

HP DECforms

Installation Guide for OpenVMS Systems

Order Number: AA-Q504F-TE

January 2006

HP DECforms is a software product for applications, services, and tools that require a structured, forms-based, or menu-based user interface. DECforms is the first commercial implementation of an ANSI/ISO standard for forms-based interfaces, the CODASYL Form Interface Management System (FIMS).

Revision/Update Information:	This is a revised manual.
Operating System:	OpenVMS Alpha Version 7.3-2 or later OpenVMS I64 Version 8.2 or later
Software Version:	HP DECforms Version 4.0

Hewlett-Packard Company
Palo Alto, California

© Copyright 2006 Hewlett-Packard Development Company, L.P.

Confidential computer software. Valid license from HP required for possession, use, or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendors standard commercial license.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel and Itanium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Oracle CDD, Oracle/Administrator, Oracle CDD/Repository, Oracle Rdb, and Oracle TRACE are trademarks of Oracle Corporation.

Motif is a registered trademark of the Open Software Foundation, Inc.

ISO is a trademark of the International Organization for Standardization.

PostScript is a registered trademark of Adobe Systems, Incorporated.

Printed in the US.

This document was prepared using VAX DOCUMENT Version 2.1.

Contents

Preface	vii
1 Preparing to Install DECforms Software	
1.1 Required Operating System Components	1-1
1.2 Required and Optional Software	1-2
1.3 Required Hardware	1-2
1.4 License Registration	1-3
1.5 Installation Requirements	1-3
1.5.1 Time	1-3
1.5.2 Privileges	1-4
1.5.3 Disk Space	1-4
1.5.4 VMSINSTAL Requirements	1-4
1.5.5 Backing Up Your System Disk	1-5
2 Installing DECforms Software	
2.1 Accessing the Online Release Notes	2-1
2.2 Determining the Files and Logical Names Added to the System	2-1
2.3 Running the Installation Verification Procedure	2-1
2.4 Aborting the Installation	2-2
2.5 Running the Installation Procedure	2-2
2.5.1 Running VMSINSTAL	2-2
2.5.2 Answering Installation Questions	2-4
2.5.3 Informational Messages	2-8
2.5.4 Running the Installation Verification Procedure	2-8
2.5.5 Completing the Installation Procedure	2-9
2.6 Error Recovery	2-9

3 After Installing DECforms Software

3.1	Editing the System Startup File	3-1
3.2	Hebrew Installation Notes	3-2
3.3	User Account Requirements	3-2
3.4	System Parameters	3-4
3.5	Cluster Considerations	3-5
3.6	Installing the Form Development Utilities as Shared Images ...	3-5
3.7	Determining and Reporting Problems	3-6

A Alpha Systems Sample Installation

A.1	Full Development Kit for English Variant of DECforms	A-2
A.2	Run-Time Kit for English Variant of DECforms	A-6
A.3	Full Development Kit for Asian Variant of DECforms	A-8
A.4	Run-Time Kit for Asian Variant of DECforms	A-13

B I64 Systems Sample Installation

B.1	Full Development Kit for English Variant of DECforms	B-2
B.2	Run-Time Kit for English Variant of DECforms	B-6
B.3	Full Development Kit for Asian variant of DECforms	B-8
B.4	Run-Time Kit for Asian Variant of DECforms	B-13

C Files and Logical Names Installed on Your System

C.1	Files Added and Modified by the Full Development Kit	C-1
C.2	Files Added and Modified by the Run-Time Kit	C-5
C.3	Logical Names Added	C-6

Examples

A-1	Alpha Sample Full Development Kit Installation	A-2
A-2	Alpha Sample Run-Time Kit Installation for English Variant	A-6
A-3	Alpha Sample Full Development Kit Installation	A-8
A-4	Alpha Sample Full Development Kit Installation	A-13
B-1	I64 Sample Full Development Kit Installation	B-2
B-2	I64 Sample Run-Time Kit Installation	B-6
B-3	I64 Sample Full Development Kit Installation	B-8
B-4	I64 Sample Run-Time Kit Installation	B-13

Tables

1	Conventions Used in the Guide	x
1-1	Disk Space Requirements	1-4
3-1	Minimum User Account Quotas for Developing DECforms Applications	3-3
3-2	Minimum System Parameter Values for Developing DECforms Applications	3-4

Preface

This manual describes how to install HP DECforms Version 4.0 and how to verify the installation.

This manual refers to some HP products by their abbreviated names:

- HP DECforms software is referred to as DECforms.
- DEC Language-Sensitive Editor software is referred to as DEC LSE.

Who Should Use This Guide

This manual is for those who install and maintain DECforms software. You should read this manual before installing DECforms.

Structure of This Guide

This manual has three chapters and three appendixes.

Chapter 1	Describes the preparations and requirements for installing DECforms.
Chapter 2	Describes the installation procedure.
Chapter 3	Describes the tasks you should do after installing DECforms.
Appendix A	Reproduces typical installation sessions on Alpha systems.
Appendix B	Reproduces typical installation sessions on I64 systems.
Appendix C	Lists the files that are installed or modified and the logical names that are defined or modified during the installation procedure.

For More Information

See the online help, the online release notes, and the following documents for more information about DECforms:

- *HP DECforms Guide to Commands and Utilities*—Describes the DECforms FORMS commands and utilities.
- *HP DECforms IFDL Reference Manual*—Describes the syntax of the DECforms Independent Form Description Language.
- *HP DECforms Style Guide for Character-Cell Devices*—Describes how to develop user interfaces with a Motif style for DECforms applications for character-cell terminals.
- *HP DECforms Programmer's Reference Manual*—Describes how DECforms software operates at run time and how to call the DECforms requests from an application program.
- *HP DECforms Guide to Developing an Application*—Part I explains for the beginning DECforms programmer how to create a DECforms application, including both the form and the program. Part II contains additional guidelines and examples for more experienced DECforms programmers.
- *HP DECforms Guide to Demonstration Forms and Applications*—Describes how to use various demonstration forms and applications. This guide is contained in online files named `forms$demo_guide.txt` and `forms$demo_guide.ps` in the `FORMS$EXAMPLES` directory on *OpenVMS* systems. If you cannot find this document, ask your system manager to install it in the appropriate directory.

For information about displaying these forms, see the *HP DECforms Guide to Developing an Application*.

- *HP DECforms Guide to Converting FMS Applications*—Describes how to convert a VAX FMS or DEC FMS application to a DECforms application.

For further information on other topics covered in this guide, see the following:

- DEC LSE documentation for information on how to use DEC LSE
- Oracle CDD documentation set for information on CDD definitions
- *ISO IS 11730:1994* for information on the standard of which DECforms is an implementation (see the Acknowledgment section)

For additional information on installing DECforms, see the OpenVMS operating system documentation for these topics:

- VMSINSTAL procedure
- Install Utility (INSTALL)
- System management and operations

Reader's Comments

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

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

How To Order Additional Documentation

For information about how to order additional documentation and for online versions of most DECforms, visit the following World Wide Web address:

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

Conventions

Table 1 lists the conventions used in this guide.

Table 1 Conventions Used in the Guide

Symbol or Term	Meaning
Ctrl/X	In procedures, a sequence such as Ctrl/X indicates that you must hold down the key labeled Ctrl while you press another key.
KPn	Key names that begin with KP indicate keys on the numeric keypad on the right side of the terminal keyboard. For example, KP4 and KP. are keys on the numeric keypad.
PF1-x	A sequence such as PF1-x indicates that you must first press and release the key labeled PF1, and then press and release another key.
...	In examples, horizontal ellipsis points indicate one of the following possibilities: <ul style="list-style-type: none">• 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 format descriptions, parentheses indicate that if you choose more than one option, you must enclose the choices in parentheses.
[]	In format descriptions, brackets indicate that whatever is enclosed is optional; you can select none, one, or all of the choices.
{}	In format descriptions, braces surround a required choice of options; you must choose one of the options listed.
\$ user input	User input is shown in bold .
Bold	DECforms terms are shown in bold where introduced or explained.

(continued on next page)

Table 1 (Cont.) Conventions Used in the Guide

Symbol or Term	Meaning
\$	The dollar sign is used to indicate the user prompt on OpenVMS systems.

Unless otherwise specified, you terminate commands by pressing the Return key.

Acknowledgment

DECforms is the HP implementation of a Form Interface Management System (FIMS) ANSI/ISO standard prepared by the CODASYL Form Interface Management System Committee and ISO/IEC JTC1/SC22 Working Group 18. The FIMS standard is documented in *ISO IS 11730:1994* and can be purchased from the International Organization for Standardization or American National Standards Institute.

Preparing to Install DECforms Software

This chapter discusses the preparations and requirements for installing HP DECforms software.

Your bill of materials (BOM) and indented bills report (BIL) specify the number of media in your kit and the contents of your kit. Make sure you compare your kit with this information. If your kit is damaged or incomplete, contact your HP representative.

DECforms provides online release notes. You can read or print the release notes before you begin the DECforms installation.

Recommendation

HP Computer Corporation strongly recommends that you read the release notes before you proceed with the installation. For more information about the release notes that ship with your kit, see Section 2.1.

1.1 Required Operating System Components

To install DECforms, you must have certain operating system components. The components you need depend on whether you are installing the DECforms full development kit or the run-time kit.

The DECforms full development kit contains the DECforms run-time system and development utilities. To install this kit, you must have installed the following OpenVMS classes:

- OpenVMS required save set
- Programming support (for STARLET.OLB and IMAGELIB.OLB)
- Utilities (for HELPLIB.OLB)

The DECforms run-time kit contains only the DECforms run-time system. To install the DECforms run-time kit, you must have installed the OpenVMS required save set class.

1.2 Required and Optional Software

This section discusses the software that must already be installed on your system before installing DECforms. The section also includes information about optional software that you can use with DECforms.

To install DECforms, you must have installed on your system:

- OpenVMS operating system supported:
 - OpenVMS Alpha Version 7.3-2 without support for Oracle CDD/Repository Version 7.2 or later
 - OpenVMS Alpha Version 8.2 with support for Oracle CDD/Repository Version 7.2 or later
 - OpenVMS I64 Version 8.2 without support for Oracle CDD/Repository Version 7.2 or later
 - OpenVMS I64 Version 8.2-1 with support for Oracle CDD/Repository Version 7.2 or later
- Oracle CDD/Repository Version 7.2 or later, if you intend to store definitions in Oracle CDD/Repository software
- DEC LSE Version 2.3 or later if you intend to use the DEC Language-Sensitive Editor (DEC LSE) templates for the DECforms Independent Form Description Language (IFDL)

For a complete list of the products that are compatible with this version of DECforms, see the Software Product Description.

Note

DECforms Version 4.0 software can be used with HP ACMS Version 5.0 or later.

1.3 Required Hardware

DECforms supports HP VT100-, VT200-, VT300-, VT400-, VT500-series terminals, and PCs that use the Windows NT operating system.

1.4 License Registration

You must register the DECforms software license with the OpenVMS License Management Facility (LMF). The LMF is available with Version 5.0 of the OpenVMS operating system.

The Product Authorization Key (PAK) that is shipped with DECforms contains the license registration information you need. The PAK is a paper certificate that contains information about the license you have purchased to run a particular piece of software.

During the installation, you are asked whether you have registered the DECforms license and loaded the appropriate authorization keys. It is therefore best to register your DECforms license *before* you do the installation.

If you have not registered the DECforms license and loaded the appropriate authorization keys, you can complete the installation; however, you cannot run either the DECforms software or its Installation Verification Procedure (IVP). Once you register the license and load an authorization key, you can run the IVP and use DECforms.

To register a license under Version 5.5 or later of the OpenVMS operating system, log in to the system manager's account, SYSTEM. You then can register a license in one of the following ways:

- Run the SYS\$UPDATE:VMSLICENSE.COM procedure. When the procedure prompts you for information, enter data from your PAK.
- Enter the LICENSE REGISTER command with the appropriate qualifiers that correspond to information on the PAK.

If you are installing DECforms on an OpenVMS Cluster system, you must register your license on each licensed node in the OpenVMS Cluster system.

For complete information on using LMF, see the section in the OpenVMS documentation set on the License Management Facility.

1.5 Installation Requirements

The following sections discuss various requirements for installing DECforms.

1.5.1 Time

Installing DECforms and running the IVP requires approximately 5 to 35 minutes, depending on your system configuration and the distribution media you are using.

1.5.2 Privileges

To install DECforms, you must be logged into an account that has SETPRV or the following privileges:

- CMKRNL
- WORLD
- SYSPRV

VMSINSTAL turns off BYPASS privilege at the start of the installation.

1.5.3 Disk Space

Installing DECforms requires a certain amount of free storage space before and after the installation, as shown in Table 1-1.

Table 1-1 Disk Space Requirements

DECforms Kit	Blocks During Installation	Blocks After Installation
Alpha Run-Time Kit	5,300	5000
Alpha Full Development Kit	41,000	40,000 (with sample and demo applications) 21,000 (without sample and demo applications)
I64 Run-Time Kit	25,000	23,000
I64 Full Development Kit	80,000	75,000 (with sample and demo applications) 60,000 (without sample and demo applications)

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

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

1.5.4 VMSINSTAL Requirements

When you run VMSINSTAL, it checks whether:

- You are logged in to a privileged account.
- You have adequate quotas for installation.
- DECnet is up and running.
- Any users are logged in to the system.

If VMSINSTAL detects any problems during the installation, it notifies you and asks whether you want to continue the installation. In some instances, you can enter YES to continue. To stop the installation and correct the situation, enter NO or press Return. Correct the problem and restart the installation.

For more information about VMSINSTAL, see the *HP OpenVMS System Management Utilities Reference Manual*.

1.5.5 Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks whether you have backed up your system disk. HP recommends that you back up your system disk before installing any software.

Use the backup procedures that have been established at your site. For details on backing up your disk, see the section on the Backup Utility in the OpenVMS documentation set.

2

Installing DECforms Software

This chapter describes how to install HP DECforms software. Section 2.5 contains a step-by-step description of the installation procedure.

2.1 Accessing the Online Release Notes

You should review the Release Notes that DECforms provides; they might contain information about changes in the installation procedures. If you specify `OPTIONS N` when you run `VMSINSTAL`, the installation procedure asks you whether you want to display or print the release notes. HP recommends that you print the release notes.

After you install DECforms, you can find the OpenVMS Alpha release notes located in

```
$ SYS$HELP:FORMSA040.RELEASE_NOTES
```

The release notes for OpenVMS I64 are located in

```
$ SYS$HELP:FORMSI040.RELEASE_NOTES
```

2.2 Determining the Files and Logical Names Added to the System

The DECforms installation procedure adds a number of files to your system. It also modifies some files and defines some logical names. Appendix C lists the changes that the DECforms installation procedure makes to your system.

2.3 Running the Installation Verification Procedure

The IVP for DECforms verifies the installation. DECforms provides two IVPs, one for the full development kit and one for the run-time kit.

When you are installing the DECforms kit, the installation procedure asks whether you want to run the IVP as part of the installation. If you respond `YES`, `VMSINSTAL` runs the appropriate IVP. You should run the IVP to verify that DECforms is installed correctly.

Should you need to run the IVP at any time after installation, enter the following command on a VT100-, VT200-, VT300-, VT400-, or VT500-series terminal or on a corresponding workstation terminal emulator:

Run-Time Kit IVP

```
$ @SYS$TEST:FORMS$RT_IVP.COM
```

Full Development Kit IVP

```
$ @SYS$TEST:FORMS$IVP.COM
```

2.4 Aborting the Installation

To abort the installation procedure at any time, press Ctrl/Y. The installation procedure deletes all files that it has created and exits. You can start the installation again.

2.5 Running the Installation Procedure

The DECforms installation procedure consists of a series of questions and informational messages. The following sections explain how to run the VMSINSTAL procedure and answer the installation questions. These sections also explain the informational messages displayed by the procedure.

2.5.1 Running VMSINSTAL

To start the installation, run the VMSINSTAL command procedure from a privileged account, such as the SYSTEM account. VMSINSTAL is in the SYS\$UPDATE directory.

To set default to the SYS\$UPDATE directory, enter the following command:

```
$ SET DEFAULT SYS$UPDATE
```

To run VMSINSTAL, enter a command with the following syntax:

```
@VMSINSTAL [product-name device-name options-list]
```

If you omit the parameters from the command line, VMSINSTAL asks you for this information later.

The following list defines the elements of the VMSINSTAL procedure.

product-name

The installation name for the product. For the DECforms full development kit running on Alpha, use the installation name FORMSA040. For the DECforms full development kit running on I64, use the installation name FORMSI040.

For the DECforms run-time kit running on Alpha, use the installation name FORMSRTA040. For the DECforms run-time kit running on I64, use the installation name FORMSRTI040.

device-name

The name of the device on which you plan to mount the media or the directory where you copied the savesets. For example, MTA0: is the device name for a tape drive; DKA0:[MYDIRECTORY] the name for a disk drive. You do not need to use the console drive for this installation. If you do use the console drive, once the installation is complete, you should replace any media you removed.

options-list

The word OPTIONS followed by one or more of the available options designators, including the following:

- Display or print release notes (N)
Indicates you want to see the installation question on release notes. If you do not include the OPTIONS N parameter, VMSINSTAL *does not* ask you about the release notes. You should review the release notes before proceeding with the installation in case they contain additional information about the installation.
If you are restarting the installation and have already reviewed the release notes, you do not need to specify OPTIONS N.
- Alternate root option (R)
Lets you install the product to a system root other than that of the running system.

To specify more than one option, separate the options with commas (OPTIONS N,R).

VMSINSTAL has several other options; for more information, see the *HP OpenVMS System Management Utilities Reference Manual* section on software installation.

The following example shows the command that runs VMSINSTAL to install DECforms from tape drive MTA0: and the system response. This example uses the OPTIONS N parameter to print or display release notes.

```
$ @VMSINSTAL FORMSI040 MTA0: OPTIONS N
      OpenVMS Software Product Installation Procedure V8.2-1
```

It is 30-NOV-2005 at 16:46.
Enter a question mark (?) at any time for help.

2.5.2 Answering Installation Questions

This section discusses the questions that appear during the installation. Except where noted, the questions are the same for both the full development kit and the run-time kit options. For sample installation procedures, see Appendix B.

An asterisk (*) marks the beginning of each question. Some questions show the default response in brackets, for example [YES]. To choose the default response, press Return.

1. Display system status.

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
```

```
.  
.  
.
```

```
* Do you want to continue anyway [NO]?
```

VMSINSTAL displays a list of active processes. The procedure asks whether you want to continue the installation.

NO is the default response to the question. To stop the installation, press Return. Once all active processes are stopped, restart the installation procedure.

2. Confirm system backup.

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

Always back up your system disk before doing an installation.

VMSINSTAL asks whether you are satisfied with your system backup.

If you are satisfied with the backup of your system disk, press Return.

Otherwise, enter NO to stop the installation. After you back up your system disk, you can restart the installation.

3. Mount the media.

```
Please mount the first volume of the set on MTA0:.
```

```
* Are you ready? YES
```

```
%MOUNT-I-MOUNTED, FORMS MOUNTED ON _$$MTA0:
```

```
The following products will be processed:
```

```
FORMSI V4.0
```

```
Beginning installation of FORMSI V4.0 at 15:46
```

```
%VMSINSTAL-I-RESTORE, Restoring product saveset A...
```

Mount the first distribution volume on the device that you specified when you ran VMSINSTAL. If you are installing from a directory on a disk, you will be asked the following:

* Where will the distribution volumes be mounted:

Then VMSINSTAL asks whether you are ready to continue the installation.

If you respond YES to indicate that you are ready, VMSINSTAL displays a message that the media containing DECforms has been mounted on the specified device and that the installation has begun.

If you entered the wrong device name when you ran VMSINSTAL and need to restart the installation, enter NO in response to the "Are you ready?" question. To stop the installation for other reasons, press Ctrl/Y.

4. **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]:

If you specified OPTIONS N when you ran VMSINSTAL, you have four options for reviewing the release notes.

Option 1 displays the release notes immediately on the console terminal. To terminate the display at any time, press Ctrl/C.

Option 2 prompts you for the name of the print queue that you want to use:

* Queue name [SYS\$PRINT]:

Press Return to print the release notes on SYS\$PRINT or enter a queue name and press Return. Option 2 is the default.

Option 3 both displays and prints the release notes.

Option 4 lets you select none of the above. However, HP does not recommend this.

5. **Continue the installation.**

* Do you want to continue the installation [N]?: **Y**
%VMSINSTAL-I-REMOVED, Product's Release Notes have been moved to SYS\$HELP.

The installation procedure asks whether you want to continue the installation. To continue, enter YES. Otherwise, press Return. In either case, the release notes are copied to the SYS\$HELP:FORMSA040.RELEASE_NOTES file on Alpha systems to the file SYS\$HELP:FORMSI040.RELEASE_NOTES on I64 systems. The software version number is represented in this file name by the *nnn* designation (040 for Version 4.0).

Note

The name of the release notes file installed by VMSINSTAL consists of the current product name and version number. Do not delete previous versions of DECforms Release Notes.

6. Install the main kit.

* Do you wish to install the main kit (16000 blocks) [YES]?

If you are installing the full development kit, the procedure asks whether you want to install the main kit. (The procedure omits this question if you are installing the run-time kit.) The main kit contains all DECforms software except the sample and demo application programs and support for DEC LSE.

7. Respond to license registration queries.

```
Product:      FORMS
Producer:     HP
Version:      4.0
Release Date: 11-JAN-2006
```

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

The installation procedure displays license information about your product and asks whether you have registered the license for DECforms. If you have registered the license for DECforms, answer YES. If you have not registered the license, you must answer NO.

If you answer NO, the installation continues; however, if you did not register your DECforms license before you started the installation procedure, you cannot run the IVP during the installation. You should run the IVP after you install DECforms and register and load its PAK.

Section 1.4 describes registering your DECforms license and Section 2.3 describes verifying the installation of DECforms.

8. Choose an Installation Verification Procedure (IVP) option.

* Do you want to run the IVP after the installation [YES]?

The installation procedure asks whether you want to run the IVP. The IVP for DECforms verifies a successful installation. HP recommends that you run the IVP.

9. Install optional DECforms software.

* Do you wish to install Sample Application Programs (3000 blocks) [YES]?

* Do you wish to install the demonstration package (12000 blocks) [YES]?

* Do you wish to install LSEDIT support (250 blocks) [YES]?

* Do you wish to install modifiable message file procedures (600 blocks) [YES]?

* Do you wish to register DECforms for Oracle TRACE support (50 blocks) [YES]?

These five installation questions ask whether you want to install the following (if you are installing the run-time kit, the procedure omits all but the Oracle TRACE query):

- Sample application programs that demonstrate using DECforms.
- Demonstration programs that also demonstrate using DECforms.
- LSEDIT support that includes DEC LSE templates for the DECforms Independent Form Description Language (IFDL).

For systems running Version 2.3 of DEC LSE software, the following messages may appear when you install DEC LSE support:

```
%TPU-W-NOTPUVAR, section file missing variable LSE$$HIGHLIGHT
required by editor.
%FORMS-I-INSLSEEND, installation of LSE support completed
```

The warning message does not affect the DECforms installation or DEC LSE support.

- Modifiable message file procedures that allow you to translate DECforms run-time messages from English to the language of your choice. `DECFORMS_MESSAGE.TXT` explains how to use these procedures. The file is located in `SYS$COMMON:[SYSHLP.EXAMPLES.FORMS.MESSAGES]`.
- Oracle TRACE support that includes a binary definition of DECforms Oracle TRACE events.

10. Purge files.

* Do you want to purge files replaced by this installation [YES]?

You can purge files from previous versions of DECforms that this installation supersedes. Purging is recommended.

To keep files from the previous version, enter NO.

2.5.3 Informational Messages

The installation procedure displays a number of informational messages that report on the progress of the installation. There are no further questions. If the installation has been successful, VMSINSTAL moves the new or modified files to their target directories, updates help files, purges appropriate files, and updates DCL tables, if necessary. The procedure displays the following message:

```
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target
directories...
```

2.5.4 Running the Installation Verification Procedure

If you chose to run the IVP, VMSINSTAL runs it now. The procedure displays the following messages for the full development kit:

```
Starting DECforms V4.0 Installation Verification Procedure.
*****.
                DECforms V4.0
```

```
                The Installation Verification Procedure
                Copyright 2005 Hewlett-Packard Development Company, L.P.
                *****
DECforms V4.0 Installation Verification Procedure beginning.
DECforms V4.0 Installation Verification Procedure completed successfully.
The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures.
```

The procedure displays the following messages for the run-time kit:

```
Starting Installation Verification Procedure (IVP)

                for DECforms V4.0 run-time Manager
DECforms Interactive Installation Verification Procedure Starting.
                [IVP panel displayed here]
DECforms Interactive Installation Verification Procedure Complete.

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures
```

For information on running the IVP after you have installed DECforms, see Section 2.3.

2.5.5 Completing the Installation Procedure

The following messages indicate that the installation is complete:

```
Installation of FORMS040 V4.0 completed at 17:02  
Enter the products to be processed from the next distribution volume set.  
* Products: ^Z  
VMSINSTAL procedure done at 17:02
```

VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, to continue to use the system manager's account and these symbols, log out and log in again.

2.6 Error Recovery

If errors occur during the installation or when the IVP is running, VMSINSTAL displays failure messages. If the installation fails, the procedure displays the following message:

```
%VMSINSTAL-E-INSFAIL, The installation of DECforms V4.0 has failed.
```

If the IVP fails, the procedure displays the following messages:

```
The DECforms V4.0 Installation Verification Procedure failed.  
%VMSINSTAL-E-IVPFAIL, The IVP for DECforms V4.0 has failed.
```

Errors might occur during the installation if any of the following conditions exists:

- The version of the operating system is incorrect.
- A required software version is incorrect.
- Quotas are insufficient.
- System parameter values are insufficient.
- The OpenVMS Help library is being used.
- The product license has not been registered and loaded.

For descriptions of the error messages generated by these conditions, see the OpenVMS documentation on system messages and recovery procedures. Take the appropriate action as described in the message. (You might need to change a system parameter or increase an authorized quota value.)

For information on installation requirements, see Chapter 1.

After Installing DECforms Software

After installing DECforms software, you might need to do the following tasks:

- Edit the system startup file to include the DECforms startup procedure.
- Access the Hebrew run-time message file.
- Set user account privileges and quotas.
- Set system parameters.
- Make DECforms available on each licensed node in your OpenVMS Cluster system (if you are installing DECforms on an OpenVMS Cluster).
- Install the form development utilities.

This chapter explains how to do these tasks.

3.1 Editing the System Startup File

You can provide for automatic startup of DECforms when your system is rebooted, and define output formats for dates and times other than the standard OpenVMS format, by editing the system startup file, `SYS$STARTUP:SYSTARTUP_VMS.COM`.

To cause automatic startup of DECforms, insert the following line in the system startup file:

```
$ @SYS$STARTUP:FORMS$STARTUP.COM
```

Include this line with command lines that start up other products. The command lines should follow the network startup command line, as follows:

```
$ @SYS$MANAGER:STARTNET.COM  
.  
.  
.  
$ @SYS$STARTUP:FORMS$STARTUP.COM
```

To have access to date and time formats other than the default standard formats, run a procedure named LIB\$DT_STARTUP.COM in your system startup file. If you want this command procedure to define the spellings of non-English date and time elements, you must define the SYS\$LANGUAGES logical name before you run the LIB\$DT_STARTUP command procedure. The English spellings of date and time elements remain available.

For example, to cause French and German spellings of date and time elements and alternate date and time formats, add the following commands to SYSTARTUP_VMS.COM:

```
$ DEFINE SYS$LANGUAGES FRENCH, GERMAN
$ @SYS$MANAGER:LIB$DT_STARTUP.COM
```

You can add the definition of SYS\$LANGUAGES and the command to run LIB\$DT_STARTUP.COM directly after the DECforms startup command line.

For more information on the SYS\$LANGUAGES logical name and the LIB\$DT_STARTUP command procedure, see the OpenVMS documentation on date and time formatting routines.

3.2 Hebrew Installation Notes

The DECforms installation process places the Hebrew run-time message file in:

```
SYS$MESSAGE:FORMS$MSGMGRSHR_HEBREW.EXE
```

The English run-time message file is found in:

```
SYS$MESSAGE:FORMS$MSGMGRSHR.EXE
```

DECforms uses the English message file by default. To use the Hebrew messages, the system manager should replace the English file with the Hebrew file, and then reinstall the image by performing @SYS\$STARTUP:FORMS\$STARTUP.

The user also can use the logical name FORMS\$MSGMGRSHR to point to the desired language-specific message file.

3.3 User Account Requirements

To use DECforms, user accounts on your system must have the TMPMBX and NETMBX privileges. The accounts also must have the quotas shown in Table 3-1.

Table 3–1 Minimum User Account Quotas for Developing DECforms Applications

Account Quota	Minimum Value
BYTLM	16384
PRCLM	3

User account privileges and quotas are stored in the file SYSUAF.DAT.

To verify and change user account privileges and quotas, use the Authorize Utility as follows:

1. Set your directory to SYS\$SYSTEM and run the Authorize Utility:

```
$ SET DEFAULT SYS$SYSTEM
$ RUN AUTHORIZE
UAF>
```

2. To check a particular account, at the Authorize Utility prompt (UAF>) enter the SHOW command with an account name. For example:

```
UAF> SHOW SMITH
```

3. To change a privilege or quota, enter the MODIFY command in the following syntax:

```
MODIFY account-name /PRIVILEGES=privilege-name/quota-name=nnnn
```

The following example adds the NETMBX privilege, modifies the BYTLM quota for the SMITH account, and exits the utility:

```
UAF> MODIFY SMITH /PRIVILEGES=NETMBX /BYTLM=16384
UAF> EXIT
```

After you exit the utility, the OpenVMS operating system displays messages indicating whether changes were made. Once you have made the changes, users must log out and log in again for the new privileges and quotas to take effect.

For more information on modifying account privileges and quotas, see the *HP OpenVMS System Management Utilities Reference Manual*.

3.4 System Parameters

Table 3–2 shows the minimum values to which certain system parameters should be set when users develop DECforms applications on your system.

Table 3–2 Minimum System Parameter Values for Developing DECforms Applications

System Parameter	Minimum Value
PQL_MBYTLM	16384
PQL_MPRCLM	3
MAXBUF ¹	4096

¹This value applies to both the full development kit and the run-time kit.

To change system parameters, do the following:

1. Edit the file `SYS$SYSTEM:MODPARAMS.DAT`.

To change the value of a parameter that is listed in the `MODPARAMS.DAT` file, use an editor to locate the line containing that parameter. Delete the current value associated with that parameter and enter the new value.

To add a new value, add a line to the `MODPARAMS.DAT` file. Make sure you include both the name of the parameter and its value in the new line. For example, to include a setting for the `PQL_MBYTLM` and `PQL_MPRCLM` parameters, add the following lines to the `MODPARAMS.DAT` file:

```
PQL_MBYTLM=16384
PQL_MPRCLM=3
```

2. Run the `AUTOGEN` procedure to recalculate your system parameters.

After you have modified the `MODPARAMS.DAT` file and exited the editor, enter the following command:

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

`AUTOGEN` does an automatic system shutdown and reboots once it has finished. Rebooting your system activates the new parameter values. For more information about using `AUTOGEN`, see the instructions on modifying system parameters in the OpenVMS documentation on system management and operations.

3.5 Cluster Considerations

After you install DECforms on an OpenVMS Cluster system, you must do the following tasks on each licensed node in the OpenVMS Cluster system:

- Run the DECforms startup command procedure.
- Install DCLTABLES.EXE.
- Register the license for DECforms.
- Run the full development kit IVP (if you are installing the full development kit) and the run-time kit IVP.

To run the startup command procedure, log into a node in the OpenVMS Cluster system and enter the following command:

```
$ @SYS$STARTUP:FORMS$STARTUP.COM
```

To install DCLTABLES.EXE, enter the following command:

```
$ INSTALL REPLACE SYS$SHARE:DCLTABLES.EXE/OPEN/SHARE/HEADER
```

To register the DECforms license on a node, see Section 1.4. To run the full development kit and run-time kit IVPs, see Section 2.3.

3.6 Installing the Form Development Utilities as Shared Images

DECforms provides the following form development utilities:

- Form Development Environment (FDE)
- Character-cell Panel Editor (CCPED)
- IFDL Translator
- Back Translator
- Extract Utility
- Test Utility
- FMS Converter (Supported only on Alpha)

If you use these form development utilities extensively on your system, you can install them as shared images to reduce the system overhead and memory requirements.

To install the form development utilities as shared images, do the following:

1. Determine the number of available global pages and global sections on your system.

To install the form development utilities as shared images, you must increase the number of global pages by 6000 and the number of global sections by 30. These are increases over what is required during installation. Install the utilities just after you start your system. The available space in the global page table is less likely to be fragmented.

2. To install the form development utilities as shared images on a currently running system, enter the following command:

```
$ @SYS$STARTUP:FORMS$STARTUP.COM DEVELOP
```

To install the utilities as shared images each time your system is rebooted, add the DEVELOP parameter to the line you added to the system startup file, SYS\$STARTUP:SYSTARTUP_VMS.COM (see Section 3.1), as follows:

```
$ @SYS$MANAGER:STARTNET.COM
.
.
.
$ @SYS$STARTUP:FORMS$STARTUP.COM DEVELOP
```

To install selected form utilities, use the OpenVMS Install Utility (INSTALL). For example, to install only the Character-cell Panel Editor as a shared image, enter the following commands:

```
$ INSTALL
INSTALL> ADD SYS$LIBRARY:FORMS$FSESHR.EXE /OPEN /SHARED /HEADER
INSTALL> ADD SYS$LIBRARY:FORMS$PEDSHR.EXE /OPEN /SHARED /HEADER
INSTALL> ADD SYS$MESSAGE:FORMS$MSGPRDSHR.EXE /OPEN /SHARED /HEADER
INSTALL> ADD SYS$LIBRARY:FORMS$PEDVTEEXEC.EXE /OPEN /SHARED /HEADER
INSTALL> EXIT
```

Note

You must install FORMS\$FSESHR.EXE and FORMS\$MSGPRDSHR.EXE with the first form development utility that you install. Once you have installed these two images, you need not reinstall them to add other form development utilities.

3.7 Determining and Reporting Problems

If an error occurs while DECforms is being used and you believe that a problem with DECforms is causing the error, take one of the following actions:

- If you have a BASIC or DECsupport Software Agreement, call your Customer Support Center.

- If you have a Self-Maintenance Software Agreement, submit a Software Performance Report (SPR).
- If you purchased DECforms within the past 90 days and you think a software error is causing the error, submit an SPR.

If you find an error in the DECforms documentation, please see the *Send Us Your Comments* section in the Preface for instructions.

A

Alpha Systems Sample Installation

This appendix contains a sample installation of HP DECforms software. Depending on which layered products you have on your system, you might see additional messages and questions when you install HP DECforms software.

The sample installation assumes the following:

- DECnet has been shut down.¹
- No users are logged in to the system.
- The installation kit is in SYS\$UPDATE.
- OPTIONS N is specified during the full development kit installation to print the release notes, but not during the run-time kit installation.
- The Installation Verification Procedure (IVP) runs after each kit has been installed.

¹ Although it is not necessary to shut down DECnet to perform a successful DECforms installation, VMSINSTAL checks to see if DECnet is shut down.

A.1 Full Development Kit for English Variant of DECforms

Example A-1 contains a sample installation for the DECforms full development kit on an Alpha system.

Example A-1 Alpha Sample Full Development Kit Installation

```
$ @sys$update:vmsinstal FORMSA040
```

```
OpenVMS Software Product Installation Procedure V8.2
```

```
It is 1-DEC-2005 at 16:05.
```

```
Enter a question mark (?) at any time for help.
```

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
```

```
TCPIP$FTP_1
```

```
FORMS
```

```
BATCH_181
```

```
* Do you want to continue anyway [NO]? yes
```

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

```
* Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]
```

```
* Enter installation options you wish to use (none):
```

```
The following products will be processed:
```

```
FORMSA V4.0
```

```
Beginning installation of FORMSA V4.0 at 16:06
```

```
%VMSINSTAL-I-RESTORE, Restoring product save set A ...
```

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

```
*****
*
*           D E C f o r m s   V 4 . 0
*           =====
*
*           Full Development Kit
*
*           Copyright 2005 Hewlett-Packard Development Company, L.P.
*
*****
```

```
*****
The installation of this kit will supersede any prior version of
DECforms that may be installed on this system.
*****
```

(continued on next page)

Example A-1 (Cont.) Alpha Sample Full Development Kit Installation

* Do you wish to install the main kit (16000 blocks) [YES]?

Product: FORMS
Producer: HP
Version: 4.0
Release Date: 11-JAN-2006

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

This kit contains an Installation Verification Procedure (IVP) to verify the correct installation of DECforms. It can be run prior to the conclusion of this procedure by answering "YES" to the IVP prompt or invoked after the installation as follows:
@SYS\$TEST:FORMS\$IVP.COM

* Do you want to run the IVP after the installation [YES]?

* Do you wish to install Sample Application Programs (3000 blocks) [YES]?

* Do you wish to install the demonstration package (12000 blocks) [YES]?

* Do you wish to install LSEEDIT support (250 blocks) [YES]?

* Do you wish to install modifiable message file procedures (600 blocks) [YES]?

* Do you wish to register DECforms for Oracle TRACE support (50 blocks) [YES]?

* Do you want to purge files replaced by this installation [YES]?

The remainder of the installation is expected to take between 5 and 35 minutes.

No further questions will be asked during this installation.

%FORMSA-I-MAINKITBEGIN, Restoring main kit.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...

%FORMSA-I-MAINKITEND, Main kit restored.

%FORMSA-I-SMPKITSTART, Restoring Sample Application package.

%VMSINSTAL-I-RESTORE, Restoring product save set C ...

%FORMSA-I-SMPKITEND, Sample Application package restored.

%FORMSA-I-DEMKITSTART, Restoring Demonstration Package.

%VMSINSTAL-I-RESTORE, Restoring product save set D ...

%FORMSA-I-DEMKITEND, Demonstration Package restored.

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb. After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

(continued on next page)

Example A-1 (Cont.) Alpha Sample Full Development Kit Installation

```
*****
%FORMSA-I-TRACEADDED, DECforms Oracle TRACE definition successfully added
to the Oracle TRACE Registrar.
%FORMSA-I-INSMAINSTART, Beginning installation of main kit.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSTEST.FORMS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSTEST.FORMS] already exists
%FORMSA-I-INSMAINEND, Installation of main kit complete.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSHLP.EXAMPLES.FORMS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSHLP.EXAMPLES.FORMS] already exists
%FORMSA-I-INSSMPSTART, Beginning installation of Sample Application.
%FORMSA-I-INSSMPEND, Installation of Sample Application complete.

%FORMSA-I-INSDEMSTART, Beginning installation of Demonstration Package.
%FORMSA-I-INSDEMEND, Installation of Demonstration Package completed..

%FORMSA-I-INLSESTART, Beginning installation of LSEDIT support.
%TPU-S-SAVEENV, environment written to
LIBRTY$DKB200:[SYS0.SYSUPD.FORMSA040]LSE1
%FORMSA-I-INLSEEND, Installation of LSEDIT support completed.

%FORMSA-I-INSDEMSTART, Beginning installation of message support.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES].
%CREATE-I-EXISTS, VMI$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES] already exists
%FORMSA-I-INSDEMEND, Installation of message support completed.
```

All files installed have names beginning with the product facility code (FORMS\$).
The following system areas are updated by this installation:

```
[SYSEXE]           - added FORMS$.EXE
[SYSLIB]           - added FORMS$.EXE files
                   - added language definition files
[SYSHLP]           - added Forms component help files
[SYSMSG]           - added message files
[SYS$STARTUP]      - added FORMS$STARTUP.COM
[DECW$DEFAULTS]    - added Forms development environment
                   initialization files.
[SYSTEST]          - added IVP procedures
[SYSTEST.FORMS]    - added IVP files

[SYSHLP.EXAMPLES.FORMS] - added sample application files
[SYSHLP.EXAMPLES.FORMS] - added Demonstration Package
[SYSHLP.EXAMPLES.FORMS.MESSAGES] - added modifiable message file
                               procedures
```

These files are modified:

(continued on next page)

Example A-1 (Cont.) Alpha Sample Full Development Kit Installation

```
[SYSLIB]STARLET.OLB      for FORMS$MGR_OBJECT_TABLES*.OBJ
[SYSLIB]IMAGELIB.OLB    for FORMS$MANAGER.EXE
[SYSLIB]DCLTABLES.EXE   for FORMS$DCL_COMMAND_TABLE.CLD
[SYSHLP]HELPLIB.LIB     for Forms help
[SYSLIB]LSE$SYSTEM_ENVIRONMENT.ENV for Forms IFDL environment
[SYSLIB]EPC$FACILITY.TLB for Forms OracleTRACE facility definition.
```

The final part of the installation process will now occur.
Upon completion of this installation, please be sure to edit the
system startup file in order to run FORMS\$STARTUP.COM

Please read the release notes before using DECforms. They contain
important information for this release.

They are located in SYS\$HELP:FORMSA040.RELEASE_NOTES.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Starting DECforms V4.0 Installation Verification Procedure.

```
*****
***                                     ***
***                               DECforms V4.0                               ***
***                                     ***
***                               Installation Verification Procedure           ***
***                                     ***
***                                     ***
***                               Copyright 2005 Hewlett-Packard Development ***
***                               Company, L.P.                               ***
***                                     ***
***                                     ***
*****
```

DECforms V4.0 Installation Verification Procedure beginning.
DECforms V4.0 Installation Verification Procedure completed successfully.

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures

Installation of FORMSA V4.0 completed at 16:08

Adding history entry in VMI\$ROOT:[SYSUPD]VMSINSTAL.HISTORY

Creating installation data file: VMI\$ROOT:[SYSUPD]FORMSA040.VMI_DATA

VMSINSTAL procedure done at 16:09

\$

A.2 Run-Time Kit for English Variant of DECforms

Example A-2 contains a sample installation for the DECforms run-time kit.

Example A-2 Alpha Sample Run-Time Kit Installation for English Variant

```
$ @sys$update:vmsinstal FORMSRTA040
```

```
OpenVMS Software Product Installation Procedure V8.2
```

```
It is 1-DEC-2005 at 16:14.
```

```
Enter a question mark (?) at any time for help.
```

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
```

```
TCPIP$FTP_1  
FORMS  
BATCH_181
```

```
* Do you want to continue anyway [NO]? yes  
* Are you satisfied with the backup of your system disk [YES]?  
* Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]  
* Enter installation options you wish to use (none):
```

```
The following products will be processed:
```

```
FORMSRTA V4.0
```

```
Beginning installation of FORMSRTA V4.0 at 16:15
```

```
%VMSINSTAL-I-RESTORE, Restoring product save set A ...
```

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

```
*****  
*  
*           H P   D E C f o r m s   V 4 . 0           *  
*           =====  
*                   Runtime Kit                       *  
*  
*           Copyright 2005 Hewlett-Packard Development Company, L.P   *  
*  
*****
```

```
Product:      FORMS-RT  
Producer:     HP  
Version:      4.0  
Release Date: 11-JAN-2006
```

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

(continued on next page)

Example A-2 (Cont.) Alpha Sample Run-Time Kit Installation for English Variant

This kit contains an Installation Verification Procedure (IVP) to verify the correct installation of DECforms. Because the IVP requires interactive operator input, it must be run using a VT100, VT200, VT300, VT400, or VT500 compatible video terminal. If you are using one of these terminal types, you may run the procedure immediately after installation by answering "YES" to the IVP prompt. Or you may choose to invoke it later using the following: @SYS\$TEST:FORMS\$RT_IVP.COM

- * Do you want to run the IVP after the installation [YES]?
- * Do you wish to register DECforms for Oracle TRACE support (50 blocks) [YES]?

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb. After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

%FORMSRTA-I-TRACEADDED, DECforms Oracle TRACE definition successfully added to.

- * Do you want to purge files replaced by this installation [YES]?
- No further questions will be asked during this installation.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory VMI\$ROOT:[SYSTEST.FORMS].
%CREATE-I-EXISTS, VMI\$ROOT:[SYSTEST.FORMS] already exists

The following files are added by this installation:

- SYS\$LIBRARY:FORMS\$MANAGER.EXE
- SYS\$LIBRARY:FORMS\$SDA.EXE
- SYS\$LIBRARY:FORMS\$MGRXMSHR.EXE
- SYS\$LIBRARY:FORMS\$MGRDDIFSHR.EXE
- SYS\$LIBRARY:FORMS\$CIOSHR.EXE
- SYS\$LIBRARY:FORMS\$PORTABLE_API.EXE

+ DECforms Installation Verification Procedure +
+-----+

If you are reading this panel, it indicates that DECforms has successfully Enabled a form.

Press Ctrl/Z or F10 to complete the Installation Verification Procedure. If you do not receive any failure messages, the Procedure has successfully disabled this form.

+-----+

(continued on next page)

Example A-2 (Cont.) Alpha Sample Run-Time Kit Installation for English Variant

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures

Installation of FORMSRTA V4.0 completed at 16:17

Adding history entry in VMI\$ROOT:[SYSUPD]VMSINSTAL.HISTORY

Creating installation data file: VMI\$ROOT:[SYSUPD]FORMSRTA040.VMI_DATA

VMSINSTAL procedure done at 16:17

\$

A.3 Full Development Kit for Asian Variant of DECforms

Example A-3 contains a sample installation for the DECforms full development kit on an Alpha system.

Example A-3 Alpha Sample Full Development Kit Installation

```
$ @sys$update:vmsinstal FORMSAAN040
```

OpenVMS Software Product Installation Procedure V8.2

It is 5-DEC-2005 at 05:27.

Enter a question mark (?) at any time for help.

%VMSINSTAL-W-ACTIVE, The following processes are still active:

TCPIP\$FTP_1

FORMS

BATCH_24

* Do you want to continue anyway [NO]? yes

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

* Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]

* Enter installation options you wish to use (none):

The following products will be processed:

FORMSAAN V4.0

Beginning installation of FORMSAAN V4.0 at 05:28

%VMSINSTAL-I-RESTORE, Restoring product save set A ...

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

(continued on next page)

Example A-3 (Cont.) Alpha Sample Full Development Kit Installation

```
*****
*
*           D E C f o r m s   V 4 . 0
*           =====
*           Full Development Kit
*
*           Copyright 2005 Hewlett-Packard Development Company, L.P.
*
*
*****
```

```
*****
The installation of this kit will supersede any prior version of
DECforms that may be installed on this system.
*****
```

```
* Do you wish to install the main kit (16600 blocks) [YES]?
DECforms supports following additional languages.
HANZI, HANYU, HANGUL, KANJI
You can install ONE of additional language support.
However, to run DECforms with additional language support,
make sure you have associate license,
localized operating systems and terminals.
* Do you wish to install additional language support (5000 blocks) [YES]?
1. HANZI    Simplified Chinese support
2. HANYU    Traditional Chinese support
3. HANGUL   Korean support
4. KANJI    Japanese support
0. NONE     skip additional language support
* Which language support do you wish to install ? [4]: 1
%FORMSAAN-I-SLCTLANG, Selected language is HANZI
Product:    FORMS-UI-HANZI
Producer:   HP
Version:    V4.0
Release Date: 11-JAN-2006
```

```
* Does this product have an authorization key registered and loaded? yes
This kit contains an Installation Verification Procedure (IVP)
to verify the correct installation of DECforms.
It can be run prior to the conclusion of this
procedure by answering "YES" to the IVP prompt or invoked
after the installation as follows:
```

(continued on next page)

Example A-3 (Cont.) Alpha Sample Full Development Kit Installation

@SYS\$TEST:FORMS\$IVP.COM

- * Do you want to run the IVP after the installation [YES]?
- * Do you wish to install Sample Application Programs (3000 blocks) [YES]?
- * Do you wish to install the demonstration package (12000 blocks) [YES]?
- * Do you wish to install LSEDIT support (250 blocks) [YES]?
- * Do you wish to install modifiable message file procedures (600 blocks) [YES]?
- * Do you wish to register DECforms for Oracle TRACE support (50 blocks) [YES]?
- * Do you want to purge files replaced by this installation [YES]?

The remainder of the installation is expected to take between 5 and 35 minutes.

No further questions will be asked during this installation.

%FORMSAAN-I-MAINKITBEGIN, restoring main kit.
%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%FORMSAAN-I-MAINKITEND, main kit restored.

%FORMSAAN-I-LANGKITBEGIN, restoring language kit.
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%FORMSAAN-I-LANGKITEND, language kit restored.

%FORMSAAN-I-SMPKITSTART, restoring Sample Application package.
%VMSINSTAL-I-RESTORE, Restoring product save set H ...
%FORMSAAN-I-SMPKITEND, Sample Application package restored.

%FORMSAAN-I-DEMKITSTART, restoring Demonstration Package.
%VMSINSTAL-I-RESTORE, Restoring product save set I ...
%FORMSAAN-I-DEMKITEND, Demonstration Package restored.

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb. After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

(continued on next page)

Example A-3 (Cont.) Alpha Sample Full Development Kit Installation

```
*****
%FORMSAAN-I-TRACEADDED, DECforms Oracle TRACE definition successfully added
to the Oracle TRACE registrar.
%FORMSAAN-I-INSMMAINSTART, beginning installation of main kit.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSTE
ST.FORMS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSTEM.FORMS] already exists
%FORMSAAN-I-INSMMAINEND, installation of main kit complete.

%FORMSAAN-I-INSLANGSTART, beginning installation of language kit.
%FORMSAAN-I-HELP_DIR_MISSING, The directory for language specific HELP file is
-FORMSAAN-I-HELP_DIR_MISSING, missing on your system.
-FORMSAAN-I-HELP_DIR_MISSING, The help files will not be provided.
%FORMSAAN-I-CONTINUE, The installation procedure is continuing..

  This installation defines your selected language as system wide.
  If you wish to change the language,
  please edit SYS$STARTUP:FORMS$STARTUP.COM,
  modify the following line to your language and execute the procedure.

  $ DEFINE/SYSTEM/EXEC/NOLOG FORMS$SYS_LANGUAGE "HANZI"

%FORMSAAN-I-INSLANGEND, installation of language kit complete.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSHL
P.EXAMPLES.FORMS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSHLP.EXAMPLES.FORMS] already exists
%FORMSAAN-I-INSSMPSTART, beginning installation of Sample Application.
%FORMSAAN-I-INSSMPEND, installation of Sample Application complete.

%FORMSAAN-I-INSDEMSTART, beginning installation of Demonstration Package.
%FORMSAAN-I-INSDEMEND, installation of Demonstration Package completed..

%FORMSAAN-I-INSLSESTART, beginning installation of LSEDIT support.
%TPU-S-SAVEENV, environment written to
LIBRTY$DKB200:[SYS0.SYSUPD.FORMSAAN040]LS
E$SYSTEM_ENVIRONMENT.ENV;1
%FORMSAAN-I-INSLSEEND, installation of LSEDIT support completed.

%FORMSAAN-I-INSDEMSTART, beginning installation of message support.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSHL
P.EXAMPLES.FORMS.MESSAGES].
%CREATE-I-EXISTS, VMI$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES] already exists
%FORMSAAN-I-INSDEMEND, installation of message support completed.
```

All files installed have names beginning with the product facility code (FORMS\$).
The following system areas are updated by this installation:

(continued on next page)

Example A-3 (Cont.) Alpha Sample Full Development Kit Installation

```
[SYSEXE]           - added FORMS$.EXE
[SYSLIB]           - added FORMS$.EXE files
                  - added language definition files
[SYSHLP]           - added Forms component help files
[SYSMMSG]          - added message files
[SYSS$STARTUP]    - added FORMS$STARTUP.COM
[DECW$DEFAULTS]   - added Forms development environment
                  - initialization files
[SYSTEST]          - added IVP procedures
[SYSTEST.FORMS]   - added IVP files

[SYSHLP.EXAMPLES.FORMS] - added sample application files
[SYSHLP.EXAMPLES.FORMS] - added Demonstration Package
[SYSHLP.EXAMPLES.FORMS.MESSAGES] - added modifiable message file
                               procedures
```

These files are modified:

```
[SYSLIB]STARLET.OLB      for FORMS$MGR_OBJECT_TABLES*.OBJ
[SYSLIB]IMAGELIB.OLB    for FORMS$MANAGER.EXE
[SYSLIB]DCLTABLES.EXE   for FORMS$DCL_COMMAND_TABLE.CLD
[SYSHLP]HELPLIB.LIB     for Forms help
[SYSLIB]LSE$SYSTEM_ENVIRONMENT.ENV for Forms IFDL environment
[SYSLIB]EPC$FACILITY.TLB for Forms OracleTRACE facility definition.
```

The final part of the installation process will now occur.
Upon completion of this installation, please be sure to edit the system startup file in order to run FORMS\$STARTUP.COM

Please read the release notes before using DECforms. These contain important information for this release.

These are in SYS\$HELP:FORMSAAN040.RELEASE_NOTES.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Starting DECforms V4.0 Installation Verification Procedure.

```
*****
***
***                      DECforms V4.0                      ***
***
***          Installation Verification Procedure          ***
***
***
***          Copyright 2005 Hewlett-Packard Development Company, L.P.          ***
***
***
*****
```

DECforms V4.0 Installation Verification Procedure beginning.
DECforms V4.0 Installation Verification Procedure completed successfully.

(continued on next page)

Example A-3 (Cont.) Alpha Sample Full Development Kit Installation

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures

Installation of FORMSAAN V4.0 completed at 05:31

Adding history entry in VMI\$ROOT:[SYSUPD]VMSINSTAL.HISTORY

Creating installation data file: VMI\$ROOT:[SYSUPD]FORMSAAN040.VMI_DATA

VMSINSTAL procedure done at 05:31

\$

A.4 Run-Time Kit for Asian Variant of DECforms

Example A-4 contains a sample installation for the DECforms full development kit on an Alpha system.

Example A-4 Alpha Sample Full Development Kit Installation

```
$ @sys$update:vmsinstal FORMSRTAAN040
```

OpenVMS Software Product Installation Procedure V8.2

It is 5-DEC-2005 at 05:37.

Enter a question mark (?) at any time for help.

%VMSINSTAL-W-ACTIVE, The following processes are still active:

TCPIP\$FTP_1

FORMS

BATCH_24

* Do you want to continue anyway [NO]? yes

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

* Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]

* Enter installation options you wish to use (none):

The following products will be processed:

FORMSRTAAN V4.0

Beginning installation of FORMSRTAAN V4.0 at 05:37

%VMSINSTAL-I-RESTORE, Restoring product save set A ...

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

(continued on next page)

Example A-4 (Cont.) Alpha Sample Full Development Kit Installation

```
*****
*
*           H P   D E C f o r m s   V 4 . 0
*           =====
*                   Runtime Kit
*
*   © Copyright 2005 Hewlett-Packard Development Company, L.P.
*
*
*****
```

DECforms supports following additional languages.

HANZI, HANYU, HANGUL, KANJI

You can install ONE of additional language support.
However, to run DECforms with additional language support,
make sure you have associate license,
localized operating systems and terminals.

* Do you wish to install additional language support (200 blocks) [YES]?

1. HANZI Simplified Chinese support
2. HANYU Traditional Chinese support
3. HANGUL Korean support
4. KANJI Japanese support
0. NONE skip additional language support

* Which language support do you wish to install ? [4]: 1

%FORMSRTAAN-I-SLCTLANG, Selected language is HANZI

```
Product:      FORMS-RT-UI-HANZI
Producer:     HP
Version:      V4.0
Release Date: 11-JAN-2006
```

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

This kit contains an Installation Verification Procedure (IVP)
to verify the correct installation of DECforms.
Because the IVP requires interactive operator input, it
must be run using a VT100, VT200, VT300, VT400, or VT500
compatible video terminal. If you are using one of these
terminal types, you may run the procedure immediately after
installation by answering "YES" to the IVP prompt. Or
you may choose to invoke it later using the following:

```
@SYSTEST:FORMS$RT_IVP.COM
```

* Do you want to run the IVP after the installation [YES]?

* Do you wish to register DECforms for Oracle TRACE support (blocks) [YES]?

```
*****
```

(continued on next page)

Example A-4 (Cont.) Alpha Sample Full Development Kit Installation

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb. After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

%FORMSRTAAN-I-TRACEADDED, DECforms Oracle TRACE definition successfully added to the Oracle TRACE registrar.

* Do you want to purge files replaced by this installation [YES]?

No further questions will be asked during this installation.

This installation defines your selected language as system wide. If you wish to change the language, please edit SYS\$STARTUP:FORMS\$STARTUP.COM, modify the following line to your language and execute the procedure.

```
$ DEFINE/SYSTEM/EXEC/NOLOG FORMS$SYS_LANGUAGE "HANZI"
```

%VMSINSTAL-I-SYSDIR, This product creates system disk directory

VMI\$ROOT:[SYSTE

ST.FORMS].

%CREATE-I-EXISTS, VMI\$ROOT:[SYSTEST.FORMS] already exists

The following files are added by this installation:

```
SYSS$LIBRARY:FORMS$MANAGER.EXE
SYSS$LIBRARY:FORMS$MGRACCSHR.EXE
SYSS$LIBRARY:FORMS$MGRXMSHR.EXE
SYSS$LIBRARY:FORMS$MGRDDIFSHR.EXE
SYSS$LIBRARY:FORMS$CIOSHR.EXE
SYSS$LIBRARY:FORMS$PORTABLE_API.EXE
SYSS$LIBRARY:FORMS$HANZISHR.EXE
SYSS$MESSAGE:FORMS$MSGMGRSHR.EXE
SYSS$MESSAGE:FORMS$MSGMGRSHR_HEBREW.EXE
SYSS$MESSAGE:FORMS$MSGMGRSHR_HANZI.EXE
SYSS$STARTUP:FORMS$STARTUP.COM
SYSTEST:FORMS$RT_IVP.COM
SYSS$COMMON:[SYSTEST.FORMS]FORMS$RT_IVP.EXE
```

The following files have been updated:

```
SYSS$LIBRARY:STARLET.OLB (inserted FORMS$MGR_OBJECT_TABLES*.OBJ)
SYSS$LIBRARY:IMAGELIB.OLB (inserted FORMS$MANAGER.EXE)
```

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Starting Installation Verification Procedure (IVP)

for DECforms V4.0 run-time Manager

(continued on next page)

Example A-4 (Cont.) Alpha Sample Full Development Kit Installation

```
+          DECforms Installation Verification Procedure          +
+-----+
  If you are reading this panel, it indicates that DECforms has
  successfully Enabled a form.

  Press Ctrl/Z or F10 to complete the Installation Verification
  Procedure.  If you do not receive any failure messages, the
  Procedure has successfully disabled this form.
+-----+

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures

  Installation of FORMSRTAAN V4.0 completed at 05:38
  Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY
  Creating installation data file: VMI$ROOT:[SYSUPD]FORMSRTAAN040.VMI_DATA

  VMSINSTAL procedure done at 05:38

$
```

B

I64 Systems Sample Installation

This appendix contains a sample installation of HP DECforms software. Depending on which layered products you have on your system, you might see additional messages and questions when you install HP DECforms software.

The sample installation assumes the following:

- DECnet has been shut down.¹
- No users are logged in to the system.
- The installation kit is in SYS\$UPDATE.
- OPTIONS N is specified during the full development kit installation to print the release notes, but not during the run-time kit installation.
- The Installation Verification Procedure (IVP) runs after each kit has been installed.

¹ Although it is not necessary to shut down DECnet to perform a successful DECforms installation, VMSINSTAL checks to see if DECnet is shut down.

B.1 Full Development Kit for English Variant of DECforms

Example B-1 contains a sample installation for the full development kit of the English variant of DECforms.

Example B-1 I64 Sample Full Development Kit Installation

```
$ @sys$update:vmsinstal FORMSI040
```

```
OpenVMS Software Product Installation Procedure V8.2-1
```

```
It is 1-DEC-2005 at 13:01.
```

```
Enter a question mark (?) at any time for help.
```

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
```

```
TCPIP$FTP_1  
BLD$UPDATECHK
```

- * Do you want to continue anyway [NO]? yes
- * Are you satisfied with the backup of your system disk [YES]?
- * Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]
- * Enter installation options you wish to use (none):

```
The following products will be processed:
```

```
FORMSI V4.0
```

```
Beginning installation of FORMSI V4.0 at 13:02
```

```
%VMSINSTAL-I-RESTORE, Restoring product save set A ...
```

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

```
*****  
*  
*          D E C f o r m s    V 4 . 0          *  
*          =====          *  
*          Full Development Kit                *  
*  
*          Copyright 2005 Hewlett-Packard Development Company, L.P. *  
*  
*  
*****
```

```
*****  
The installation of this kit will supersede any prior version of  
DECforms that may be installed on this system.  
*****
```

```
* Do you wish to install the main kit (16000 blocks) [YES]?
```

(continued on next page)

Example B-1 (Cont.) 164 Sample Full Development Kit Installation

Product: FORMS
Producer: HP
Version: 4.0
Release Date: 11-JAN-2006

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

This kit contains an Installation Verification Procedure (IVP) to verify the correct installation of DECforms. It can be run prior to the conclusion of this procedure by answering "YES" to the IVP prompt or invoked after the installation as follows:
@SYS\$TEST:FORMS\$IVP.COM

* Do you want to run the IVP after the installation [YES]?

* Do you wish to install Sample Application Programs (3000 blocks) [YES]?

* Do you wish to install the demonstration package (12000 blocks) [YES]?

* Do you wish to install LSEDIT support (250 blocks) [YES]?

* Do you wish to install modifiable message file procedures (600 blocks) [YES]?

* Do you wish to register DECforms for Oracle TRACE support (50 blocks) [YES]?

* Do you want to purge files replaced by this installation [YES]?

The remainder of the installation is expected to take between 5 and 35 minutes.

No further questions will be asked during this installation.

%FORMSI-I-MAINKITBEGIN, Restoring main kit.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...

%FORMSI-I-MAINKITEND, Main kit restored.

%FORMSI-I-SMPKITSTART, Restoring Sample Application package.

%VMSINSTAL-I-RESTORE, Restoring product save set C ...

%FORMSI-I-SMPKITEND, Sample Application package restored.

%FORMSI-I-DEMKITSTART, Restoring Demonstration Package.

%VMSINSTAL-I-RESTORE, Restoring product save set D ...

%FORMSI-I-DEMKITEND, Demonstration Package restored.

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb.
After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

(continued on next page)

Example B-1 (Cont.) I64 Sample Full Development Kit Installation

```
*****
%FORMSI-I-TRACEADDED, DECforms Oracle TRACE definition successfully added to
the Oracle TRACE Registrar.
%FORMSI-I-INSMAINSTART, Beginning installation of main kit.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSTEST.FORMS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSTEST.FORMS] already exists
%FORMSI-I-INSMAINEND, Installation of main kit complete.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSHLP.EXAMPLES.FORMS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSHLP.EXAMPLES.FORMS] already exists
%FORMSI-I-INSSMPSTART, Beginning installation of Sample Application.
%FORMSI-I-INSSMPEND, Installation of Sample Application complete.

%FORMSI-I-INSDEMSTART, Beginning installation of Demonstration Package.
%FORMSI-I-INSDEMEND, Installation of Demonstration Package completed..

%FORMSI-I-INLSESTART, Beginning installation of LSEDIT support.
%TPU-S-SAVEENV, environment written to
PULL06$DKA0:[SYS0.SYSUPD.FORMSI040]LSE$S1
%FORMSI-I-INLSEEND, Installation of LSEDIT support completed.

%FORMSI-I-INSDEMSTART, Beginning installation of message support.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES].
%CREATE-I-EXISTS, VMI$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES] already exists
%FORMSI-I-INSDEMEND, Installation of message support completed.
```

All files installed have names beginning with the product facility code (FORMS\$).
The following system areas are updated by this installation:

```
[SYSEXE]           - added FORMS$.EXE
[SYSLIB]           - added FORMS$.EXE files
                   - added language definition files
[SYSHLP]           - added Forms component help files
[SYSMSG]           - added message files
[SYS$STARTUP]     - added FORMS$STARTUP.COM
[DECW$DEFAULTS]   - added Forms development environment
                   initialization files
[SYSTEST]         - added IVP procedures
[SYSTEST.FORMS]   - added IVP files

[SYSHLP.EXAMPLES.FORMS] - added sample application files
[SYSHLP.EXAMPLES.FORMS] - added Demonstration Package
[SYSHLP.EXAMPLES.FORMS.MESSAGES] - added modifiable message file
                               procedures
```

These files are modified:

(continued on next page)

Example B-1 (Cont.) 164 Sample Full Development Kit Installation

```
[SYSLIB]STARLET.OLB      for FORMS$MGR_OBJECT_TABLES*.OBJ
[SYSLIB]IMAGELIB.OLB    for FORMS$MANAGER.EXE
[SYSLIB]DCLTABLES.EXE   for FORMS$DCL_COMMAND_TABLE.CLD
[SYSHLP]HELPLIB.LIB     for Forms help
[SYSLIB]LSE$SYSTEM_ENVIRONMENT.ENV for Forms IFDL environment
[SYSLIB]EPC$FACILITY.TLB for Forms OracleTRACE facility definition.
```

The final part of the installation process will now occur.
Upon completion of this installation, please be sure to edit the
system startup file in order to run FORMS\$STARTUP.COM

Please read the release notes before using DECforms. They contain
important information for this release.

They are located in SYS\$HELP:FORMSI040.RELEASE_NOTES.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Starting DECforms V4.0 Installation Verification Procedure.

```
*****
***
***                      DECforms V4.0                      ***
***
***          Installation Verification Procedure          ***
***
***          Copyright 2005 Hewlett-Packard Development Company, L.P.  ***
***
***
***
*****
```

DECforms V4.0 Installation Verification Procedure beginning.
DECforms V4.0 Installation Verification Procedure completed successfully.

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures

Installation of FORMSI V4.0 completed at 13:07

Adding history entry in VMI\$ROOT:[SYSUPD]VMSINSTAL.HISTORY

Creating installation data file: VMI\$ROOT:[SYSUPD]FORMSI040.VMI_DATA

VMSINSTAL procedure done at

\$

B.2 Run-Time Kit for English Variant of DECforms

Example B-2 contains a sample installation for the English variant of DECforms run-time kit.

Example B-2 I64 Sample Run-Time Kit Installation

```
$ @sys$update:vmsinstal FORMSRTI040
```

```
OpenVMS Software Product Installation Procedure V8.2-1
```

```
It is 1-DEC-2005 at 14:22.
```

```
Enter a question mark (?) at any time for help.
```

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
```

```
TCPIP$FTP_1
```

```
BLD$UPDATECHK
```

```
* Do you want to continue anyway [NO]? yes
```

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

```
* Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]
```

```
* Enter installation options you wish to use (none):
```

```
The following products will be processed:
```

```
FORMSRTI V4.0
```

```
Beginning installation of FORMSRTI V4.0 at 14:22
```

```
%VMSINSTAL-I-RESTORE, Restoring product save set A ...
```

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

```
*****
*
*           H P   D E C f o r m s   V 4 . 0           *
*           =====
*                   Runtime Kit
*
*           Copyright 2005 Hewlett-Packard Development Company, L.P
*
*****
```

```
Product:    FORMS-RT
Producer:   HP
Version:    4.0
Release Date: 11-JAN-2006
```

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

(continued on next page)

Example B-2 (Cont.) 164 Sample Run-Time Kit Installation

This kit contains an Installation Verification Procedure (IVP) to verify the correct installation of DECforms. Because the IVP requires interactive operator input, it must be run using a VT100, VT200, VT300, VT400, or VT500 compatible video terminal. If you are using one of these terminal types, you may run the procedure immediately after installation by answering "YES" to the IVP prompt. Or you may choose to invoke it later using the following: @SYSTEST:FORMS\$RT_IVP.COM

* Do you want to run the IVP after the installation [YES]?

* Do you wish to register DECforms for Oracle TRACE support (50 blocks) [YES]?

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb. After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

%FORMSRTI-I-TRACEADDED, DECforms Oracle TRACE definition successfully added to.

* Do you want to purge files replaced by this installation [YES]?

No further questions will be asked during this installation.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory VMI\$ROOT:[SYSTEST.FORMS].

%CREATE-I-EXISTS, VMI\$ROOT:[SYSTEST.FORMS] already exists

The following files are added by this installation:

SYSS\$LIBRARY:FORMS\$MANAGER.EXE
SYSS\$LIBRARY:FORMS\$SDA.EXE
SYSS\$LIBRARY:FORMS\$MGRXMSHR.EXE
SYSS\$LIBRARY:FORMS\$MGRDDIFSHR.EXE
SYSS\$LIBRARY:FORMS\$C IOSHR.EXE
SYSS\$LIBRARY:FORMS\$PORTABLE_API.EXE
SYSS\$MESSAGE:FORMS\$MSGMGRSHR.EXE
SYSS\$MESSAGE:FORMS\$MSGMGRSHR_HEBREW.EXE
SYSS\$STARTUP:FORMS\$STARTUP.COM
SYSS\$TEST:FORMS\$RT_IVP.COM
SYSS\$COMMON:[SYSTEST.FORMS]FORMS\$RT_IVP.EXE

The following files have been updated:

SYSS\$LIBRARY:STARLET.OLB (inserted FORMS\$MGR_OBJECT_TABLES*.OBJ)
SYSS\$LIBRARY:IMAGELIB.OLB (inserted FORMS\$MANAGER.EXE)

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Starting Installation Verification Procedure (IVP)

(continued on next page)

Example B-2 (Cont.) I64 Sample Run-Time Kit Installation

```
for DECforms V4.0 Run-time Manager
+ DECforms Installation Verification Procedure +
+-----+

If you are reading this panel, it indicates that DECforms has
successfully Enabled a form.

Press Ctrl/Z or F10 to complete the Installation Verification
Procedure. If you do not receive any failure messages, the
Procedure has successfully disabled this form.

+-----+
No next item.

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures

Installation of FORMSRTI V4.0 completed at 14:23
Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY
Creating installation data file: VMI$ROOT:[SYSUPD]FORMSRTI040.VMI_DATA

VMSINSTAL procedure done at 14:23
$
```

B.3 Full Development Kit for Asian variant of DECforms

Example B-3 contains a sample installation of the full development kit for Asian variant (HANZI) of DECforms.

Example B-3 I64 Sample Full Development Kit Installation

```
$ @sys$update:vmsinstal FORMSIAN040
```

```
OpenVMS Software Product Installation Procedure V8.2-1

It is 1-DEC-2005 at 16:59.
Enter a question mark (?) at any time for help.
```

(continued on next page)

Example B-3 (Cont.) 164 Sample Full Development Kit Installation

%VMSINSTAL-W-ACTIVE, The following processes are still active:

TCPIP\$FTP_1
BLD\$UPDATECHK

- * Do you want to continue anyway [NO]? yes
- * Are you satisfied with the backup of your system disk [YES]?
- * Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]
- * Enter installation options you wish to use (none):

The following products will be processed:

FORMSIAN V4.0

Beginning installation of FORMSIAN V4.0 at 16:59

%VMSINSTAL-I-RESTORE, Restoring product save set A ...

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

```
*****
*
*           D E C f o r m s   V 4 . 0
*           =====
*           Full Development Kit
*
*           Copyright 2005 Hewlett-Packard Development Company, L.P.
*
*****
```

```
*****
The installation of this kit will supersede any prior version of
DECforms that may be installed on this system.
*****
```

- * Do you wish to install the main kit (16600 blocks) [YES]?

DECforms supports following additional languages.

HANZI, HANYU, HANGUL, KANJI

You can install ONE of additional language support.

However, to run DECforms with additional language support,
make sure you have associate license,
localized operating systems and terminals.

- * Do you wish to install additional language support (5000 blocks) [NO]? yes

1. HANZI Simplified Chinese support
2. HANYU Traditional Chinese support
3. HANGUL Korean support
4. KANJI Japanese support

(continued on next page)

Example B-3 (Cont.) 164 Sample Full Development Kit Installation

```
0. NONE      skip additional language support

* Which language support do you wish to install ? [0]: 1
%FORMSIAN-I-SLCTLANG, Selected language is HANZI

Product:     FORMS-UI-HANZI
Producer:    HP
Version:     V4.0
Release Date: 11-JAN-2006

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

This kit contains an Installation Verification Procedure (IVP)
to verify the correct installation of DECforms.
It can be run prior to the conclusion of this
procedure by answering "YES" to the IVP prompt or invoked
after the installation as follows:

@SYS$TEST:FORMS$IVP.COM

* Do you want to run the IVP after the installation [YES]?
* Do you wish to install Sample Application Programs (3000 blocks) [YES]?
* Do you wish to install the demonstration package (12000 blocks) [YES]?
* Do you wish to install LSEDIT support (250 blocks) [YES]?
* Do you wish to install modifiable message file procedures (600 blocks) [YES]?
* Do you wish to register DECforms for Oracle TRACE support (50 blocks) [YES]?
* Do you want to purge files replaced by this installation [YES]?

The remainder of the installation is expected to take between
5 and 35 minutes.

No further questions will be asked during this installation.

%FORMSIAN-I-MAINKITBEGIN, restoring main kit.
%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%FORMSIAN-I-MAINKITEND, main kit restored.

%FORMSIAN-I-LANGKITBEGIN, restoring language kit.
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%FORMSIAN-I-LANGKITEND, language kit restored.

%FORMSIAN-I-SMPKITSTART, restoring Sample Application package.
%VMSINSTAL-I-RESTORE, Restoring product save set H ...
%FORMSIAN-I-SMPKITEND, Sample Application package restored.

%FORMSIAN-I-DEMKITSTART, restoring Demonstration Package.
%VMSINSTAL-I-RESTORE, Restoring product save set I ...
%FORMSIAN-I-DEMKITEND, Demonstration Package restored.
```

(continued on next page)

Example B-3 (Cont.) 164 Sample Full Development Kit Installation

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb. After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

%FORMSIAN-I-TRACEADDED, DECforms Oracle TRACE definition successfully added to.

%FORMSIAN-I-INSMMAINSTART, beginning installation of main kit.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory

VMI\$ROOT:[SYSTEST.FORMS].

%CREATE-I-EXISTS, VMI\$ROOT:[SYSTEST.FORMS] already exists

%FORMSIAN-I-INSMMAINEND, installation of main kit complete.

%FORMSIAN-I-INSLANGSTART, beginning installation of language kit.

%FORMSIAN-I-HELP_DIR_MISSING, The directory for language specific HELP file is

-FORMSIAN-I-HELP_DIR_MISSING, missing on your system.

-FORMSIAN-I-HELP_DIR_MISSING, The help files will not be provided.

%FORMSIAN-I-CONTINUE, The installation procedure is continuing...

This installation defines your selected language as system wide.

If you wish to change the language,

please edit SYS\$STARTUP:FORMS\$STARTUP.COM,

modify the following line to your language and execute the procedure.

```
$ DEFINE/SYSTEM/EXEC/NOLOG FORMS$SYS_LANGUAGE "HANZI"
```

%FORMSIAN-I-INSLANGEND, installation of language kit complete.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory

VMI\$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES].

%CREATE-I-EXISTS, VMI\$ROOT:[SYSHLP.EXAMPLES.FORMS] already exists

%FORMSIAN-I-INSSMPSTART, beginning installation of Sample Application.

%FORMSIAN-I-INSSMPEND, installation of Sample Application complete.

%FORMSIAN-I-INSDEMSTART, beginning installation of Demonstration Package.

%FORMSIAN-I-INSDEMEND, installation of Demonstration Package completed..

%FORMSIAN-I-INLSESTART, beginning installation of LSEEDIT support.

%TPU-S-SAVEENV, environment written to

PULL06\$DKA0:[SYS0.SYSUPD.FORMSIAN040]LSE1

%FORMSIAN-I-INLSEEND, installation of LSEEDIT support completed.

%FORMSIAN-I-INSDEMSTART, beginning installation of message support.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory

VMI\$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES].

%CREATE-I-EXISTS, VMI\$ROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES] already exists

%FORMSIAN-I-INSDEMEND, installation of message support completed.

(continued on next page)

Example B-3 (Cont.) 164 Sample Full Development Kit Installation

All files installed have names beginning with the product facility code (FORMS\$).
The following system areas are updated by this installation:

```
[SYSEXE]           - added FORMS$.EXE
[SYSLIB]           - added FORMS$.EXE files
                  - added language definition files
[SYSHLP]           - added Forms component help files
[SYSMSG]           - added message files
[SYS$STARTUP]     - added FORMS$STARTUP.COM
[DECW$DEFAULTS]   - added Forms development environment
                  - initialization files
[SYSTEST]         - added IVP procedures
[SYSTEST.FORMS]   - added IVP files

[SYSHLP.EXAMPLES.FORMS] - added sample application files
[SYSHLP.EXAMPLES.FORMS] - added Demonstration Package
[SYSHLP.EXAMPLES.FORMS.MESSAGES] - added modifiable message file
                               procedures
```

These files are modified:

```
[SYSLIB]STARLET.OLB      for FORMS$MGR_OBJECT_TABLES*.OBJ
[SYSLIB]IMAGELIB.OLB    for FORMS$MANAGER.EXE
[SYSLIB]DCLTABLES.EXE   for FORMS$DCL_COMMAND_TABLE.CLD
[SYSHLP]HELPLIB.LIB     for Forms help
[SYSLIB]LSE$SYSTEM_ENVIRONMENT.ENV for Forms IPDL environment
[SYSLIB]EPC$FACILITY.TLB for Forms OracleTRACE facility definition.
```

The final part of the installation process will now occur.
Upon completion of this installation, please be sure to edit the system startup file in order to run FORMS\$STARTUP.COM

Please read the release notes before using DECforms. These contain important information for this release.

These are in SYS\$HELP:FORMSIAN040.RELEASE_NOTES.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Starting DECforms V4.0 Installation Verification Procedure.

```
*****
***
***              DECforms V4.0              ***
***
***      Installation Verification Procedure  ***
***
***
***      Copyright 2005 Hewlett-Packard Development Company, L.P. ***
***
***
*****
```

(continued on next page)

Example B-3 (Cont.) 164 Sample Full Development Kit Installation

DECforms V4.0 Installation Verification Procedure beginning.
DECforms V4.0 Installation Verification Procedure completed successfully.

The Installation Verification Procedure has completed successfully.
Refer to the Installation Guide for further verification procedures

Installation of FORMSIAN V4.0 completed at 17:01

Adding history entry in VMI\$ROOT:[SYSUPD]VMSINSTAL.HISTORY

Creating installation data file: VMI\$ROOT:[SYSUPD]FORMSIAN040.VMI_DATA

VMSINSTAL procedure done at 17:01

\$

B.4 Run-Time Kit for Asian Variant of DECforms

Example B-4 contains a sample installation of the run-time kit for the Asian variant (HANZI) of DECforms.

Example B-4 164 Sample Run-Time Kit Installation

\$ @sys\$update:vmsinstal FORMSRTIAN040

OpenVMS Software Product Installation Procedure V8.2-1

It is 6-DEC-2005 at 00:01.

Enter a question mark (?) at any time for help.

%VMSINSTAL-W-ACTIVE, The following processes are still active:

TCPIP\$FTP_1
BLD\$UPDATECHK
BATCH_12

- * Do you want to continue anyway [NO]? yes
- * Are you satisfied with the backup of your system disk [YES]?
- * Where will the distribution volumes be mounted: MYDISK:[MYDIRECTORY]
- * Enter installation options you wish to use (none):

The following products will be processed:

FORMSRTIAN V4.0

Beginning installation of FORMSRTIAN V4.0 at 00:01

%VMSINSTAL-I-RESTORE, Restoring product save set A ...

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

(continued on next page)

Example B-4 (Cont.) I64 Sample Run-Time Kit Installation

```
*****
*
*           H P   D E C f o r m s   V 4 . 0           *
*           =====
*                   Runtime Kit
*
*   © Copyright 2005 Hewlett-Packard Development Company, L.P.
*
*
*****
```

DECforms supports following additional languages.

HANZI, HANYU, HANGUL, KANJI

You can install ONE of additional language support.
However, to run DECforms with additional language support,
make sure you have associate license,
localized operating systems and terminals.

* Do you wish to install additional language support (200 blocks) [YES]?

1. HANZI Simplified Chinese support
2. HANYU Traditional Chinese support
3. HANGUL Korean support
4. KANJI Japanese support
0. NONE skip additional language support

* Which language support do you wish to install ? [4]: 1

%FORMSRTIAN-I-SLCTLANG, Selected language is HANZI

```
Product:   FORMS-RT-UI-HANZI
Producer:  HP
Version:   V4.0
Release Date: 11-JAN-2006
```

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

This kit contains an Installation Verification Procedure (IVP)
to verify the correct installation of DECforms.
Because the IVP requires interactive operator input, it
must be run using a VT100, VT200, VT300, VT400, or VT500
compatible video terminal. If you are using one of these
terminal types, you may run the procedure immediately after
installation by answering "YES" to the IVP prompt. Or
you may choose to invoke it later using the following:

```
@SYS$TEST:FORMS$RT_IVP.COM
```

* Do you want to run the IVP after the installation [YES]?

(continued on next page)

Example B-4 (Cont.) I64 Sample Run-Time Kit Installation

* Do you wish to register DECforms for Oracle TRACE support (blocks) [YES]?

Oracle TRACE has not been installed. Now storing the FORMS facility definition into sys\$share:epc\$facility.tlb. After installing Oracle TRACE, the facility definition may be placed in the Oracle TRACE administration database. Please refer to the Oracle TRACE User's guide for instructions on how to insert binary facility definitions into the Oracle TRACE administration database.

%FORMSRTIAN-I-TRACEADDED, DECforms Oracle TRACE definition successfully added to the Oracle TRACE registrar.

* Do you want to purge files replaced by this installation [YES]?
No further questions will be asked during this installation.

This installation defines your selected language as system wide. If you wish to change the language, please edit SYS\$STARTUP:FORMS\$STARTUP.COM, modify the following line to your language and execute the procedure.

```
$ DEFINE/SYSTEM/EXEC/NOLOG FORMS$SYS_LANGUAGE "HANZI"
```

%VMSINSTAL-I-SYSDIR, This product creates system disk directory VMI\$ROOT:[SYSTEM.FORMS].
%CREATE-I-EXISTS, VMI\$ROOT:[SYSTEM.FORMS] already exists

The following files are added by this installation:

```
SYSS$LIBRARY:FORMS$MANAGER.EXE  
+ DECforms Installation Verification Procedure
```

-----+
If you are reading this panel, it indicates that DECforms has successfully Enabled a form.

Press Ctrl/Z or F10 to complete the Installation Verification Procedure. If you do not receive any failure messages, the Procedure has successfully disabled this form.

-----+
The Installation Verification Procedure has completed successfully. Refer to the Installation Guide for further verification procedures
Installation of FORMSRTIAN V4.0 completed at 00:02

(continued on next page)

Example B-4 (Cont.) I64 Sample Run-Time Kit Installation

```
Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY
```

```
Creating installation data file: VMI$ROOT:[SYSUPD]FORMSRTIAN040.VMI_DATA
```

```
VMSINSTAL procedure done at 00:03
```

```
$
```

C

Files and Logical Names Installed on Your System

The DECforms installation procedure installs a number of files on your system and defines some logical names. Section C.1 lists the files installed or modified by the DECforms full development kit. Section C.2 lists the files installed or modified by the DECforms run-time kit. Section C.3 describes the logical names the installation procedure defines.

C.1 Files Added and Modified by the Full Development Kit

The following list contains the names of all files installed on your system when you install the DECforms full development kit:

- Directory SYS\$COMMON:[SYSTEST]
 - FORMS\$IVP.COM
 - FORMS\$RT_IVP.COM
- Directory SYS\$COMMON:[SYSTEST.FORMS]
 - FORMS\$RT_IVP.EXE
- Directory SYS\$SYSROOT:[SYSEXE]
 - FORMS\$DISPATCH.EXE
 - FORMS\$TEXTEDIT.EXE
- Directory SYS\$SYSROOT:[SYSHLP]
 - FORMS\$FDE_HELP.HLB
 - FORMS\$HELPLIB.HLB
 - FORMS\$PEDVTHELP.HLB
 - FORMSAnnn.RELEASE_NOTES (for Alpha kit)
 - FORMSIInn.RELEASE_NOTES (for I64 kit)
- Directory SYS\$SYSROOT:[SYSHLP.EXAMPLES.FORMS]
 - FORMS\$CHECKING.EXE

FORMS\$CHECKING_ADA.ADA
FORMS\$CHECKING_BASIC.BAS
FORMS\$CHECKING_BASIC_COMMON.BAS
FORMS\$CHECKING_C.C
FORMS\$CHECKING_COBOL.COB
FORMS\$CHECKING_DATA.DAT
FORMS\$CHECKING_FORM.FORM
FORMS\$CHECKING_FORM.IFDL
FORMS\$CHECKING_FORTRAN.FOR
FORMS\$CHECKING_PASCAL.PAS
FORMS\$CHECKING_PLI.PLI
FORMS\$DEMO.COM
FORMS\$DEMO_CALCULATOR_FORM.EXE
FORMS\$DEMO_CALCULATOR_FORM.IFDL
FORMS\$DEMO_CALLS.COB
FORMS\$DEMO_CALLS.EXE
FORMS\$DEMO_CALLS.FORM
FORMS\$DEMO_CALLS.IFDL
FORMS\$DEMO_COMMAND_RECALL_FORM.EXE
FORMS\$DEMO_COMMAND_RECALL_FORM.IFDL
FORMS\$DEMO_COPYCAT_FORM.EXE
FORMS\$DEMO_COPYCAT_FORM.IFDL
FORMS\$DEMO_ENABLE.BAS
FORMS\$DEMO_ENABLE.EXE
FORMS\$DEMO_GLOBE_FORM.EXE
FORMS\$DEMO_GLOBE_FORM.IFDL
FORMS\$DEMO_GUIDE.PS
FORMS\$DEMO_GUIDE.TXT
FORMS\$DEMO_MRF_C.C
FORMS\$DEMO_MRF.EXE
FORMS\$DEMO_MRF_FOR.FOR
FORMS\$DEMO_MRF_FORM.IFDL
FORMS\$DEMO_ORDER_ENTRY_FORM.EXE
FORMS\$DEMO_ORDER_ENTRY_FORM.IFDL
FORMS\$DEMO_PHONE.EXE
FORMS\$DEMO_PHONE.IFDL
FORMS\$DEMO_PHONE.PAS
FORMS\$DEMO_PHONE_FILE.DAT
FORMS\$DEMO_RULE_FORM.EXE
FORMS\$DEMO_RULE_FORM.IFDL
FORMS\$DEMO_SHOW_TEXTLIB.COB
FORMS\$DEMO_SHOW_TEXTLIB.EXE
FORMS\$DEMO_SHOW_TEXTLIB.FORM

FORMS\$DEMO_SHOW_TEXTLIB.IFDL
 FORMS\$DEMO_TEXTLIB.COB
 FORMS\$DEMO_TIMER.EXE
 FORMS\$DEMO_TIMER_AST.COB
 FORMS\$DEMO_TIMER_AST_ROUTINE.COB
 FORMS\$DEMO_TIMER_CHECK_STATUS.COB
 FORMS\$DEMO_TIMER_COMP_ROUTINE.COB
 FORMS\$DEMO_TIMER_FORM.IFDL
 FORMS\$DEMO_TIMER_SET_TIMER.COB
 FORMS\$DEMO_TM.C
 FORMS\$DEMO_TM.EXE
 FORMS\$DEMO_TM_FORM.IFDL
 FORMS\$DEMO_TRACK_AND_FIELD.C
 FORMS\$DEMO_TRACK_AND_FIELD.EXE
 FORMS\$DEMO_TRACK_AND_FIELD.IFDL
 FORMS\$SAMPLE_FORM.FORM
 FORMS\$SAMPLE_FORM.IFDL
 FORMS\$SAMPLE_PROGRAM.EXE
 FORMS\$SAMPLE_PROGRAM_API.EXE
 FORMS\$SAMPLE_PROGRAM_API.FOR
 FORMS\$SAMPLE_PROGRAM_C.EXE
 FORMS\$SAMPLE_PROGRAM_C.C
 FORMS\$SAMPLE_PROGRAM_FORTRAN.EXE
 FORMS\$SAMPLE_PROGRAM_FORTRAN.FOR
 FORMS_CHECKING_COMMON.F
 FORMS_CHECKING_GETSYSINFO.F

- Directory SYS\$SYSROOT:[SYSHLP.EXAMPLES.FORMS.MESSAGES]

DECFORMS_MESSAGES.TXT
 FORMS\$MSG_BUILD.COM
 FORMS\$MSG_RUN_TIME.MSG

- Directory SYS\$SYSROOT:[SYSLIB]

FORMSDEF.H
 FORMS\$ADA_DEFINITIONS.ADA
 FORMS\$BAS_DEFINITIONS.BAS
 FORMS\$BLISS_DEFINITIONS.R32
 FORMS\$CIOSHR.EXE
 FORMS\$CNVSHR.EXE
 FORMS\$COB_DEFINITIONS.LIB
 FORMS\$C_DEFINITIONS.H
 FORMS\$FDESHR.EXE
 FORMS\$FDE_EDIT.TPU

FORMS\$FDE_SUBPROC.COM
 FORMS\$FOR_DEFINITIONS.FOR
 FORMS\$FSESHR.EXE
 FORMS\$FSTSHR.EXE
 FORMS\$MANAGER.EXE
 FORMS\$MGRDDIFSHR.EXE
 FORMS\$MGRWEBSHR.EXE
 FORMS\$MGRXMSHR.EXE
 FORMS\$PAS_DEFINITIONS.PAS
 FORMS\$PEDSHR.EXE
 FORMS\$PEDVTEXEC.EXE
 FORMS\$PLI_DEFINITIONS.PLI
 FORMS\$PORTABLE_API.EXE
 FORMS\$TRNSHR.EXE
 FORMS\$UTLBCKSHR.EXE
 FORMS\$UTLEXOSHR.EXE
 FORMS\$UTLEXTSHR.EXE
 FORMS\$UTLTSTSHR.EXE
 FORMS_DEF.F
 FORMS_DEF.H
 FORMSDEF.F
 FORMSDEF.H

- Directory SYS\$SYSROOT:[SYSMSG]
 - FORMS\$MSGMGRSHR.EXE
 - FORMS\$MSGMGRSHR_HEBREW.EXE
 - FORMS\$MSGPRDSHR.EXE
- Directory SYS\$SYSROOT:[SYS\$STARTUP]
 - FORMS\$STARTUP.COM

The following list contains the names of and changes to all files modified by the DECforms installation procedure when you install the full development kit:

- SYS\$LIBRARY:DCLTABLES.EXE—FORMS DCL command is added.
- SYS\$LIBRARY:STARLET.OLB—DECforms object tables are added.
- SYS\$LIBRARY:IMAGELIB.OLB—FORMS\$MANAGER.EXE is added.
- SYS\$LIBRARY:LSE\$SYSTEM_ENVIRONMENT.ENV—DECforms LSE support (optional) is added.
- SYS\$HELP:HELPLIB.HLB—DECforms Help is added.

- EPC\$DATABASE.DIR:EPC\$ADMIN_DB.RDB—DECforms is registered in the Oracle TRACE database.

C.2 Files Added and Modified by the Run-Time Kit

The following list contains the names of all files installed on your system when you install the DECforms run-time kit:

- Directory SYS\$COMMON:[SYSTEST]
 - FORMS\$RT_IVP.COM
- Directory SYS\$COMMON:[SYSTEST.FORMS]
 - FORMS\$RT_IVP.EXE
- Directory SYS\$SYSROOT:[SYSLIB]
 - FORMS\$CIOSHR.EXE
 - FORMS\$MANAGER.EXE
 - FORMS\$MGRXMSHR.EXE
 - FORMS\$MGRDDIFSHR.EXE
 - FORMS\$MGRWEBSHR.EXE
 - FORMS\$PORTABLE_API.EXE
- Directory SYS\$SYSROOT:[SYSMSG]
 - FORMS\$MSGMGRSHR.EXE
 - FORMS\$MSGMGRSHR_HEBREW.EXE
- Directory SYS\$SYSROOT:[SYS\$STARTUP]
 - FORMS\$STARTUP.COM
- Directory SYS\$SYSROOT:[SYSHLP]
 - FORMSAnnn.RELEASE_NOTES —for Alpha kit
 - FORMSIinn.RELEASE_NOTES —for I64 kit

The following list contains the names of and changes to all files modified by the DECforms installation procedure when you install the run-time kit:

- SYS\$LIBRARY:STARLET.OLB—DECforms object tables are added.
- SYS\$LIBRARY:IMAGELIB.OLB—FORMS\$MANAGER.EXE is added.

C.3 Logical Names Added

When you install DECforms, one logical name is entered into the system logical name table. This name is stored in the DECforms startup file and is entered automatically into the system logical name table whenever the system reboots or whenever you run the software.

The logical name is FORMS\$EXAMPLES and is defined as
SYS\$SYSROOT:[SYSHELP.EXAMPLES.FORMS]