DECintact

Installation Guide

Order Number: AA–KZ01C–TE

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This document contains instructions for installing the development, remote-access, and run-time systems for the DECintact product on the VMS operating system. It also explains how to read the online release notes before or after installing the product. This document applies to DECintact Version 2.0 and all maintenance updates in that version. Refer to the VAX System Support Addendum (SPD 29.58.xx) for a list of supported processors, configurations, and ordering information for this and other VMS software products.

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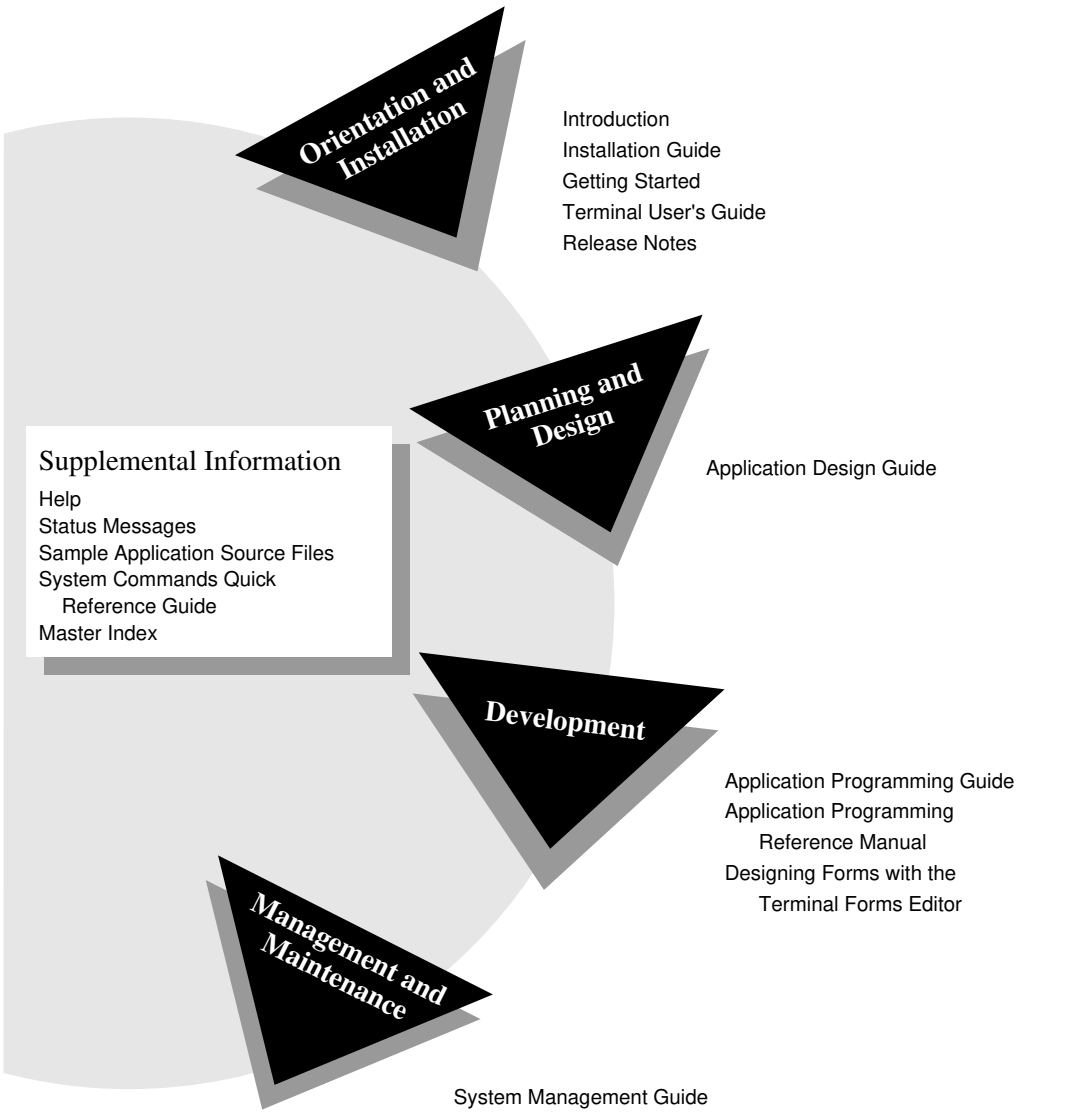
DECintact Information for the Application Development Life Cycle



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Document	Description
DECintact Introduction[1]	Overview of DECintact concepts, and a glossary of DECintact terms.
DECintact Installation Guide[1]	Instructions for installing DECintact on the VMS operating system.
DECintact Getting Started[2]	Step-by-step tutorial that develops a sample DECintact application.
DECintact Terminal User's Guide[1]	Explanation of DECintact functions for the terminal user.
Release Notes[3]	Changes, restrictions, and corrections to DECintact software and documentation from the previous to the current version.
DECintact Application Design Guide[2]	Information necessary to make application design decisions for DECintact.
DECintact Application Programming Guide[2]	Guide to developing DECintact applications.
DECintact Application Programming Reference Manual[2]	Reference information about DECintact routines used to write applications.
DECintact Designing Forms with the Terminal Forms Editor[2]	Guide to creating, modifying, and maintaining TFE forms.
DECintact System Management Guide[1]	Description of system management tasks.
Online Help[3]	Help utility that provides information about DECintact.
Status Messages[3]	Alphabetically sorted listing of DECintact status messages, including explanations and suggested user actions.
Sample Applications Source Files[3]	Sample applications that are referenced throughout the DECintact documentation.
DECintact System Commands Quick Reference Guide[1]	Listing of DECintact DCL-level commands for using and managing the DECintact system.
DECintact Master Index[1] ,[4]	Listing of all index entries in the DECintact documentation set.

[1] Packaged with development, run-time, and remote licenses

[2] Packaged with development license

[3] Available with software media

[4] Not available on line

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Preface

This document describes how to install the DECintact development, remote-access, and run-time systems on the VMS operating system. It is intended for VMS system managers.

Document Structure

- Chapter 1 provides the information needed to prepare for the installation, including the contents of the distribution kits, prerequisite software, required setup activities, upgrading procedure, and required privileges and quotas.
- Chapter 2 provides step-by-step installation procedures.
- Chapter 3 discusses postinstallation procedures.
- Chapter 4 explains how to migrate existing DECintact copies to DECintact Version 2.0.
- Appendix A contains a sample installation.
- Appendix B lists all files installed with each of the three kits.
- Appendix C lists the most common messages you can receive during installation.
- Appendix D provides information about DECdtm transaction log files.

Before continuing with this manual, please note the following:

- Keep this document with your distribution kit. Refer to this document in case you receive any maintenance updates or need to reinstall the DECintact system for any other reason.
- The installation procedure is described step by step. The procedure, for the most part, is self-explanatory. The system prompts you to answer questions and change volumes, and waits for you to tell it to continue.

- At the back of the hardcopy version of this document is a Reader's Comments form. If you have any comments about this manual, fill out the form and mail it.
- For information on reporting problems with the DECintact system, see Section 3.6, Determining and Reporting Problems.
- Refer to the System Support Addendum (SSA 29.58.xx-A, part of Software Product Description, SPD 29.58.xx) for a list of supported processors, configurations, and ordering information for this and other VMS software products. Also refer to the VMS Optional Software Cross-Reference Tables for information on optional products and versions.
- This document does not contain release notes information; instead, release notes are provided on line. To print the release notes after you complete the installation procedure, enter the following:

  ```
  $ HELP INTACT RELEASE_NOTES Return
  ```

  For more information on the release notes, see Section 1.1.2, Accessing the Online Release Notes.

Associated Documents

For more information on installing a layered product on a VMS system, see:

- *Guide to VAX/VMS Software Installation*
- *VAX/VMS System Manager's Reference Manual*
- *VAX/VMS System Messages and Recovery Procedures Reference Manual*

For the command procedures to register the Product Authorization Key (PAK), and information on licensing messages or errors, refer to:

- *VMS License Management Utility Reference Manual*

For more information about the DECintact system, refer to the documents described in the DECintact Information Table at the front of this installation guide.

Conventions

This document uses the following conventions.

Convention	Description
new term	New terms are highlighted in bold type and defined in the glossary.
`User input`	In examples, user input is highlighted in red type for hardcopy documentation and in bold type for online documentation.
italics	Use of italic type indicates emphasis on a word or phrase. Titles of manuals are also italicized.
Return	A key name in a box indicates that you press that key on the terminal keyboard.
Ctrl/X	This symbol indicates that you press the Ctrl (control) key and hold it down while pressing the specified key (indicated here by X).
WORD	Uppercase text indicates VMS data types, commands, keywords, logical names, and routines or services.
word	In format descriptions, a lowercase word indicates parameters and variables.
. . .	In examples, a vertical ellipsis indicates that information not directly related to the example has been omitted.
keypad	Keypad refers to the numeric keypad. If the key sequence is PF1/keypad 8, press PF1 followed by the 8 key on the numeric keypad.

1

Preparing for DECintact Installation

This chapter discusses the preparations and requirements necessary for installing the DECintact system.

The DECintact product is a transaction processing system that provides a foundation for building simple and complex applications on one or more VMS systems. Multiple copies of the DECintact system can execute at the same time, sharing physical memory. The DECintact system runs as a collection of routines and processes under the VMS operating system.

1.1 DECintact Product Information

This section describes:

- DECintact licenses
- Accessing the online DECintact release notes
- Contents of the distribution kit
- Required operating system components

For more information about the DECintact product, see the DECintact documentation set, available in hardcopy form or as part of the VMS Online Documentation Library on CDROM.

1.1.1 DECintact Licenses

Three licenses provide different levels of support for the DECintact system:

- DECINTACT — The *development* system allows complete DECintact functionality.
- DECINTACT-RT — The *run-time* system runs existing DECintact applications, and accesses applications running on other network nodes.
- DECINTACT-REM — The *remote-access* system accesses DECintact applications running on other network nodes, and provides DECintact front-end features.

1.1 DECintact Product Information

Table 1–1 illustrates the differences in features among the three DECintact systems.

Table 1–1 Features Supported by DECintact Licenses

Function	Development	Run-Time	Remote-Access
Terminal management	Yes	Yes	Yes
User edit routines	Yes	Yes	Yes
Remote application access	Yes	Yes	Yes
Queue management	Yes	Yes	No
File management	Yes	Yes	No
File/queue recovery	Yes	Yes	No
Application execution	Yes	Yes	No
Application compiles	Yes	No	No
Forms development	Yes	No	No
Application development	Yes	No	No

1.1.2 Accessing the Online Release Notes

The DECintact system provides online release notes that you can either display or print during the installation procedure.

The prompt to display or print the release notes appears in the installation procedure, as noted in the description of step 6, only when you invoke the VMSINSTAL command procedure with the N option.

Note

For access to the release notes before you install the DECintact system, follow the installation procedure (see Chapter 2) up to step 6, in which you can choose to read or print the release notes and discontinue the installation procedure.

To read the release notes after the installation, display or print the file SYS$HELP:INTACT020.RELEASE_NOTES.

DECintact help that is available through accessing DCL help also directs you to the release notes file. After the installation, enter the following command:

```
$ HELP INTACT RELEASE_NOTES Return
```

1.1.3 Contents of the Distribution Kit

The DECintact software kit consists of the software media and the License Management Facility (LMF) license. The media is one TK50 tape or one magnetic tape (2400 foot / 1600 BPI). The choice depends on your license options and hardware type.

The DECintact product is also available as part of the VMS Consolidated Software Distribution on CDROM.

DECintact systems support the LMF features provided by VMS; LMF requires registration of a Product Authorization Key (PAK).

The bill of materials specifies the contents of your kit. Check the contents of your kit against the list in the bill of materials. If your kit is damaged or if you find that parts of it are missing, call your Digital representative.

For information about mounting the distribution media as well as several options to the installation procedure, see *VMS Upgrade and Installation Manual*.

Appendix B lists files added to your system during this installation. The installation procedure defines the installation directory that you specify during the installation as group logical name INTACT$VERSION. Most DECintact files added to your system during the installation are located in INTACT$VERSION or subdirectories of this directory. See *DECintact System Management Guide* for information about the DECintact directory structure.

1.1.4 Required Operating System Components

The VMS operating system comes with a variety of support options, or classes. Classes include such features as networking and RMS journaling. For a complete list of the required classes, see the System Support Addendum (SSA), which comes with the DECintact Software Product Description (SPD).

1.2 Prerequisite Software

You must have a valid version of VMS installed on your VAX system before installing the DECintact system. To determine what version of the VMS operating system is running, enter the following command:

```
$ SHOW SYSTEM Return
```

The first line of the ensuing display shows the version of the VMS operating system.

VMSINSTAL checks for the correct version of VMS; if you have the wrong version, VMSINSTAL fails.

1.2 Prerequisite Software

For the current supported software version, refer to the DECintact System Support Addendum (SSA).

1.3 Checking the Setup of DECdtm Services

To ensure that DECdtm software is set up correctly for all nodes that use the DECintact system, perform the following actions:

1. Check that the system logical name SYS$DECDTM_INHIBIT is not defined. If this logical name is defined, remove it from SYLOGICALS.COM and reboot the system.
2. Check to see that the following System Generation Utility (SYSGEN) parameters are defined. If they are not defined, edit SYS$SYSTEM:MODPARAMS.DAT, the parameter data file used by the AUTOGEN command procedure, and use AUTOGEN to define this SYSGEN parameter. (See steps 3 and 4 in Section 1.7.3.)
   - SCSNODE

     This parameter must be defined for DECintact to support the DECdtm software.
   - SCSSYSTEMID
3. Check that the system logical name SYS$JOURNAL is defined for a valid device and directory. See Appendix D for more information about defining SYS$JOURNAL.
4. Check to see that the system processes TP_SERVER and IPCACP are started. If these processes are not started, execute the DECDTM$STARTUP.COM procedure by entering the following command:

   ```
   $ @SYS$STARTUP:DECDTM$STARTUP.COM FULL
   ```

   Running this procedure provides information to explain the problem that prevents DECdtm services from starting. When the problem is diagnosed and solved, reboot the system to restart DECdtm services.
5. Using the Log Manager Control Program (LMCP) Utility, ensure that the DECdtm transaction log is defined for every node of the cluster where the DECintact system is used. See Appendix D for more information about defining the DECdtm transaction log.

1.4 Optional Software

After meeting the requirements for prerequisite software, you can also install any of the latest supported versions of the following software products:

- DECforms
- DECnet
- DECtrace for VMS
- VAX COBOL GENERATOR
- VAX CDD/Plus
- VAX DBMS
- VAX Language-Sensitive Editor/Source Code Analyzer
- VAX languages:

  VAX BASIC
  VAX C
  VAX FORTRAN
  VAX Pascal
  VAX COBOL
  PL/I

- VAX Rdb/VMS
- VAXset software tools such as:

  VAX DEC/CMS (Code Management System)
  VAX DEC/MMS (Module Management System)
  VAX DEC/Test Manager
  VAX Performance and Coverage Analyzer
  VAX Source Code Analyzer

There are no dependencies on the optional software for installation.

1.4 Optional Software

Note

Although the following software products are optional for the installation of the DECintact product, Digital recommends installing them before installing the DECintact product if you want support for them by the DECintact system.

- DECtrace for VMS
- VAX Language-Sensitive Editor/Source Code Analyzer

The DECintact installation procedure displays messages about the status of support by the DECintact system for these products depending on whether these products are installed on the node used for the DECintact installation. See Chapter 3 for more information about support for these products.

For currently supported software versions, refer to the DECintact System Support Addendum (SSA).

1.5 Upgrading to DECintact Version 2.0

If you are upgrading from a previous version or installation of the DECintact software, you must first follow the procedure described in this section before continuing with the rest of the preinstallation activities of this chapter and before performing the installation described in Chapter 2 and the postinstallation activities described in Chapter 3. After completing the installation for an upgrade, follow the instructions in Chapter 4 for migrating existing DECintact copies to the newly installed version of the DECintact system.

If you have a version of the DECintact system already installed, do the following before installing DECintact Version 2.0:

Step 1. Shut down all DECintact copies.

Enter the following command to shut down all DECintact copies:

```
$ @copy-directory:INTACT$COPY_CONTROL SHUT Return
```

Step 2. Delete DECintact global sections for each copy.

Delete DECintact global sections for each copy by entering the following command and responding to the prompt as shown:

```
$ RUN INTACT$VERSION:INTACT$INIGSD Return
Option? DELETE Return
```

Step 3. Deinstall DECintact shareable images.

Enter the following commands to deinstall DECintact shareable images:

```
$  INSTALL DELETE INTACT$PRVSHR Return
$  INSTALL DELETE INTACT$SHR Return
```

If the previously installed DECintact system is Version 2.0, enter the following additional commands:

```
$  INSTALL DELETE INTACT$RPCSHR Return
$  INSTALL DELETE INTACT$RPCMSG Return
$  INSTALL DELETE INTACT$VFSHR Return
```

Step 4. Deassign all DECintact defined logical names.

Enter the following command to identify all logical names that must be deassigned:

```
$  SHOW LOGICAL INTACT* Return
```

Deassign each of these logicals (identified by the SHOW LOGICAL INTACT* command) with the following command:

```
$  DEASSIGN logical_name Return
```

Note that the following logical names are defined in the systemwide logical name table and must be deassigned with the /SYSTEM and /EXEC qualifers:

- INTACT$PRVSHR
- INTACT$RPCMSG
- INTACT$RPCSHR
- INTACT$SHR
- INTACT$VFSHR

In addition, all logical names in the group logical name table must be deassigned with the /GROUP qualifer.

Note

You cannot run DECintact Version 2.0 and previous releases or versions of the DECintact software on the same system. After you install DECintact Version 2.0, do not attempt to start an existing copy until you first either create a new DECintact copy or migrate an existing DECintact Version 2.0 copy.

Step 5. Install Version 2.0.

Continue with the preinstallation, installation, and postinstallation activities.

1.6 License Registration

Register a DECintact system license through the VMS License Management Facility (LMF) in accordance with the license agreement signed by your site. License registration information is contained in the Product Authorization Key (PAK) that is shipped with the DECintact system. The PAK is a paper certificate that contains information about the license you have to run the DECintact software.

Before installing the DECintact system, register and load the PAK. To register your PAK, log in to the SYSTEM account. Then, enter the following command:

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

Refer to *VMS License Management Utility Manual* for information pertaining to this command procedure and to management features of LMF. During the installation, the system asks whether you registered the DECintact license and loaded the appropriate authorization key. When the system prompts you for information, respond with data from your PAK.

If you plan to use the DECintact system on more than one node in a VAXcluster system, perform a license load on the other nodes after you complete this installation.

1.7 Installation Procedure Requirements

This section discusses the following topics that deal with various requirements for installing the DECintact system:

- UIC with Installation Verification Procedure
- Process privileges and quotas
- System parameters
- Disk space
- VMSINSTAL requirements
- Backing up your system disk
- Time

1.7.1 UIC with Installation Verification Procedure

The Installation Verification Procedure (IVP) must run within a group that has an established groupwide logical name table. To run the IVP, you, the installer, must be in your default User Identification Code (UIC). If you are not currently running from your own UIC, use the SET UIC command to return to your default UIC before running VMSINSTAL.

Note that there is no requirement that the DECintact product be installed from the SYSTEM account.

1.7.2 Process Privileges and Quotas

To install the DECintact system, you need either the SETPRV privilege or both of the following privileges:

- CMKRNL
- TMPMBX

The following privileges are also required to run the IVP:

- ALTPRI
- DETACH
- GROUP
- GRPNAM
- GRPPRV
- LOG_IO
- NETMBX
- PFNMAP
- PRMGBL
- SHARE
- SHMEM
- SYSGBL
- SYSLCK
- SYSNAM
- SYSPRV

Note that as the VMSINSTAL command procedure executes, it turns off the BYPASS privilege at the start of the installation.

1.7 Installation Procedure Requirements

Table 1–2 shows the minimum process quotas needed for installing the DECintact system.

Table 1–2 Minimum Process Quotas

Process Name	Description	Minimum Quota
PGFLQUO	Paging file	19,100
WSQUO	Working set pages	2,048
WSEXTENT	Maximum working set	2,048
PRCLM	Subprocess quota	1
MAXDETACH	Detached processes	0
ASTLM	AST quota	24
BIOLM	Buffered I/O limit	18
BYTLM	Buffered I/O byte count quota	40,000
DIOLM	Direct I/O limit	40
ENQLM	Enqueue quota	200
FILLM	Open file quota	100

To check or change process quotas, use the VMS Authorize Utility. The following two examples illustrate checking and changing the quotas for the SYSTEM account.

To check the quotas you currently have, enter the following commands:

```
$  SET DEFAULT SYS$SYSTEM  Return
$  RUN AUTHORIZE  Return
UAF>  SHOW SYSTEM  Return
UAF>  EXIT  Return
$
```

To change a process quota — the ASTLM value, for example — enter the following commands, substituting the appropriate process name and value where this example shows ASTLM=24:

```
$  SET DEFAULT SYS$SYSTEM  Return
$  RUN AUTHORIZE  Return
UAF>  MODIFY SYSTEM/ASTLM=24  Return
UAF>  EXIT  Return
$
```

If you change any quotas with the VMS Authorize Utility, you must log out of the system and log back in for them to take effect. The VMS Authorize Utility is described in *Guide to Maintaining a VMS System*.

1.7.3 System Parameters

Table 1–3 shows the minimum values for SYSGEN system parameters required for installation.

Table 1–3 Minimum System Parameter Values

Parameter	Minimum Value
GBLSECTIONS	25 unused global sections
GBLPAGES	6,000 unused global pages
WSMAX	2,048 pages

To ensure that your system has the required SYSGEN system parameter quotas for the installation, perform the following steps.

Step 1. Check the current SYSGEN system parameter values.

Check the current SYSGEN parameter values for the following parameters by entering the command in the example following each listed parameter:

- GBLSECTIONS — Number of free global sections

```
$ WRITE SYS$OUTPUT F$GETSYI("FREE_GBLSECTS") Return
12
```

- GBLPAGES — Number of free global pages

```
$ WRITE SYS$OUTPUT F$GETSYI("FREE_GBLPAGES") Return
4636
```

- WSMAX — Size of current working set maximum

```
$ WRITE SYS$OUTPUT F$GETSYI("WSMAX") Return
4096
```

Step 2. Calculate the number of unused global sections and pages needed.

To determine the number of additional unused global sections and pages needed, perform the following calculation for GBLSECTIONS and GBLPAGES:

> Subtract the current number unused for the parameter (the value obtained for the parameter in step 1) from the required total number unused for the parameter (as specified in Table 1–3).

If the value of the difference is greater than zero, you need to change the value of the parameter.

The following examples show this calculation for these parameters:

- Additional unused global sections needed

  25 − 12 = 13 unused sections needed

  In this example, the difference, 13, is greater than zero and represents the number of additional unused global sections needed to install the DECintact system.

- Additional unused global pages needed

  6000 − 4636 = 1364 unused pages needed

  In this example, the difference, 1,364, is greater than zero and represents the number of additional unused global pages needed to install the DECintact system.

Step 3. Edit the system parameters.

If you must change these or any other system parameters, plan to change them before you begin the installation procedure. To modify the values for the global sections and global pages parameters, edit SYS$SYSTEM:MODPARAMS.DAT, the parameter data file used by the AUTOGEN command procedure. For example, to provide additional global sections and pages based on the values calculated in step 2, edit MODPARAMS.DAT and add the following lines, or change the existing lines as follows:

```
ADD_GBLSECTIONS=13
ADD_GBLPAGES=1364
```

Step 4. Activate the new parameters.

Because the global sections and global pages parameters are not dynamic, you must run AUTOGEN to recompute them. Enter the following command sequence to shut down the VMS system and reboot, activating the new system parameters:

```
$  @SYS$UPDATE:AUTOGEN SAVPARAMS GENPARAMS Return
$  @SYS$UPDATE:AUTOGEN SETPARAMS REBOOT Return
```

Refer to the VMS System Management Subkit for information on using AUTOGEN.

1.7.4 Disk Space

You can install the DECintact system on either your system disk or another disk.

Note

1. Consider the following information when deciding where to create the INTACT$VERSION directory:

   Building the AVERTZ sample application requires approximately 20,000 blocks to accommodate files in three subdirectories below directory INTACT$VERSION:[EXAMPLES.AVERTZ], using one subdirectory for each of the following:

   - VAX Rdb/VMS database
   - AVERTZ executable files
   - VAX CDD/Plus dictionary

2. If disk quotas are set on your system, ensure that they are sufficient to accommodate DECintact disk space requirements.

To determine the number of free blocks on the disk that you designate for the installation, enter the following command:

```
$ SHOW DEVICE devicename: Return
```

1.7.4.1 Disk Space if Installation Disk is the System Disk

To install the DECintact system on your system disk, provide the following disk space:

- 52,000 blocks for peak disk-block utilization
- 46,000 blocks for net disk-block utilization

1.7.4.2 Disk Space if Installation Disk is Not the System Disk

If you are installing the DECintact system on a disk other than the system disk, you must still provide the following disk space:

- System disk
  - 38,000 blocks for peak disk-block utilization
  - 5,000 blocks for net disk-block utilization

- Installation disk
  - 45,000 blocks for peak disk-block utilization
  - 45,000 blocks for net disk-block utilization

1.7.5 VMSINSTAL Requirements

When you invoke the VMSINSTAL command procedure, it checks the following:

- Whether you have set your default device and directory to SYS$UPDATE
- Whether you are logged in to a privileged account
- Whether you have adequate quotas for installation
- Whether DECnet is running
- Whether any users are logged in to the system

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

1.7.6 Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks if you have backed up your system disk. Digital recommends that you do a system disk backup before installing any software.

Use the backup procedures that are established at your site. For details on performing a system disk backup, see the section on the Backup Utility in the VMS System Management Subkit.

1.7.7 Time Required for Installation

Installing the DECintact system takes approximately 15-50 minutes.

If you are unfamiliar with VMSINSTAL, the VMS operating system, or the configuration of your system, allocate a minimum of two hours to read the referenced documentation and gather the required information.

2

Installing the DECintact System

This chapter describes the steps to install the DECintact system. The DECintact installation procedure consists of a series of questions and informational messages. When responding to a prompt, press the Return key after entering your response. If you need additional help during the installation, enter a question mark (?) in response to any prompt; the installation procedure displays an explanation of possible valid responses. For a sample of a DECintact installation, see Appendix A.

To abort the installation procedure, press Ctrl/Y. When you press Ctrl/Y, the installation procedure deletes all files it has created up to that point (but not their directories) and exits. To retry the installation procedure after pressing Ctrl/Y, proceed from step 2.

Enhancements to VMSINSTAL in future releases of the VMS operating system might result in additional system prompts during installation. Although this installation guide does not include these prompts in the installation procedure, the installation can proceed normally.

2.1 Performing the Installation

Step 1. Log in to a properly privileged account.

Log in to an account that has the required privileges and quotas. Be sure that all necessary privileges are enabled. Section 1.7.2 provides information about these requirements. The following example shows logging in to the SYSTEM account.

```
Username:  SYSTEM  Return
Password:          Return
```

2.1 Performing the Installation

Step 2. Invoke VMSINSTAL.

To start the installation, invoke the VMSINSTAL command procedure, located in the SYS$UPDATE directory, by entering a DCL command in the following format:

```
@SYS$UPDATE:VMSINSTAL saveset-name device-name OPTIONS N
```

where:

saveset-name

Is the installation name for the component to install. For the DECintact system, use the following installation name, which identifies the product name and version number:

```
DECINTACT020
```

device-name

Is the name of the device on which you plan to mount the installation media. For example, MFA1: is the device name for a tape drive. It is not necessary to use the console drive for this installation. However, if you do use the console drive, replace any media you removed once the installation is complete.

OPTIONS N

Is an optional parameter that indicates you want to see the prompt to display or print the release notes. If you omit the OPTIONS N parameter, VMSINSTAL does not ask you about the release notes. The release notes can contain additional information about the installation; review the release notes before proceeding with the installation. If you are restarting the installation and have already reviewed the release notes, you do not need to specify OPTIONS N. The release notes are always placed in SYS$HELP, whether or not you specify OPTIONS N.

Note that there are several other options you can select when you invoke VMSINSTAL.

- Auto_answer option (A) — Initially creates a file that contains your answers to VMSINSTALL questions and prompts. You can then use the option (and the answer file) to save time during a reinstallation (typically after upgrading your system).
- Get save-set option (G) — Lets you store product save sets temporarily on a magnetic tape or in a disk directory.
- File log option (L) — Logs all activity to the terminal during installation.
- Alternate root option (R) — Lets you install the product to a system root other than that of the running system.

See the VMS documentation on software installation in the VMS System Management Subkit for detailed information on these options. If you specify more than one option, separate the options with commas (OPTIONS A,N).

The following example invokes VMSINSTAL to install Version 2.0 of the DECintact system from tape drive MFA1: and shows the system response. This example uses the OPTIONS N release note parameter.

```
$  @SYS$UPDATE:VMSINSTAL DECINTACT020 MFA1: OPTIONS N  Return

VAX/VMS Software Product Installation Procedure V5.4

It is 26-SEP-1991 at 12:18.
Enter a question mark (?) at any time for help.
```

After invoking VMSINSTAL, you receive several prompts and messages that explain and direct the installation. If you do not supply either the product name or the device name, VMSINSTAL prompts you for this information later in the installation procedure. If VMSINSTAL prompts you for a device name after you have already provided one, you are probably naming a device that is not available on the system. VMSINSTAL continues to prompt you for a device until you name a valid one.

VMSINSTAL does not prompt you for any options, so be sure to include OPTIONS N on the VMSINSTAL command line to access the release notes during the installation.

Step 3. Check any warning messages that ask if you want to continue.

If you do not complete the installation preparation described in previous sections of this manual, the procedure displays warnings about existing problems and issues a prompt asking if you want to continue.

Correct any problems before continuing the installation procedure. If you continue without correcting the problem, Digital may not support the resulting installation. The following example shows a warning message:

```
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
Do you want to continue anyway [NO]?
```

If you answer NO, VMSINSTAL returns you to DCL command level. After you shut down the network, you must return to step 2 to run VMSINSTAL again. If you answer YES, the installation continues normally.

Step 4. VMSINSTAL checks that you have backed up your system disk.

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

If you have not backed up your system disk, do not continue with the installation. If you need to back up the system disk, answer NO. VMSINSTAL exits and returns you to the DCL prompt. Back up your system disk, and then start the installation procedure at step 2.

If you have already backed up the system disk, answer YES.

See the appropriate VMS software installation guide in the VMS documentation set for more information on backups before installation. For general information on backups, see the appropriate documentation for the VMS Backup Utility.

Step 5. Insert the first installation kit volume.

Before VMSINSTAL tries to access the distribution media, it asks you to mount the media on the device you named when you invoked VMSINSTAL (or when you responded to the device prompt). The request is followed by a prompt asking if you are ready to proceed.

```
Please mount the first volume of the set on MFA1:.

* Are you ready?  YES Return
The following products will be processed:

  DECINTACT V2.0

Beginning installation of DECINTACT V2.0 at 12:18
%VMSINSTAL-I-RESTORE, Restoring product save set A ...

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

Step 6. Select a release notes option.

This step applies only if you specified OPTIONS N in step 2.

```
    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]:  2 Return
```

If you select option 1, VMSINSTAL displays the release notes immediately on your screen. If you select option 2 or option 3, VMSINSTAL prompts you for a queue name.

```
* Queue name [SYS$PRINT]:  Return
```

You can enter a queue name or press Return to indicate the default output print device, SYS$PRINT. VMSINSTAL responds with an informational message indicating the queue used, which is SI$8700 in the following example:

```
Job INTACT020 (queue SI$8700, entry 1794) started on SYS$PRINT
```

Next, or if you select option 4, VMSINSTAL displays a prompt asking if you want to continue the installation:

```
* Do you want to continue the installation [NO]?:  YES Return

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

                DECintact V2.0 System Installation
```

If you answer NO, VMSINSTAL terminates the installation.

Note

The name of the release notes file installed by VMSINSTAL consists of the current product name and version number. It is good practice to keep release notes for previous versions of the DECintact system.

Step 7. Decide whether to purge files.

New generations of the files SYS$LIBRARY:DCLTABLES.EXE and SYS$HELP:HELPLIB.HLB are created during installation of the DECintact system. VMSINSTAL asks you whether you want to purge the old files:

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

To purge the old copies of these two files after installation, answer YES in response to the preceding question. If you do not want to purge the old generations of these files, answer NO.

Step 8. Select the device and directory.

VMSINSTAL explains how to perform this step and prompts for the destination device and directory name where all DECintact V2.0 files are to reside. Supply the destination device and directory name.

Note

You must provide a new directory name, that is, the name of a directory that does not currently exist.

```
   In response to the next question, please enter destination device and
   directory specification for DECintact files. The directory name must be
   a new directory name; that is, the name of a directory that does not exist.
   This directory will be the INTACT$VERSION directory once the installation
   is complete.  The INTACT$COPY directory will be a subdirectory below this.
   The default device and directory are: SYS$SYSDEVICE:[DECINTACT020]

* Installation device and directory [SYS$SYSDEVICE:[DECINTACT020]]:
```

2.1 Performing the Installation

Step 9. Select and verify the software license.

The installation procedure displays license information about the DECintact product and asks the following two questions to verify that a DECintact license has been installed before the product is installed. For each question, supply an appropriate answer.

```
Please answer the next question by selecting the number which
represents the currently loaded DECintact license.

         1.  DECINTACT
         2.  DECINTACT-RT
         3.  DECINTACT-REM

* Which license do you have registered and loaded [1]: 1

          Product:     DECINTACT
          Producer:    DEC
          Version:     2.0
          Release Date:19-SEP-1989

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

If you have not registered and loaded your PAK, you must answer NO to this question. You have to register and load your PAK to successfully complete the installation. If you have not done so, stop the installation, register and load your PAK, and then restart the installation.

Step 10. Read informational messages.

If LSE is not installed or if a license for LSE is not loaded, the procedure displays the following message and instructions:

```
    ************************************************************

    The VAX Language-Sensitive Editor is not installed on your
    system.  To have the VAX Language-Sensitive Editor support,
    you must:


        1.  Load the VAX Language-Sensitive Editor License

        2.  Install the VAX Language-Sensitive Editor

        3.  @Intact$version:Intact$update_lse.com

    ************************************************************
```

If an unsupported version of LSE is installed, the procedure displays the following message and instructions:

```
    ************************************************************

    VAX LSE nn.nn is installed on your system. To use the VAX
    Language-Sensitive Editor template for DECintact system
    calls, you must:


        1.  Install VAX LSE 3.0 or higher.
        2.  @Intact$version:Intact$update_lse.com

    ************************************************************
```

where:

nn.nn	Is the version number of LSE installed on your system.

VMSINSTAL then displays the following informational messages:

```
    All interactive input for the installation of DECintact V2.0 is now
    complete.  It will take approximately 15 to 50 minutes to complete the
    installation, depending on your system and kit media.

%VMSINSTAL-I-RESTORE, Restoring product saveset B ...

    LSE environment successfully updated.

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

Note that system disk directory messages are displayed only if you are installing the DECintact system on the system disk. These messages are not shown in this example.

Step 11. Check installation verification messages.

The Installation Verification Procedure (IVP) runs automatically. Check that your system responses are the same. If not, identify the problem as described in Section 2.2.

```
%INTACT$IVP-I-BEGIN, starting DECintact installation verification
procedure
%INTACT$IVP-I-INSFAC, Inserting facility definition into DECtrace Admin DB.
%INTACT$IVP-S-EPCINS, Facility insert successful.
%INTACT$IVP-I-INSFILE, Inserting facility definition file into DECtrace
facility library.
%INTACT$IVP-S-LIBINS, Library insert successful.
%INTACT$IVP-I-END, successfully completed DECintact installation
verification procedure
```

Step 12. The installation procedure ends.

The following messages indicate that the installation procedure is complete:

```
        Installation of DECINTACT V2.0 completed at 12:59


        VMSINSTAL procedure done at 13:00
```

Step 13. Log out.

You can now log out of the privileged account.

```
$ LOGOUT [Return]
SYSTEM     logged out at 26-SEP-1991 13:05:00.00
```

Note that VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you invoked the installation from the system manager's account and you want to continue to use that account and restore those symbols, log out and log in again.

2.2 Error Conditions

If the installation procedure fails for any reason, the following message is displayed:

```
%VMSINSTAL-F-UNEXPECTED, Installation terminated due to unexpected event.
```

One or more of the following conditions can cause an error during the installation:

- Insufficient disk space to complete the installation
- Insufficient AST quota
- Insufficient buffered I/O byte count

- Insufficient subprocess quota
- Insufficient open file quota
- Insufficient process paging file quota
- Insufficient process working set quota
- Insufficient system maximum working set
- Incorrect version of VMS

For descriptions of the error messages generated by these conditions, see *VMS System Messages and Recovery Procedures Manual* and *VMS Upgrade and Installation Manual*.

If you are notified that any of these conditions exist, take the appropriate action, as described in the message. You may need to change a system parameter (with SYSGEN) or increase an authorized quota value (with AUTHORIZE). If the installation fails, restart the installation procedure from step 2.

For a list of the more common messages specific to the DECintact system issued by VMSINSTAL, refer to Appendix C.

If the Installation Verification Procedure fails, you receive messages explaining the failure. These IVP messages are also listed in Appendix C.

3
Postinstallation Procedures

The following activities take place after installing the DECintact system:

- Activating the INTACT command
- Using the INTACT command on VAXcluster systems
- Using the STARTUP and SHUTDOWN commands
- Running the Installation Verification Procedure separately from installation
- Performing maintenance updates
- Determining and reporting problems
- Improving product performance
- Activating support for VAX Language-Sensitive Editor
- Activating support for DECtrace for VMS
- Getting started using the DECintact system

3.1 Activating the INTACT Command

The installation procedure modifies the DCL command table so that the INTACT command is recognized and processed. However, the old command table is still in effect for those users who are currently logged in. All logged-in users who want to use the INTACT command must log out of the system and log in again.

3.2 Using the INTACT Command on VAXcluster Systems

To make the INTACT command available to nodes in a VAXcluster system configuration, execute a sequence of commands from an account with the proper privileges on each node, as shown in the following example. In this example, the INTACT command becomes available for the DECINTACT-RT license; load the appropriate license for your nodes.

Enter the following command sequence for each node in a VAXcluster system on which you want to run the DECintact system:

```
$  INSTALL :== $INSTALL/COMMAND_MODE  Return
$  INSTALL  Return
INSTALL>  REPLACE SYS$LIBRARY:DCLTABLES.EXE  Return
INSTALL>  EXIT  Return
$  LICENSE LOAD DECINTACT-RT  Return
```

3.3 Using the STARTUP and SHUTDOWN Commands

The DECintact product provides defaults in the DECintact control procedure to cover a normal startup situation. The DECintact STARTUP function starts, or makes a copy of the DECintact system available for use. The DECintact system manager can alter the functionality by specifying various parameters on the command line. These parameters, as well as the SHUTDOWN function, are described in *DECintact System Management Guide*.

3.4 Running the Installation Verification Procedure Separately

You usually run the Installation Verification Procedure (IVP) during installation. If you want to run the IVP separately to ensure the integrity of installed files if system problems occur, enter command procedure INTACT$IVP.COM from directory INTACT$VERSION, as shown in the following example:

```
$  @INTACT$VERSION:INTACT$IVP.COM  Return
```

3.5 Performing Maintenance Updates

When Digital periodically issues maintenance updates of the DECintact product, each update consists of an installation kit. Install this kit as described in this document or in any documentation that may accompany the maintenance update.

Each time a maintenance update is released, the version number changes. For example, if the current version is 2.0, the version number of the next maintenance update is 2.1. In addition, the maintenance update usually includes changes to the release notes. The release notes describe the changes that have been made to the DECintact product since the previous release.

The update release notes are provided on line. You can read the release notes before you install the DECintact product and at any time after the product is installed. For information on reading the release notes before the DECintact system is installed, follow the installation procedure up to step 6. To read the release notes after installing the product, display or print the file SYS$HELP:INTACT02x.RELEASE_NOTES, where x represents the version of the maintenance update; or enter the following command to find out how to access the release notes:

```
$ HELP INTACT RELEASE_NOTES Return
```

3.6 Determining and Reporting Problems

If you encounter a problem while using the DECintact product, report the problem to Digital. Depending on the nature of the problem and the type of support you have, you can take one of the following actions:

- Call Digital if your Software Product Services (SPS) contract or warranty agreement entitles you to telephone support.
- Submit a Software Performance Report (SPR). See the release notes for the DECintact product for information on how to submit an SPR.
- Fill out and submit a Reader's Comments form if the problem concerns the DECintact documentation. You can find Reader's Comments forms at the back of each hard-copy manual. Use the form from the manual in which you found the error. Include the section and page number.

Review the Software Product Description (SPD) and Warranty Addendum for an explanation of the warranty. If you encounter a problem during the warranty period, report the problem as indicated previously, or follow alternate instructions provided by Digital for reporting SPD nonconformance problems.

3.7 Improving Product Performance

The following suggestions can help you to improve the performance of the DECintact system as a whole:

- Use nonpaged physical memory for data buffers (TDBs and DFBs).
- Use multiple physical disk drives for various files, such as the recovery-unit journal (transaction rollback) and the after-image journal (transaction rollforward), and application data and log files.
- Balance used disk drives over available HSCs, CIs, and K.Sdi ports.

If you intend to use the DECintact product extensively on your system, you can reduce system overhead and memory requirements by installing it as a shared image using the Install Utility. For more information about improving product performance, see *DECintact System Management Guide*.

3.8 Activating Support for VAX Language-Sensitive Editor

If a version of the VAX Language-Sensitive Editor (LSE) that the DECintact system supports is installed before the DECintact installation, you can use that version of LSE with DECintact. If after the DECintact installation you install a version of LSE that DECintact supports, you do not need to reinstall the DECintact system to activate support of that version of LSE; instead, enter the following command:

```
$ @INTACT$VERSION:INTACT$UPDATE_LSE.COM
```

3.9 Activating Support for DECtrace for VMS

After the DECintact installation, if you install a version of the DECtrace for VMS product that DECintact supports, you do not need to reinstall the DECintact system to activate support of that version of the DECtrace software. For information about supporting a newly installed version of the DECtrace software, see *DECtrace for VMS User's Guide*.

3.10 Getting Started Using the DECintact System

For recommended steps for the initial use of the DECintact system, see *DECintact System Management Guide*.

4

Migrating to DECintact Version 2.0

This chapter describes the procedures necessary to migrate existing DECintact copies to DECintact Version 2.0. Perform the steps provided in this chapter after performing the DECintact Version 2.0 preinstallation, installation, and postinstallation activities of the preceding chapters.

4.1 Migrating from DECintact Version 1.1 to Version 2.0

This section describes the procedure necessary to migrate from an existing DECintact Version 1.1 system to a DECintact Version 2.0 system.

Step 1. Create a new DECintact copy.

Considering the extent of the changes in DECintact Version 2.0 compared with Version 1.1, Digital recommends that you create a new copy of DECintact. Refer to *DECintact System Management Guide* for complete information about creating a copy.

Note

The DECintact file database file INTACT$FILE.MAR, menu definition file INTACT$MENU_USR.MAR, and security files INTACT$UIT.DAT and INTACT$AUDIT are compatible between Version 1.1 and Version 2.0 of the DECintact system.

Step 2. Relink the applications.

Relink any DECintact applications previously linked under another version of DECintact software.

Step 3. Start the copy under DECintact Version 2.0

Start the copy by entering the following command:

```
$ @COPY-DIRECTORY:INTACT$COPY_CONTROL START Return
```

4.2 Migrating from a Previously Installed DECintact Version 2.0

This section describes the procedure necessary to migrate from an existing DECintact Version 2.0 system.

Step 1. Edit the copy control procedure.

Edit the copy control procedure so that the logical name INTACT$VERSION points to the DECintact Version 2.0 directory:

```
$  EDIT copy-directory:INTACT$COPY_CONTROL.COM  Return
```

Change the symbol INTACT$VERSION_DIRECTORY to point to the current DECintact installation directory.

Step 2. Establish the new INTACT$VERSION logical name.

Enter the following command to establish the new INTACT$VERSION logical name:

```
$  @copy-directory:INTACT$COPY_CONTROL LOGICAL_NAMES_ONLY  Return
```

Step 3. Replace DSPLCL.EXE and DSPLCL.DBG with Version 2.0 images.

Replace DSPLCL.EXE and DSPLCL.DBG in the INTACT$COPY directory with Version 2.0 images.

If you have not built UERs into DSPLCL, copy the new images:

```
$  COPY INTACT$VERSION:DSPLCL.EXE INTACT$COPY  Return
$  COPY INTACT$VERSION:DSPLCL.DBG INTACT$COPY  Return
```

If you have built UERs into DSPLCL, rebuild the images:

```
$  SET DEFAULT INTACT$COPY  Return
$  @INTACT$VERSION:INTACT$REBUILD DSPLCL  Return
```

Step 4. Relink the applications.

Use INTOPT.OPT to relink any DECintact applications previously linked under another version of the DECintact software.

Step 5. Start the copy under DECintact Version 2.0.

Start the copy by entering the following command:

```
$  @copy-directory:INTACT$COPY_CONTROL START  Return
```

A
Sample Installation

This appendix contains a sample installation for the DECintact system. Please note that this is a sample. The installation procedure may be modified slightly in maintenance updates of this product.

Example A–1 is the dialog from a DECintact development license installation.

Example A–1 Installation Sample

```
Username: SYSTEM
Password:

        Welcome to VAX/VMS V5.4

    Last interactive login on Tuesday, 24-SEP-1991 11:01
    Last non-interactive login on Tuesday, 24-SEP-1991 11:04

$@SYS$UPDATE:VMSINSTAL DECINTACT020 MFA1: OPTIONS N

VAX/VMS Software Product Installation Procedure V5.4


It is 26-SEP-1991 at 12:18.


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

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

The following products will be processed:

  DECINTACT V2.0
```

(continued on next page)

Example A–1 (Cont.) Installation Sample

```
Beginning installation of DECINTACT V2.0 at 12:18

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

    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]: 2

* Queue name [SYS$PRINT]: SYS$PRINT

Job INTACT020 (queue OLTP$LN11, entry 929) started on OLTP$LN11

* Do you want to continue the installation [NO]? YES

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

               DECintact V2.0 System Installation

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

    In response to the next question, please enter destination device and
    directory specification for DECintact files. The directory name must be
    a new directory name; that is, the name of a directory that does not exist.
    This directory will be the INTACT$VERSION directory once the installation
    is complete.  The INTACT$COPY directory will be a subdirectory below this.
    The default device and directory are: SYS$SYSDEVICE:[DECINTACT020]

* Installation device and directory [SYS$SYSDEVICE:[DECINTACT020]]:

    Please answer the next question by selecting the number which represents
    the currently loaded DECintact license.

        1.  DECINTACT
        2.  DECINTACT-RT
        3.  DECINTACT-REM


* Which license do you have registered and loaded [1]: 1

       Product:      DECINTACT
       Producer:     DEC
       Version:      2.0
       Release Date: 19-SEP-1989

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

(continued on next page)

Example A–1 (Cont.) Installation Sample

```
    All interactive input for the installation of DECintact V2.0 is now
    complete.  It will take approximately 15 to 50 minutes to complete the
    installation, depending on your system and kit media.

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

    LSE environment successfully updated.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020.COPY_DEFAULT].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020.COPY_DEFAULT.LOG].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020.COPY_DEFAULT.DECFORMS_CACHE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020.COPY_DEFAULT.DECFORMS_STORAGE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020.EXAMPLES].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020.EXAMPLES.AVERTZ].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[DECINTACT020.EXAMPLES.EMPLOYEE].
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

%INTACT$IVP-I-BEGIN, starting DECintact installation verification procedure
%INTACT$IVP-I-INSFAC, Inserting facility definition into DECtrace Admin DB.
%INTACT$IVP-S-EPCINS, Facility insert successful.
%INTACT$IVP-I-INSFILE, Inserting facility definition file into DECtrace facility library.
%INTACT$IVP-S-LIBINS, Library insert successful.
%INTACT$IVP-I-END, successfully completed DECintact installation verification procedure

        Installation of DECINTACT V2.0 completed at 12:59

        VMSINSTAL procedure done at 13:00

$ LOGOUT
  SYSTEM     logged out at 26-SEP-1991 13:05:01.91
```

B

Files Installed with the DECintact System

This appendix lists the files that result from installing different DECintact licenses. Files in the remote license are common to all licenses.

For most directories in the lists of files, the lists identify the directories by the logical names defined for them during the installation. However, the installation procedure does not define logical names for some directories for sample application files that the installation procedure provides. For these directories, this appendix lists the following directory specifications:

- For files installed for the AVERTZ sample application:

  version-disk:[version-dir.EXAMPLES.AVERTZ]

- For files installed for the EMPLOYEE sample application:

  version-disk:[version-dir.EXAMPLES.EMPLOYEE]

where:

version-disk	Is the name of the disk that the installer specifies during the installation as the destination disk associated with the destination directory, and which, with the destination directory, the installation procedure defines as INTACT$VERSION.
version-dir	Is the name of the directory that the installer specifies during the installation as the destination directory, and which, with the destination disk, the installation procedure defines as INTACT$VERSION.

B.1 DECintact Files in a Remote-Access License

The following files result from the installation of any DECintact system.

- INTACT$COPY:DECFORMS_CACHE.DIR
- INTACT$COPY:DECFORMS_STORAGE.DIR
- INTACT$COPY:DSPLCL.DBG
- INTACT$COPY:DSPLCL.EXE

B.1 DECintact Files in a Remote-Access License

- INTACT$COPY:INTACT$AUDIT.DAT
- INTACT$COPY:INTACT$AUDIT.FDL
- INTACT$COPY:INTACT$COPY_CONTROL.COM
- INTACT$COPY:INTACT$COPY_CONTROL_USER.COM
- INTACT$COPY:INTACT$DF_BLANK_FORM.EXE
- INTACT$COPY:INTACT$DF_BLANK_FORM.IFDL
- INTACT$COPY:INTACT$FILE.MAR
- INTACT$COPY:INTACT$FILE.SECTION
- INTACT$COPY:INTACT$FORM.SECTION
- INTACT$COPY:INTACT$FORMS_LIBRARY.DAT
- INTACT$COPY:INTACT$MENU.SECTION
- INTACT$COPY:INTACT$MENU_USR.MAR
- INTACT$COPY:INTACT$PDUDB.DAT
- INTACT$COPY:INTACT$PDUDB.FDL
- INTACT$COPY:INTACT$PSWDVAL.EXE
- INTACT$COPY:INTACT$PSWDVAL.MAR
- INTACT$COPY:INTACT$PSWDVAL_BLD.OPT
- INTACT$COPY:INTACT$QUEUE.SECTION
- INTACT$COPY:INTACT$QUEUE_ITEM.DAT
- INTACT$COPY:INTACT$QUEUE_ITEM.FDL
- INTACT$COPY:INTACT$QUEUE_RCV.DAT
- INTACT$COPY:INTACT$QUEUE_REF.DAT
- INTACT$COPY:INTACT$QUEUE_REF.FDL
- INTACT$COPY:INTACT$QUEUE_SND.DAT
- INTACT$COPY:INTACT$QUEUE_SYS.DAT
- INTACT$COPY:INTACT$QUEUE_SYS.FDL
- INTACT$COPY:INTACT$RESTORE.COM
- INTACT$COPY:INTACT$ROLLBACK.JNL
- INTACT$COPY:INTACT$ROLLFORWARD.FDL

B.1 DECintact Files in a Remote-Access License

- INTACT$COPY:INTACT$ROLLFORWARD.JNL
- INTACT$COPY:INTACT$SYNC_POINT_BACKUP.COM
- INTACT$COPY:INTACT$TRANSACTION.SECTION
- INTACT$COPY:INTACT$UIR.DAT
- INTACT$COPY:INTACT$UIR.FDL
- INTACT$COPY:INTACT.MSS_PARAMETERS
- INTACT$COPY:LOG.DIR
- INTACT$COPY:SAMPLE.DAT
- INTACT$COPY:SAMPLE.EXE
- INTACT$COPY:USEREDIT.OPT
- INTACT$VERSION:CLUSTER_AST.OBJ
- INTACT$VERSION:CMGDEF.MAR
- INTACT$VERSION:CMGDEF.OBJ
- INTACT$VERSION:COPY_DEFAULT.DIR
- INTACT$VERSION:CPYTSK.EXE
- INTACT$VERSION:DFSERVER.EXE
- INTACT$VERSION:DSPACT.EXE
- INTACT$VERSION:DSPLCL.DBG
- INTACT$VERSION:DSPLCL.EXE
- INTACT$VERSION:FLUSH_LOG.EXE
- INTACT$VERSION:FORCEX.EXE
- INTACT$VERSION:INIGSD.OPT
- INTACT$VERSION:INIOPN.OBJ
- INTACT$VERSION:INIPRV.OBJ
- INTACT$VERSION:INTACT$AUDIT.DAT
- INTACT$VERSION:INTACT$AUDIT.FDL
- INTACT$VERSION:INTACT$AUDREP.EXE
- INTACT$VERSION:INTACT$BAKINI.EXE
- INTACT$VERSION:INTACT$BAKRES.EXE

B.1 DECintact Files in a Remote-Access License

- INTACT$VERSION:INTACT$BUF.EXE
- INTACT$VERSION:INTACT$CALSET.EXE
- INTACT$VERSION:INTACT$CMU.EXE
- INTACT$VERSION:INTACT$COMMON_CONTROL.COM
- INTACT$VERSION:INTACT$COPY_CONTROL_USER.COM
- INTACT$VERSION:INTACT$CREATE_COPY.COM
- INTACT$VERSION:INTACT$DF_BLANK_FORM.EXE
- INTACT$VERSION:INTACT$DF_BLANK_FORM.IFDL
- INTACT$VERSION:INTACT$FAC_DEF.EPC$DEF
- INTACT$VERSION:INTACT$FILE.MAR
- INTACT$VERSION:INTACT$FILE.SECTION
- INTACT$VERSION:INTACT$FORM.SECTION
- INTACT$VERSION:INTACT$FORMS_LIBRARY.DAT
- INTACT$VERSION:INTACT$HELP.EXE
- INTACT$VERSION:INTACT$HFU.EXE
- INTACT$VERSION:INTACT$HIBER.EXE
- INTACT$VERSION:INTACT$HLP.HLB
- INTACT$VERSION:INTACT$IMU.EXE
- INTACT$VERSION:INTACT$INIGSD.EXE
- INTACT$VERSION:INTACT$INIGSD.OBJ
- INTACT$VERSION:INTACT$INILOG.EXE
- INTACT$VERSION:INTACT$IVP.COM
- INTACT$VERSION:INTACT$MENU.SECTION
- INTACT$VERSION:INTACT$MENU_SYS.MAR
- INTACT$VERSION:INTACT$MENU_USR.MAR
- INTACT$VERSION:INTACT$MSG.EXE
- INTACT$VERSION:INTACT$ONLINEHLP.HLB
- INTACT$VERSION:INTACT$PARSER.EXE
- INTACT$VERSION:INTACT$PDU.EXE

B.1 DECintact Files in a Remote-Access License

- INTACT$VERSION:INTACT$PDUDB.DAT
- INTACT$VERSION:INTACT$PDUDB.FDL
- INTACT$VERSION:INTACT$PRVSHR.EXE
- INTACT$VERSION:INTACT$PRVSHR.OBJ
- INTACT$VERSION:INTACT$PRVSHR_BLD.OPT
- INTACT$VERSION:INTACT$PSWDVAL.EXE
- INTACT$VERSION:INTACT$PSWDVAL.MAR
- INTACT$VERSION:INTACT$PSWDVAL_BLD.OPT
- INTACT$VERSION:INTACT$QMU.EXE
- INTACT$VERSION:INTACT$QUEINI.EXE
- INTACT$VERSION:INTACT$QUEUE.SECTION
- INTACT$VERSION:INTACT$QUEUE_ITEM.DAT
- INTACT$VERSION:INTACT$QUEUE_ITEM.FDL
- INTACT$VERSION:INTACT$QUEUE_RCV.DAT
- INTACT$VERSION:INTACT$QUEUE_RCV.FDL
- INTACT$VERSION:INTACT$QUEUE_REF.DAT
- INTACT$VERSION:INTACT$QUEUE_REF.FDL
- INTACT$VERSION:INTACT$QUEUE_SND.DAT
- INTACT$VERSION:INTACT$QUEUE_SND.FDL
- INTACT$VERSION:INTACT$QUEUE_SYS.DAT
- INTACT$VERSION:INTACT$QUEUE_SYS.FDL
- INTACT$VERSION:INTACT$REBUILD.COM
- INTACT$VERSION:INTACT$RECOVER.COM
- INTACT$VERSION:INTACT$RESTORE.COM
- INTACT$VERSION:INTACT$RESTRT.EXE
- INTACT$VERSION:INTACT$ROLLFORWARD.FDL
- INTACT$VERSION:INTACT$RPCMSG.EXE
- INTACT$VERSION:INTACT$RPCSHR.EXE
- INTACT$VERSION:INTACT$RSPWRT.EXE

B.1 DECintact Files in a Remote-Access License

- INTACT$VERSION:INTACT$SECURE.EXE
- INTACT$VERSION:INTACT$SHR.EXE
- INTACT$VERSION:INTACT$SWLPROC.EXE
- INTACT$VERSION:INTACT$SWLUP.EXE
- INTACT$VERSION:INTACT$SWLUP.HLB
- INTACT$VERSION:INTACT$SYNC_POINT_BACKUP.COM
- INTACT$VERSION:INTACT$SYNC_POINT_ROLFWD.COM
- INTACT$VERSION:INTACT$TFEHLP.HLB
- INTACT$VERSION:INTACT$TFEVAX.EXE
- INTACT$VERSION:INTACT$TOC.EXE
- INTACT$VERSION:INTACT$TRANSACTION.SECTION
- INTACT$VERSION:INTACT$UIR.DAT
- INTACT$VERSION:INTACT$UIR.FDL
- INTACT$VERSION:INTACT$UTILITIES.COM
- INTACT$VERSION:INTACT$VERSION.OPT
- INTACT$VERSION:INTACT$VFSHR.EXE
- INTACT$VERSION:INTACT$VIM.EXE
- INTACT$VERSION:INTACT$VIMHLP.HLB
- INTACT$VERSION:INTACT.MLB
- INTACT$VERSION:INTACT.OLB
- INTACT$VERSION:INTNOSHROPT.OPT
- INTACT$VERSION:INTONLAPL.COM
- INTACT$VERSION:INTONLDCL.COM
- INTACT$VERSION:INTOPT.OPT
- INTACT$VERSION:LCKINT.EXE
- INTACT$VERSION:QUESRV.EXE
- INTACT$VERSION:QUESRVXMT.EXE
- INTACT$VERSION:SAMPLE.DAT
- INTACT$VERSION:SAMPLE.EXE

B.1 DECintact Files in a Remote-Access License

- INTACT$VERSION:SETPRCNAM.COM
- INTACT$VERSION:SRVMGR.EXE
- INTACT$VERSION:TMGDEF.OBJ
- INTACT$VERSION:TMGDISP.OBJ
- INTACT$VERSION:TMGEDIT.OBJ
- INTACT$VERSION:TMGEDTDEF.BAS
- INTACT$VERSION:TMGEDTDEF.COB
- INTACT$VERSION:TMGEDTDEF.FOR
- INTACT$VERSION:TMGEDTDEF.H
- INTACT$VERSION:TMGFMT.OBJ
- INTACT$VERSION:TMGINIT.OBJ
- INTACT$VERSION:TMGMAIN.OBJ
- INTACT$VERSION:TMGNET.OBJ
- INTACT$VERSION:TMGPKT.OBJ
- INTACT$VERSION:TMGTIO.OBJ
- INTACT$VERSION:TMGUTIL.OBJ
- INTACT$VERSION:TMGWORK.OBJ
- INTACT$VERSION:USEREDIT.OPT
- version-disk:[version-dir.EXAMPLES.AVERTZ]AA_READMEFIRST.TXT
- version-disk:[version-dir.EXAMPLES.AVERTZ]AVERTZ_COBOL_ BLD.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]AVERTZ_DSPLCL.PRM
- version-disk:[version-dir.EXAMPLES.AVERTZ]AVERTZ_INTACT$MENU_ USR.MAR
- version-disk:[version-dir.EXAMPLES.AVERTZ]BUILD_CDD_ ENTITIES.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]BUILD_FORM.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]BUILD_MESSAGE_ FILE.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]COMPILE_SERVERS.COM

B.1 DECintact Files in a Remote-Access License

- version-disk:[version-dir.EXAMPLES.AVERTZ]COMPILE_TASKS.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]DB_BUILD.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]DEFINE_QUEUE.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]DEFINE_SERVERS.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]LINK_REPORT.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]LINK_SERVERS.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]LINK_TASKS.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]REPORT.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]REPORT.COM
- version-disk:[version-dir.EXAMPLES.AVERTZ]VRMSG.MSG
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_CANCEL_RS_ PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_CHECKIN_CLIENT_ MAIN.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_CHECKIN_CLIENT_ SUB.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_CHECKOUT_CLIENT_ MAIN.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_CHECKOUT_CLIENT_ SUB.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_COMPLETE_ CHECKIN_PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_COMPLETE_ CHECKOUT_PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_COMPUTE_BILL_ PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_CUSTOMERS.DAT
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_FIELDS.CDO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_FINDCAR_PROC.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_FIND_CU_PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_FIND_SI_PROC.SCO

B.1 DECintact Files in a Remote-Access License

- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_FIND_VE_PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_FIND_VE_VRH_ PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_FORM.IFDL
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_GETRESV_PROC.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_INDEXES.SQL
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_LITERALS_ INCLUDE.LIB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_LOAD_ CUSTOMERS.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_LOAD_REGIONS.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_LOAD_RENTAL_ CLASSES.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_LOAD_SITES.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_LOAD_VEHICLES.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_MESSAGES_ INCLUDE.LIB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_READ_INIT.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_READ_SERVER_ MAIN.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_READ_SERVER_ SUB.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_RECORDS.CDO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_REGIONS.DAT
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_RENTAL_ CLASSES.DAT
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_RESERVE_CLIENT_ MAIN.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_RESERVE_CLIENT_ SUB.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_RES_DETAILS_ PROC.SCO

B.1 DECintact Files in a Remote-Access License

- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_SCHEMA.SQL
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_SITES.DAT
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_SQL_STATUS_ INCLUDE.LIB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_STORE_CU_PROC.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_TERM.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_UPDATE_INIT.SCO
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_UPDATE_SERVER_ MAIN.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_UPDATE_SERVER_ SUB.COB
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_VEHICLES.DAT
- version-disk:[version-dir.EXAMPLES.AVERTZ]VR_WRITE_RS_PROC.SCO
- version-disk:[version-dir.EXAMPLES.EMPLOYEE]EMPLOYEE.COB
- version-disk:[version-dir.EXAMPLES.EMPLOYEE]EMPLOYEE_INFO_ FORM.IFDL
- version-disk:[version-dir.EXAMPLES.EMPLOYEE]EMPLOYEE_ DSPLCL.PRM
- version-disk:[version-dir.EXAMPLES.EMPLOYEE]EMPLOYEE_ INTACT$MENU_USR.MAR

B.2 DECintact Files in a Development License

The following additional files result from installation of the development license:

- INTACT$COPY:DEXAMPLE.BAS
- INTACT$COPY:SAMPLE.BAS
- INTACT$COPY:SAMPLE_ROOT.BAS
- INTACT$COPY:SAMPLE_SUB.BAS
- INTACT$VERSION:DEXAMPLE.BAS
- INTACT$VERSION:DFBDEF.BAS
- INTACT$VERSION:DFBDEF.CDDL

B.2 DECintact Files in a Development License

- INTACT$VERSION:DFBDEF.COB
- INTACT$VERSION:DFBDEF.DDL
- INTACT$VERSION:DFBDEF.FOR
- INTACT$VERSION:DFBDEF.H
- INTACT$VERSION:DFBDEF.PAS
- INTACT$VERSION:FFEDEF.BAS
- INTACT$VERSION:FFEDEF.CDDL
- INTACT$VERSION:FFEDEF.COB
- INTACT$VERSION:FFEDEF.DDL
- INTACT$VERSION:FFEDEF.FOR
- INTACT$VERSION:FFEDEF.H
- INTACT$VERSION:FFEDEF.PAS
- INTACT$VERSION:FFEDEFCON.PAS
- INTACT$VERSION:FMINFODEF.BAS
- INTACT$VERSION:FMINFODEF.CDDL
- INTACT$VERSION:FMINFODEF.COB
- INTACT$VERSION:FMINFODEF.DDL
- INTACT$VERSION:FMINFODEF.FOR
- INTACT$VERSION:FMINFODEF.H
- INTACT$VERSION:FMINFODEF.PAS
- INTACT$VERSION:FNCDEF.BAS
- INTACT$VERSION:FNCDEF.CDDL
- INTACT$VERSION:FNCDEF.DDL
- INTACT$VERSION:INTACT$DEFINITIONS.BAS
- INTACT$VERSION:INTACT$DEFINITIONS.FOR
- INTACT$VERSION:INTACT$DEFINITIONS.H
- INTACT$VERSION:INTACT$DEFINITIONS.LIB
- INTACT$VERSION:INTACT$DEFINITIONS.PAS
- INTACT$VERSION:INTACT$DEFINITIONS.PLI

B.2 DECintact Files in a Development License

- INTACT$VERSION:INTACT$DFB.LIB
- INTACT$VERSION:INTACT$FFE.LIB
- INTACT$VERSION:INTACT$FMINFO.LIB
- INTACT$VERSION:INTACT$HFU.OBJ
- INTACT$VERSION:INTACT$MSG.LIB
- INTACT$VERSION:INTACT$QDB.LIB
- INTACT$VERSION:INTACT$QKB.LIB
- INTACT$VERSION:INTACT$QUEHDR.LIB
- INTACT$VERSION:INTACT$RCVPKT.BAS
- INTACT$VERSION:INTACT$RCVPKT.FOR
- INTACT$VERSION:INTACT$RCVPKT.H
- INTACT$VERSION:INTACT$RCVPKT.LIB
- INTACT$VERSION:INTACT$RCVPKT.PAS
- INTACT$VERSION:INTACT$RCVPKT.PLI
- INTACT$VERSION:INTACT$SERVER.OBJ
- INTACT$VERSION:INTACT$STRUCTURES.BAS
- INTACT$VERSION:INTACT$STRUCTURES.FOR
- INTACT$VERSION:INTACT$STRUCTURES.H
- INTACT$VERSION:INTACT$STRUCTURES.LIB
- INTACT$VERSION:INTACT$STRUCTURES.PAS
- INTACT$VERSION:INTACT$STRUCTURES.PLI
- INTACT$VERSION:INTACT$TDB.LIB
- INTACT$VERSION:INTACT$UIR.BAS
- INTACT$VERSION:INTACT$UIR.FOR
- INTACT$VERSION:INTACT$UIR.H
- INTACT$VERSION:INTACT$UIR.LIB
- INTACT$VERSION:INTACT$UIR.PAS
- INTACT$VERSION:INTACT$UIR.PLI
- INTACT$VERSION:INTDEF.BAS

B.2 DECintact Files in a Development License

- INTACT$VERSION:INTDEF.COB
- INTACT$VERSION:INTDEF.FOR
- INTACT$VERSION:INTDEF.H
- INTACT$VERSION:INTDEF.MAR
- INTACT$VERSION:INTDEF.PAS
- INTACT$VERSION:PRFDEF.BAS
- INTACT$VERSION:PRFDEF.CDDL
- INTACT$VERSION:PRFDEF.DDL
- INTACT$VERSION:QUEDEF.BAS
- INTACT$VERSION:QUEDEF.COB
- INTACT$VERSION:QUEDEF.DDL
- INTACT$VERSION:QUEDEF.FOR
- INTACT$VERSION:QUEDEF.H
- INTACT$VERSION:QUEDEF.PAS
- INTACT$VERSION:QUEDEFCON.PAS
- INTACT$VERSION:QUEMAP.BAS
- INTACT$VERSION:QUEMAP.CDDL
- INTACT$VERSION:QUEMAP.DDL
- INTACT$VERSION:QUEMAP.FOR
- INTACT$VERSION:QUEMAP.H
- INTACT$VERSION:RABDEF.BAS
- INTACT$VERSION:RABDEF.CDDL
- INTACT$VERSION:RABDEF.DDL
- INTACT$VERSION:RMBDEF.BAS
- INTACT$VERSION:RMBDEF.COB
- INTACT$VERSION:RMBDEF.FOR
- INTACT$VERSION:RMBDEF.H
- INTACT$VERSION:RMBDEF.PAS
- INTACT$VERSION:SAMPLE.BAS

B.2 DECintact Files in a Development License

- INTACT$VERSION:SAMPLE_ROOT.BAS
- INTACT$VERSION:SAMPLE_SUB.BAS
- INTACT$VERSION:TDBDEF.BAS
- INTACT$VERSION:TDBDEF.CDDL
- INTACT$VERSION:TDBDEF.COB
- INTACT$VERSION:TDBDEF.DDL
- INTACT$VERSION:TDBDEF.FOR
- INTACT$VERSION:TDBDEF.H
- INTACT$VERSION:TDBDEF.PAS
- INTACT$VERSION:UIRDEF.BAS
- INTACT$VERSION:UIRDEF.COB
- INTACT$VERSION:UIRDEF.H
- INTACT$VERSION:UIRDEF.MAR
- SYS$HELP:INTACT020.RELEASE_NOTES
- SYS$TEST:INTACT$IVP020.COM

B.3 DECintact Files for Development and Run-Time Licenses

In addition to the files previously listed, the following files are in the directory only when the development or run-time license is installed:

- INTACT$COPY:INTACT$EXAMPLE_RESTORE.COM
- INTACT$COPY:INTACT$EXAMPLE_SYNC_POINT_BACKUP.COM
- INTACT$VERSION:HFUNAM.OBJ

B.4 IVP Files

When the IVP runs successfully, the INTACT$LOG: directory also contains the following files:

- CPYTSK.ERR
- CPYTSK.LOG
- DSPLCL.ERR
- DSPLCL.LOG

- INTACT$IVP.TMP
- INTACT$TMG.SECTION
- LCKINT.LOG
- SW_COMM.DAT

With DECnet running, the INTACT$LOG: directory also contains the following files:

- QUESRV.ERR
- QUESRV.LOG
- QUESRVXMT.ERR
- QUESRVXMT.LOG

C
Messages

This appendix lists the messages you may see while installing the DECintact product with VMSINSTAL. These messages come from either the VMSINSTAL program or the Installation Verification Procedure (IVP).

If you receive a message that is not listed in this appendix, check *VMS System Messages and Recovery Procedures Manual*. For messages relating to LMF errors, refer to *VMS License Management Utility Manual*.

C.1 Message Format

The messages in this appendix have the following format:

%facility-s-ident, text [*-facility-s-ident, text*]

where:

% (percent sign)	Prefixes the first message issued.
facility	Can be one of the following: VMSINSTAL for VMSINSTAL messages INTACT$IVP for IVP messages
- (hyphen)	Prefixes each subsequent message.

C.1 Message Format

s

Represents a severity level and can be one of the following:

Code	Meaning
S	Success
I	Informational
W	Warning
E	Error
F	Fatal

The severity level of a message is included in the status message from the component. You can identify the type of message you have received by its severity level. Success and informational messages inform you that the system has performed your request. In some cases, the command processing continues after issuing a success message. In other cases, the message indicates that the command processing is complete.

Warning messages indicate that the command may have performed some, but not all, of your request, and that you may have to verify the command or program output.

Error messages indicate that the output or program result is incorrect, but the system may attempt to continue execution.

Fatal messages indicate that the system cannot continue execution of the request.

ident

Abbreviates the message text. All the messages in this appendix are alphabetized according to the *ident*.

text

Explains the message.

C.2 VMSINSTAL Messages

The VMSINSTAL messages are listed in this section. Note that *nnnn* indicates the current or required quota units.

BADVMSVER, This kit requires VMS V5.4 or later.

Severity: Fatal

Explanation: The target machine must be running VMS Version 5.4 or higher.

User Action: You must install VMS Version 5.4 or higher before attempting installation again.

COPYALRRUN, DECINTACT COPY is already running prior to installation. COPY must be shut down before installation starts.

Severity: Fatal

Explanation: DECintact processes are active indicating that a DECintact COPY is currently up.

User Action: Shut down the currently active DECintact COPY.

DECDTMINHIB, SYS$DECDTM_INHIBIT is DEFINED. Check SYS$STARTUP:SYLOGICALS.COM.

Severity: Fatal

Explanation: The logical SYS$DECDTM_INHIBIT has been defined, thus disabling the used of DECdtm.

User Action: This logical is defined in SYSTARTUP:SYLOGICALS.COM. Remove all references that define this logical.

DEVNOTAVL, Device *device-name* is not available.

Severity: Error

Explanation: The destination device specified is not currently available.

User Action: Either make the destination device available, or select another device for the installation.

DEVNOTDISK, Device *device-name* is not a disk.

Severity: Error

Explanation: The destination device specified is not a disk unit.

User Action: Select another device for the installation.

C.2 VMSINSTAL Messages

DEVNOTEXIST, Device *device-name* does not exist.

Severity: Error

Explanation: The destination device specified does not exist.

User Action: Select another device for the installation.

DIREXISTS, Directory *directory-name* already exists; please specify nonexistent directory.

Severity: Error

Explanation: The directory name you specified points to an existing directory.

User Action: Specify a directory name of a directory that does not currently exist.

INVALDEVDIR, Destination specification is invalid.

Severity: Error

Explanation: Destination specification is invalid.

User Action: Input a valid device and directory specification.

NOBYTLM, Process quota BYTLM is too low; *nnnn* needed, *nnnn* currently set.

Severity: Fatal

Explanation: Your process BYTLM count is too low.

User Action: Use the Authorize Utility to set the needed values. Log out and then log in to the system for the value settings to take effect. Then restart the installation.

NOCLISYMTBL, System parameter CLISYMTBL is too low; *nnnn* needed/ *nnnn* currently set.

Severity: Fatal

Explanation: Your system's command line interpreter symbol table is too small.

User Action: Use the System Generation Utility (SYSGEN) to configure your system with the correct value for the dynamic system parameter CLISYMTBL.

NOCOMMONLOG, No DECdtm common log exists for this node. Use LMCP to create one.

Severity: Fatal

Explanation: A DECdtm transaction log does not exist for this node. A transaction log is required for DECdtm to work.

User Action: Use the LMCP Utility to create a DECdtm transaction log and restart the installation.

NODIOLM, Process quota DIOLM is too low; *nnn* needed, *nnn* currently set.

Severity: Fatal

Explanation: Your process DIOLM count is too low.

User Action: Use the Authorize Utility to set the needed values. Log out and then log in to the system for the value settings to take effect. Then restart the installation.

NOENQLM, Process quota ENQLM is too low; *nnn* needed, *nnn* currently set.

Severity: Fatal

Explanation: Your process ENQLM count is too low.

User Action: Use the Authorize Utility to set the needed values. Log out and then log in to the system for the value settings to take effect. Then restart the installation.

NOFILLM, Process quota FILLM is too low; *nnnn* needed/*nnnn* currently set.

Severity: Fatal

Explanation: Your process does not have the required open file limit (FILLM) quota.

User Action: Use the Authorize Utility to set the proper value. Log out and then log in to the system for the value setting to take effect. Then restart the installation.

NOGBLPAGES, System parameter GBLPAGES is too low; *nnnn* needed/*nnnn* currently free.

Severity: Fatal

Explanation: Your system does not have enough free global pages allocated.

User Action: Use MODPARAMS.DAT and AUTOGEN to configure your system with the correct amount of global pages. Reboot the system for the value setting to take effect and restart the installation.

C.2 VMSINSTAL Messages

NOGBLSECTIONS, System parameter GBLECTIONS is too low; *nnnn* needed/*nnnn* currently free.

Severity: Fatal

Explanation: Your system does not have enough free global sections allocated.

User Action: Use MODPARAMS.DAT and AUTOGEN to configure your system with the correct amount of global sections. Reboot the system for the value setting to take effect and restart the installation.

NOLSENV, LSE environment file(s) could not be found.

Severity: Warning

Explanation: The INTACT$VERSION:INTACT$LSE_PKG.ENV file could not be found.

User Action: Verify that the INTACT$VERSION:INTACT$LSE_PKG.ENV file does not exist. If the file does not exist, then there has been a problem with the LSE support provided by DECintact. If the file exists, then enter the following command to add the LSE support:

```
@INTACT$VERSION:INTACT$UPDATE_LSE
```

NOMAXDETACH, Process quota MAXDETACH is too low; 0 [unlimited] needed/ *nnnn* currently set.

Severity: Fatal

Explanation: Your process does not have the maximum number of detached processes set.

User Action: Use the Authorize Utility to set the proper value. Log out and then log in to the system for the value setting to take effect. Then restart the installation.

NOPGFLQUO, Process quota PGFLQUOTA is too low; *nnnn* needed/*nnnn* currently set.

Severity: Fatal

Explanation: Your process has the paging file quota set too low.

User Action: Use the Authorize Utility to set the proper value. Log out and then log in to the system for the value setting to take effect. Then restart the installation.

NOPRCLM, Process quota PRCLM is too low; *nnnn* needed/*nnnn* currently set.

Severity: Fatal

Explanation: Your process has the process count limit set too low.

User Action: Use the Authorize Utility to set the proper value. Log out and then log in to the system for the value setting to take effect. Then restart the installation.

NOPRIVIVP, Process does not have sufficient provileges to run IVP. The required privileges are ALTPRI, CMKRNL, DETACH, GROUP, GRPNAM, GRPPRV, LOG_IO, NETMBX, PFNMAP, PRMGBL, SHARE, SHMEM, SYSGBL, SYSLCK, SYSPRV.

Severity: Error

Explanation: Your process does not have the correct set of privileges to execute the IVP.

User Action: Use the Authorize Utility to set the proper privileges. Log out and then log in to the system for the privileges to take effect. Then restart the installation.

NOSCSNODE, SCSNODE is not set. DECdtm requires an SCSNODE.

Severity: Fatal

Explanation: The SCSNODE is not defined on your system and is required for support of DECdtm services by the DECintact system.

User Action: Use MODPARAMS.DAT and AUTOGEN to define SCSNODE. Reboot the system for the definition to take effect, and restart the installation.

NOSPACE, *device-name* does not contain enough free blocks for installation; *nnnn* required, *nnnn* currently free.

Severity: Error

Explanation: Not enough free blocks are available on the destination device.

User Action: Free enough blocks for installation, or select another device for the installation.

C.2 VMSINSTAL Messages

NOSYSSPACE, System disk does not contain enough free blocks for installation; *nnnn* required.

Severity: Fatal

Explanation: The system disk does not have enough free blocks for the installation to complete successfully.

User Action: You must free enough blocks to complete the installation before attempting the installation again.

NOWSEXTENT, Process quota WSEXTENT is too low; *nnnn* needed/*nnnn* currently set.

Severity: Fatal

Explanation: The size of the working set extent of your process is set too low.

User Action: Use the Authorize Utility to set the proper value. Log out and then log in to the system for the value setting to take effect. Then restart the installation.

NOWSMAX, System parameter WSMAX is too low; *nnnn* needed/*nnnn* currently set.

Severity: Fatal

Explanation: Your system's maximum working set size is too low.

User Action: Use MODPARAMS.DAT and AUTOGEN to configure your system with the correct working size. Reboot the system for the value setting to take effect, and restart the installation.

NOWSQUOTA, Process quota WSQUO is too low; *nnnn* needed/*nnnn* currently set.

Severity: Fatal

Explanation: The working set quota size of your process is set too low.

User Action: Use the Authorize Utility to set the proper value. Log out and then log in to the system for the value setting to take effect. Then restart the installation.

C.3 IVP Messages

The IVP messages are listed in this section.

ALRRUN, processes already running prior to IVP-initiated startup

Severity: Error

Explanation: The default DECintact copy is currently running.

User Action: You must shut down the DECintact copy before executing the IVP.

BADFMT, bad format in *device:[directory]*INTACT$COPY_CONTROL.COM

Severity: Error

Explanation: The command procedure INTACT$COPY_CONTROL.COM was not found in the default copy directory, or has a bad internal format.

User Action: Reinstall the DECintact system.

BEGIN, starting DECintact installation verification procedure

Severity: Informational

Explanation: The DECintact IVP is starting.

User Action: No action is required.

END, successfully completed DECintact installation verification procedure.

Severity: Informational

Explanation: The DECintact IVP has run successfully.

User Action: None.

INSFAC, Inserting facility definition into DECtrace Admin DB.

Severity: Informational

Explanation: The facility definition for DECintact has been inserted into the DECtrace Administration Database.

User Action: None.

INSFILE, Inserting facility definition file into DECtrace facility library.

Severity: Informational

Explanation: The DECtrace facility definition for DECintact is being inserted into the DECtrace facility library.

User Action: None.

C.3 IVP Messages

LIBINS, Library insert successful.

Severity: Success

Explanation: The DECtrace facility definition for DECintact has been successfully inserted into the DECtrace facility library.

User Action: None.

NOLICENSE, No license is active for DECtrace. Facility not inserted.

Severity: Warning

Explanation: The license for DECtrace is not active on your system. The DECintact facility cannot be inserted into the DECtrace Administration Database.

User Action: If you want support of DECtrace by the DECintact system, load the DECtrace license and insert the DECintact facility definition INTACT$VERSION:EPC_FACILITY.EPC$DEF into the DECtrace Administration Database. See *DECtrace for VMS User's Guide* for more information.

NOTCPY, *directory* is not a DECintact copy directory

Severity: Error

Explanation: The default DECintact copy directory does not exist, or is not properly populated.

User Action: Reinstall the DECintact system.

NOTINST, DECtrace not installed. Facility not inserted.

Severity: Warning

Explanation: DECtrace is not installed on your system. The DECintact facility cannot be inserted into the DECtrace Administation Database.

User Action: If DECintact's support of DECtrace is desired, install DECtrace.

NOTRUN, not all processes running after IVP-initiated startup

Severity: Error

Explanation: INTACT$COPY_CONTROL failed to start all the required processes for the default DECintact copy.

User Action: Reinstall the DECintact system.

SHUTER, error during IVP-initiated shutdown

Severity: Error

Explanation: INTACT$COPY_CONTROL.COM experienced an unexpected error while shutting down the default DECintact copy.

User Action: Reinstall the DECintact system.

STLRUN, processes still running after IVP-initiated shutdown

Severity: Error

Explanation: INTACT$COPY_CONTROL.COM failed to stop all processes for the default DECintact copy, after the IVP requested a shutdown.

User Action: Reinstall the DECintact system.

STRTER, error during IVP-initiated startup

Severity: Error

Explanation: INTACT$COPY_CONTROL.COM experienced an unexpected error while starting up the default DECintact copy.

User Action: Reinstall the DECintact system.

VERS, Installed DECtrace Version is V*n.n*.

Severity: Informational

Explanation: This is the current installed version of DECtrace.

User Action: None.

VERSREQ, DECintact requires DECtrace version 1.1 or higher. Facility not inserted.

Severity: Warning

Explanation: The current version of DECtrace is not supported by DECintact. DECintact requires DECtrace Version 1.1 or higher.

User Action: Install Version 1.1 or higher of DECtrace.

D

Creating Transaction Logs for DECdtm Services

If you want to use DECdtm services on a node, you must create a transaction log for that node. In a VAXcluster system, you must create a transaction log for each node in the cluster. This appendix describes the following:

- Prerequisites for creating a transaction log
- Planning the size and location of transaction logs
- Setting up and creating transaction logs
- Example of setting up and creating transaction logs for a cluster

For more information about DECdtm services and the commands described in this appendix, see the VMS documentation set.

D.1 Prerequisites for Creating a Transaction Log

Before you create a transaction log for a node, the following prerequisites must be met:

- You must have the SYSPRV privilege.
- The node must be running VMS Version 5.4 or higher.

D.2 Planning the Size and Location of Transaction Logs

The size and location of transaction logs can affect the performance of your system. Before you create transaction logs, plan how big to make the logs and where you are going to put them. Although you can later move a transaction log and change the size to improve performance, careful planning reduces the need for changes.

D.2 Planning the Size and Location of Transaction Logs

If the performance of your system is adversely affected by either the size or location of the logs, refer to the VMS documentation for the following information:

- Checking whether the transaction logs are the correct size
- Changing the size of transaction logs
- Moving transaction logs

D.2.1 Determining the Size of Transaction Logs

Note

These guidelines for determining the size of a transaction log provide only an approximate size. When planning transaction logs, overestimate, rather than underestimate, the size of the transaction log.

When you create transaction logs, you specify the size of the log in blocks. By default, the size of each transaction log is 4000 blocks. This default size gives acceptable performance on most systems.

If your system is already running transactions, you can use the MONITOR TRANSACTION command to check the rate of transactions and their duration. See the *VMS Monitor Utility Manual* for more information about the MONITOR command.

If you know or can anticipate the rate of transactions and their duration, use the following algorithm to calculate the approximate transaction log size:

$$size = 40 * rate * duration$$

where:

size	Is the size of the transaction log in blocks.
rate	Is the average number of transactions executed each second.
duration	Is the average duration of each transaction in seconds.

For example, if *rate* is 10 transactions per second and *duration* is 12 seconds, the calculation is as follows:

$$size = 40 * \quad 10 * 12 = 4800$$

In this example, the recommended size for the transaction log is 4800 blocks.

If you do not know the rate and duration of transactions, accept the default value of 4000 blocks. If the default size later proves unacceptable you can change the size of the transaction log, as described in the VMS documentation.

D.2.2 Determining the Location for Transaction Logs

When deciding where to put the transaction log for a node, consider the following factors:

- Speed

  Select a high performance disk, such as a solid state disk, that is not heavily used.

- Availability

  High availability is achieved when you have multiple access paths to the data. Use a disk that can be accessed by the other nodes in the cluster when the node is down. This reduces the time that other transactions in the cluster are blocked while waiting for recovery from the node failure.

- Reliability

  Reliability is achieved when you have multiple copies of the data. A shadowed disk is more reliable than a nonshadowed disk, but can be slower than a nonshadowed disk because transaction logs are almost exclusively write-only.

You can choose which of these factors is most important. For example, if the node is a workstation, you can choose to give up speed for availability and reliability, by putting the transaction log on a shadowed HSC-based disk, instead of on a faster disk attached to the workstation.

If you have a VAXcluster, each node must have its own transaction log. To improve the performance of the transactions, distribute the logs among different disks on the system.

Note

Ensure that the disk has sufficient contiguous space to hold the transaction log. A discontiguous transaction log results in poor transaction performance.

D.3 Setting Up and Creating Transaction Logs

This section describes how to set up and create transaction logs. Before creating a transaction log, consider the recommendations for determining the size and location of the log, as described in Section D.2.

To set up and create a transaction log:

- Identify the directories where you want to put the log.

- Create the transaction log in the directories.

For an example of how to set up and create transaction logs for a three-node VAXcluster system, refer to Section D.4.

D.3.1 Setting Up the Transaction Logs

DECdtm services uses the system logical name SYS$JOURNAL to locate transaction logs. For a single node, you must define SYS$JOURNAL to point to the directory that will contain the transaction log. In a cluster, you define SYS$JOURNAL on each node as a search list that points to all the directories that will contain the transaction logs for the cluster. If you put transaction logs for all nodes in one directory, SYS$JOURNAL on each node points to that directory.

You must define SYS$JOURNAL in the system logical name table in executive mode.

Note

Remember to define SYS$JOURNAL in both the common and node-specific versions of the SYS$STARTUP:SYLOGICALS.COM command procedure.

D.3.2 Creating the Transaction Logs

To create a transaction log, use the Log Manager Control Program (LMCP) Utility.

Invoke the LMCP Utility:

```
$  RUN SYS$SYSTEM:LMCP
LMCP>
```

At the LMCP> prompt, enter the CREATE LOGFILE command, using the following syntax:

CREATE LOGFILE *filespec* /SIZE=*size*

where:

filespec	Is the full file-specification of the log. The name of the file must be SYSTEM$*node-name*, where *node-name* is the name of the node. The file extension must be .LM$JOURNAL. If you omit the file extension in the command line, you get the extension .LM$JOURNAL by default.
size	Is the size of the transaction log in blocks. If you omit the /SIZE qualifier, the transaction log is created with the default size of 4000 blocks.

Then, enter the EXIT command at the LMCP> prompt.

D.4 Example of Setting Up and Creating Transaction Logs

This section shows you how to set up and create transaction logs for a three-node VAXcluster system. For this example, Table D–1 lists cluster members and transaction log details.

Table D–1 Details for Example of Creating Transaction Logs

Node Name	Transaction Log	
	Location	Size (in blocks)
ORANGE	DISK$USER1:[LOGFILES]	5000
RED	DISK$USER3:[LOGFILES]	4000
GREEN	DISK$LOG:[LOGFILES]	6000

Perform the following steps to set up all transaction logs for the cluster and create the logs. Before starting, ensure that all three disks are mounted on all three nodes.

1. For each node, enter the following command to define the logical SYS$JOURNAL to be a search list of all the directories in Table D–1:

D.4 Example of Setting Up and Creating Transaction Logs

```
$   DEFINE /SYSTEM /EXECUTIVE SYS$JOURNAL -
_$  DISK$USER1:[LOGFILES], -
_$  DISK$USER3:[LOGFILES], -
_$  DISK$LOG:[LOGFILES]
```

Note

You can enter all of the commands to set up the cluster from one node, using the SYSMAN Utility.

2. Edit the common and node-specific versions of SYS$STARTUP:SYLOGICALS.COM files to include the definition of SYS$JOURNAL.
3. Enter the following commands to create the transaction logs:

```
$  RUN SYS$SYSTEM:LMCP
LMCP>  CREATE LOGFILE DISK$USER1:[LOGFILES]SYSTEM$ORANGE /SIZE=5000
LMCP>  CREATE LOGFILE DISK$USER3:[LOGFILES]SYSTEM$RED
LMCP>  CREATE LOGFILE DISK$LOG:[LOGFILES]SYSTEM$GREEN/SIZE=6000
LMCP>  EXIT
```

When you omit the /SIZE qualifier (for example, when creating the log for node RED), the transaction log is created with the default size of 4000 blocks.

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