CDA Converter Library Installation Guide

Order Number: AA-NG87B-TE

October 1989

This document contains instructions for installing the CDA Converter Library on the VMS and ULTRIX operating systems. It also explains how to read the online release notes before or after installing the product. This document applies to the CDA Converter Library Version 1.0 and all maintenance updates throughout that version.

Revision/Update Information:	This manual supersedes the *CDA Converter Library Installation Guide* (Order Number: AA-NG87A-TE).
Operating System and Version:	VMS Version 5.1 or higher; ULTRIX-32 Version 3.0 or higher; UWS Version 2.0 or higher; Future maintenance releases of the CDA Converter Library may require higher versions.
Software Version:	CDA Converter Library Version 1.0

digital equipment corporation
maynard, massachusetts

First Printing, June 1989
Revised, October, 1989

The information in this document is subject to change without notice and should not be construed as a commitment by Digital Equipment Corporation. Digital Equipment Corporation assumes no responsibility for any errors that may appear in this document.

The software described in this document is furnished under a license and may be used or copied only in accordance with the terms of such license.

No responsibility is assumed for the use or reliability of software on equipment that is not supplied by Digital Equipment Corporation or its affiliated companies.

© Digital Equipment Corporation 1989.

All Rights Reserved.
Printed in U.S.A.

The postpaid Reader's Comments forms at the end of this document request your critical evaluation to assist in preparing future documentation.

The following are trademarks of Digital Equipment Corporation:

CDA	DECwindows	UNIBUS
DDIF	DECwrite	VAX
DDIS	DIGITAL	VAXcluster
DEC	DTIF	VAX RMS
DECalc	LN03	VAXstation
DECalc-PLUS	PrintServer 40	VMS
DECchart	Q-bus	XUI
DECdecision	ReGIS	Xway
DECnet	TEAMDATA	
DECUS	ULTRIX	digital™

5339

Contents

Preface v

Chapter 1 Installing the CDA Converter Library for VMS

1.1 Before You Install the CDA Converter Library on VMS 1–1
1.1.1 Prerequisite Software 1–1
1.1.2 Optional Software 1–1
1.1.3 Accessing the Online Release Notes 1–2
1.1.4 Installation Procedure Requirements 1–2
1.1.5 User Account Quotas and Privileges 1–2
1.1.6 VMS License Management Facility 1–3
1.1.7 Special Requirements 1–4
1.1.8 Using VMSINSTAL 1–4

1.2 Installing the CDA Converter Library on VMS 1–5
1.2.1 Installing CDA Converter Library on a VAXcluster 1–13

1.3 After the Installation on VMS 1–13

1.4 Running the Installation Verification Procedure Separately on VMS . . 1–14

1.5 Error Conditions on VMS 1–14

1.6 Sample Installation on VMS 1–15

Chapter 2 Installing the CDA Converter Library for ULTRIX-32 (VAX)

2.1 Before You Install the CDA Converter Library on ULTRIX-32 (VAX) . . . 2–1
2.1.1 Installation Prerequisites 2–1
2.1.2 Distribution Media 2–2
2.1.3 Accessing the Online Release Notes and Command Files . . . 2–5
2.1.4 Special Requirements 2–6

2.2 Installing the CDA Converter Library on ULTRIX-32 (VAX) 2–6

2.3 Performing the Installation on ULTRIX-32 (VAX) 2–6
2.3.1 9-Track Magnetic Tape and TK50 Tape Cartridge Users 2–7

2.4 After the Installation on ULTRIX-32 (VAX) 2–8

2.5 Sample Installation on ULTRIX-32 (VAX) 2–8

Chapter 3 Installing the CDA Converter Library for ULTRIX-32 (RISC)

3.1 Before You Install the CDA Converter Library on ULTRIX-32 (RISC) . . 3–1
3.1.1 Installation Prerequisites 3–1
3.1.2 Distribution Media 3–2
3.1.3 Accessing the Online Release Notes and Command Files . . . 3–5
3.1.4 Special Requirements 3–6

3.2 Installing the CDA Converter Library on ULTRIX-32 (RISC) 3–6

3.3 Performing the Installation on ULTRIX-32 (RISC) 3–6
3.3.1 9-Track Magnetic Tape and TK50 Tape Cartridge Users 3–7

3.4 After the Installation on ULTRIX-32 (RISC) 3–8

3.5 Sample Installation on ULTRIX-32 (RISC) 3–8

Index

Preface

This document describes how to install the CDA Converter Library on the VMS, ULTRIX-32 (VAX), and ULTRIX-32 (RISC) operating systems. It is intended for system managers. Keep this document with your distribution kit. You will need it to install maintenance updates or to reinstall the CDA Converter Library for any other reason.

Maintenance Updates

This document applies to the CDA Converter Library Version 1.0 and all maintenance updates in that version. A major version number is represented by the digits to the left of the decimal point, and a maintenance update version number is indicated by the digits to the right of the decimal point.

Digital may periodically issue maintenance updates of the CDA Converter Library. Each update consists of an installation kit. You should 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 1.0, the version number of the first maintenance update will be 1.1. In addition, each maintenance update includes new release notes. The release notes describe the changes that have been made to the CDA Converter Library since the previous release.

The updated release notes are provided on line. You should read the release notes when you first install the CDA Converter Library; they are also accessible at any time after the product is installed. For information on reading the release notes when you are installing the CDA Converter Library on VMS systems, follow the installation procedure through step 4 in Section 1.2, Installing the CDA Converter Library on VMS.

To locate the release notes after the CDA Converter Library is installed on VMS, display or print the file SYS$HELP:CDACVTLIB010.RELEASE_NOTES.

To locate the release notes after the CDA Converter Library is installed on ULTRIX-32 (RISC), display or print the file cdrbase_010.release_notes in /usr/doc.

Determining and Reporting Problems

If an error occurs while you are using the CDA Converter Library and you believe that the error is caused by a problem with the CDA Converter Library, take one of the following actions:

- If you purchased the CDA Converter Library within the past 90 days and you think the problem is caused by a software error, you can submit a Software Performance Report (SPR).
- If you have a Basic or DECsupport Software Agreement, you should call your Customer Support Center. With these services, you receive telephone support that provides high-level advisory and remedial assistance. For more information, contact your local Digital representative.
- If you have a Self-Maintenance Software Agreement, you can submit a Software Performance Report (SPR).

If you find an error in the CDA Converter Library documentation, you should fill out and submit a Reader's Comments form from the back of the document in which the error was found. Include the section and page number where the error was found.

Preparing to Install the CDA Converter Library

Your bill of materials (BOM) and indented bills report (BIL) specify the number and contents of your media. Be sure to check the contents of your kit against this information. If your kit is damaged or if you find that parts of it are missing, call your Digital representative.

Distribution media must be mounted in numerical order. The installation procedure prompts you to mount the volumes. For more information on how to mount distribution media, see your processor-specific installation/operations guide, which also details several options to the installation procedure.

The installation procedure is described step-by-step and is, for the most part, self-explanatory. The system prompts you to answer questions and to change volumes, and waits for you to tell it to continue.

Conventions

Defaults appear in brackets ([ ]) throughout the installation procedure. Text you type is indicated in color.

For more information about installing the CDA Converter Library on VMS or ULTRIX-32 systems, see your processor-specific installation/operations guide.

Chapter 1

Installing the CDA Converter Library for VMS

This chapter describes how to install the CDA Converter Library on VMS systems.

1.1 Before You Install the CDA Converter Library on VMS

This section describes the prerequisites for installing the CDA Converter Library on VMS systems.

1.1.1 Prerequisite Software

The CDA Converter Library Version 1.0 requires VMS Version 5.1 or higher.

1.1.2 Optional Software

The Graphics back end that is installed with the CDA Converter Library Version 1.0 requires the DEC GKS Run-Time Library (RTL) Version 4.0. The installation procedure installs the Graphics back end, but does not check whether the DEC GKS Run-Time Library is installed on your system.

If the DEC GKS RTL is not installed on your system at the time of the CDA Converter Library installation, the IVP displays an informational message and does not attempt to test the Graphics back end. Users who need to use the Graphics back end can install the DEC GKS Run-Time Library later. To determine which version of DEC GKS is currently installed on your system, use the following command:

```
$ ANALYZE/IMAGE SYS$LIBRARY:GKSRTLIB
```

Look at the version number field that is displayed.

1.1.3 Accessing the Online Release Notes

The CDA Converter Library provides online release notes. The prompt to display or print the release notes during the installation appears in step 4 of the installation procedure when you invoke VMSINSTAL with the OPTIONS N parameter.

To obtain the release notes after the installation, type or print the file SYS$HELP:CDACVTLIB010.RELEASE_NOTES.

1.1.4 Installation Procedure Requirements

The installation takes approximately 12 to 20 minutes, depending on the type of media and your system configuration. Before installing the CDA Converter Library, you must have the following privileges and resources:

- SETPRV privileges, or CMKRNL, WORLD, and SYSPRV privileges
- A minimum of 7200 blocks of free disk space during installation; 4000 blocks are used after installation

1.1.5 User Account Quotas and Privileges

To use the CDA Converter Library, each account must have TMPMBX and NETMBX privileges and the following requirements:

- AST limit (ASTLM) 24 (minimum)
- Buffered I/O quota (BIOLM) 18 (minimum)
- Buffered I/O byte count quota (BYTLM) 18000 (minimum)
- Direct I/O quota (DIOLM) 18 (minimum)
- Enqueue quota (ENQLM) 30 (minimum)
- Open file limit (FILLM) 20 (minimum)
- Paging file quota (PGFLQUOTA) 10240 pages (minimum)
- Subprocess creation quota (PRCLM) 0 (minimum)
- Working set size (WSDEF) 256 pages (minimum) 256 pages (optimum)

Use the VMS Authorize Utility (AUTHORIZE) to compare the current values of these quotas with the requirements for the CDA Converter Library. For example, the account used in the following example is the SYSTEM account:

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

To change the values of these quotas, use the VMS Authorize Utility's MODIFY command. For more information, see the *VMS Authorize Utility Manual*.

1.1.6 VMS License Management Facility

You must register the CDA Converter Library license through the VMS License Management Facility (LMF) in accordance with the license agreement signed by your site. The license registration information you need is contained in the Product Authorization Key (PAK) that is shipped with the CDA Converter Library. The PAK is a paper certificate that contains information about the license you have to run a particular piece of software.

During the installation, the system asks whether you have registered the CDA Converter Library license and loaded the appropriate authorization key. You must register and load your license for the CDA Converter Library *before* you start the installation in order to use the software.

To register a license under VMS, first log in to the system manager's account, SYSTEM. You then have a choice of two ways to perform the registration:

- Invoke the SYS$UPDATE:VMSLICENSE.COM procedure. When it prompts you for information, respond with data from your Product Authorization Pak (PAK).
- At the DCL prompt, issue the LICENSE REGISTER command with the appropriate qualifiers that correspond to PAK information.

If you plan to use the CDA Converter Library on more than one node in a VAXcluster, you will need to perform a license load on the other nodes after you complete this installation (see Section 1.2.1).

For complete information on using LMF, see the manual on the License Management Utility in the VMS documentation set.

1.1.7 Special Requirements

If you install a newer VMS version after you install the CDA Converter Library, you must install the CDA Converter Library again in order to use the most recent version of the CDA Toolkit. However, this is not necessare with VMS versions that are higher than Version 5.2, since they will not supersede current CDA Toolkit files.

For a list of VMS classes that are required to enable full functionality of the CDA Converter Library, see the System Software Addendum (SSA). The SSA accompanies the Software Product Description (SPD).

1.1.8 Using VMSINSTAL

After you log in to a privileged account to install the CDA Converter Library, invoke VMSINSTAL. VMSINSTAL is the command procedure that installs this product. An example of invoking VMSINSTAL is shown in steps 1 and 2 of Section 1.2, Installing the CDA Converter Library on VMS.

The VMSINSTAL command procedure has the following syntax:

```
$ @SYS$UPDATE:VMSINSTAL CDACVTLIB010 ddcu: [OPTIONS N]
```

You can also type an asterisk (*) in place of CDACVTLIB010. If you are installing from magnetic tape, you can use the asterisk to save installation time; the asterisk causes the CDA Converter Library to be installed with a minimum of tape passes.

ddcu:
Represents a device name where the distribution volumes will be mounted for the CDA Converter Library installation media, where *dd* is the device code, *c* is the controller code, and *u* is the unit number. It is not necessary to use the console drive to install the CDA Converter Library. If you do use the console drive, you should replace any media you removed from the drive. MUA0: is the device name used in examples in this document.

OPTIONS N
Is an optional parameter you should provide if you want to be prompted to display or print the release notes. If you do not include the OPTIONS N parameter, VMSINSTAL does not prompt you to display or print the release notes. VMSINSTAL permits the use of several other options. For more information on the other options, see your processor-specific installation/operations guide.

If you do not supply the first two parameters, VMSINSTAL prompts you for the product and device names. If you wish to be prompted for the product and device names and to display or print the release notes, type the following:

```
$ @SYS$UPDATE:VMSINSTAL RETURN
```

When you invoke VMSINSTAL, it checks the following:

- Whether you logged in to a privileged account. Digital recommends that you install software from the system manager's account with your default device and directory set to SYS$UPDATE.
- Whether you have adequate quotas for installation. VMSINSTAL checks for the following quota values:
  - ASTLM = 24
  - BIOLM = 18
  - BYTLM = 18000
  - DIOLM = 18
  - ENQLM = 30
  - FILLM = 20

VMSINSTAL then checks whether the following conditions exist. If so, discontinue the conditions before resuming the installation procedure.

- Whether DECnet is up and running (for VMS V5.1 only)
- Whether any users are logged in to the system

If VMSINSTAL detects either of these conditions, you will be asked whether you want to continue the installation. If you want to continue, type YES. If you want to stop the installation, press RETURN.

Before you begin the installation, register the information contained in the Product Authorization Key (PAK) that is shipped with the CDA Converter Library by using either the VMS License command procedure (VMSLICENSE) or the LICENSE REGISTER and LICENSE LOAD commands, as described in the *VMS License Management Utility Manual*.

1.2 Installing the CDA Converter Library on VMS

This section contains excerpts from the installation procedure and explains each step. Defaults appear in brackets throughout the installation procedure.

To abort the installation procedure at any time, press CTRL/Y. When you press CTRL/Y, the installation procedure deletes all files it has created up to that point and then returns you to DCL level. If you want to retry the installation procedure after pressing CTRL/Y, you must proceed from step 2.

Step 1: Log in to a Privileged Account and Set Your Default Device and Directory to SYS$UPDATE.

```
RETURN
Username:  SYSTEM   RETURN
Password:           RETURN
$  SET DEFAULT SYS$UPDATE  RETURN
```

Step 2: Invoke VMSINSTAL.

```
$  @VMSINSTAL CDACVTLIB010 MUA0: OPTIONS N RETURN

      VAX/VMS Software Product Installation Procedure VX.X


It is dd-mmm-yyyy at hh:mm.
Enter a question mark (?) at any time for help.

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

If you are satisfied with the backup of your system disk, press RETURN. Otherwise, type NO and press RETURN to discontinue the installation.

Step 3: Insert the First Installation Kit Volume.

```
Please mount the first volume of the set on MUA0:.
* Are you ready?  YES  RETURN
The following products will be processed:

  CDA Converter Library V1.0


   Beginning installation of CDA Converter Library V1.0 at hh:mm

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

To indicate that you want to continue the installation, mount volume 1, type YES, and press RETURN.

Step 4: Select a Release Notes Option.

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

```
Release Notes Options:

    1. Display release notes
    2. Print release notes
    3. Both 1 and 2

    4. Copy release notes to SYS$HELP
    5. Do not display, print or copy release notes
```

```
* Select option [3]:  RETURN
```

If you select option 1, VMSINSTAL displays the release notes on line immediately. You can terminate the display at any time by pressing CTRL/C.

If you select option 2, VMSINSTAL prompts you for a queue name. Either type a queue name or press RETURN to send the file to the default output print device.

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

If you select option 3, VMSINSTAL displays the release notes on line immediately. You can terminate the display at any time by pressing CTRL/C. VMSINSTAL then prompts you for a queue name. Either type a queue name or press RETURN to send the file to the default output print device. The CDA Converter Library release notes are then copied to SYS$HELP:CDACVTLIB010.RELEASE_NOTES.

If you select option 4, VMSINSTAL copies the release notes to SYS$HELP immediately.

If you select option 5, VMSINSTAL does not display, print, or copy the release notes; typically this option is selected when the user wants to terminate the installation. If you selected release note option 5, which specified that the release notes be copied to SYS$HELP, you will not be able to access the release notes without installing the product kit again.

NOTE

This version of the release notes file installed by VMSINSTAL is labeled with the current product name and version number. Take care not to delete release notes for previous versions of the CDA Converter Library.

Next, VMSINSTAL displays the following message:

```
* Do you want to continue the installation [N]?:  Y RETURN
```

If you want to continue the installation, type YES and press RETURN. If you type NO or press RETURN, VMSINSTAL discontinues the installation. In either case, VMSINSTAL moves the release notes to SYS$HELP.

```
%VMSINSTAL-I-RELMOVED, The product release notes have been successfully
    moved to SYS$HELP.
```

Step 5: Select Installation Options.

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

The directories SYS$LIBRARY, SYS$SYSTEM, and CDA$LIBRARY may contain previous versions of the CDA Converter Library files. These files are replaced during the installation with new files, but the old files are not automatically purged. Purging is recommended. In response to the purging prompt, press RETURN to purge the files or type NO to keep them.

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

The Installation Verification Procedure (IVP) runs tests to check whether the installation procedure was successful. Press RETURN to run the IVP after the installation. If you do not want to run the IVP, type NO in response to the prompt.

Step 6: Respond to License Registration Queries.

CDA Converter Library supports the VMS License Management Facility (LMF). The installation procedure displays license information about your product and then asks if you have registered and loaded your authorization key for CDA Converter Library. The following is an example of such information:

```
Product:       CDA-CONVERTER-LIBRARY
Producer:      DEC
Version:       1.0
Release Date:  31-JUL-89

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

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

Step 7: Read Informational Messages.

The CDA Converter Library installation procedure produces a number of informational messages that report on the progress of the installation.

The success of the installation is indicated by the following message:

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

If the installation procedure is successful, the new or modified files are moved to their target directories.

This kit checks CDA$ACCESS.EXE; if that file is older than the one in this kit, the CDA base system is installed. (The kit checks each additional converter's image and replaces it as needed.)

NOTE

The installation requires that CDA$LIBRARY: be defined in the DECW$LOGICAL_NAMES table (defined by DECwindows). The default style guides will be placed in CDA$LIBRARY:.

The procedure creates the directory SYS$COMMON:[SYSTEST.CDACVTLIB], where the IVP procedures and files are installed.

The following files are created or modified by the installation procedure:

Directory	File Name	Description
SYS$COMMON: [SYSTEST.CDACVTLIB]	CDACVTLIB$IVP.CDA$OPTIONS	IVP procedures and files
	CDA_BASE$IVP.CDA$OPTIONS	
	TCV$IVP_INPUT.CALC$GRD	
	TCV$IVP_INPUT.DIF	
	TCV$IVP_INPUT.TAB	
	TCV$IVP_INPUT.WK1	
	TCV$IVP_INPUT.DTIF	
	ACCEPT.DX	Example files
	AUTUMN.TIFF	
	EXAMPLE_DDIF.DDIF	
	STD_TEST.CGM	
	CHART_1.DDIF	
	CHAMPAGNE.MACPAINT	
SYS$TEST:	CDACVTLIB$IVP.COM	
	CDA_BASE$IVP.COM	
SYS$SYSTEM:	CDA$CONVERT.EXE	CDA Converter
	DDIF$VIEW.EXE	DDIF Viewer

Directory	File Name	Description
SYS$HELP:	CDACVTLIB010.RELEASE_NOTES	Release notes
	DDIF$VIEW.HLB	Viewer HELP library
	HELPLIB.HLB	Modified
SYS$MESSAGE:	DDIF$VIEWMSG.EXE	DDIF Viewer messages
SYS$LIBRARY:	CDA$ACCESS.EXE	CDA run-time library
	SYS$LIBRARY:DCLTABLES.EXE	Modified
	CDA$DTIF_TO_DDIF.EXE	DTIF to DDIF domain converter
	CDA$WRITE_ANALYSIS.EXE	Analysis back end
	DDIF$READ_TEXT.EXE	Text front end
	DDIF$WRITE_TEXT.EXE	Text back end
	DDIF$WRITE_PS.EXE	PostScript back end
	CDA$CDA_.ADA	
	CDA$DEF.BAS	CDA definition files
	CDA$DEF.FOR	
	CDA$DEF.H	
	CDA$DEF.MAR	
	CDA$DEF.PAS	
	CDA$DEF.PLI	
	CDA$DEF.R32	
	CDA$MSG.BAS	CDA message files
	CDA$MSG.FOR	
	CDA$MSG.H	
	CDA$MSG.MAR	
	CDA$MSG.PAS	
	CDA$MSG.PLI	
	CDA$MSG.R32	
	DDIF$DDIF_.ADA	
	DDIF$DEF.BAS	DDIF definition files

Directory	File Name	Description
	DDIF$DEF.FOR	
	DDIF$DEF.H	
	DDIF$DEF.MAR	
	DDIF$DEF.PAS	
	DDIF$DEF.PLI	
	DDIF$DEF.R32	
	CGMDDIF_MSG.EXE	CGM message file
	SGML$PARSE.EXE	SGML parse file
	DDIF$VIEWSHR.EXE	DDIF Viewer
	DDIF$VIEW.UID	DDIF Viewer
	DDIF$READ_AFS.EXE	AFS front end
	DDIF$WRITE_AFS.EXE	AFS back end
	DDIF$READ_DCA.EXE	DCA front end
	DDIF$WRITE_DCA.EXE	DCA back end
	DDIF$READ_DX.EXE	DX front end
	DDIF$WRITE_DX.EXE	DX back end
	DDIF$READ_CGM.EXE	CGM front end
	DDIF$READ_SGML.EXE	SGML front end
	DDIF$WRITE_SGML.EXE	SGML back end
	DDIF$READ_TIFF.EXE	TIFF front end
	DDIF$WRITE_TIFF.EXE	TIFF back end
	DDIF$WRITE_GRAPHICS.EXE	Graphics back end
	DDIF$READ_MACPAINT.EXE	MACPAINT front end
	DDIF$WRITE_MACPAINT.EXE	MACPAINT back end
	DTIF$READ_ASCII_TABULAR.EXE	ASCII tabular front end
	DTIF$WRITE_ASCII_TABULAR.EXE	ASCII tabular back end
	DTIF$READ_CALCGRD.EXE	CALCGRD front end
	DTIF$READ_DIF.EXE	DIF front end
	DTIF$READ_WK1.EXE	WK1 front end
	DTIF$WRITE_WK1.EXE	WK1 back end
CDA$LIBRARY:	DEFSTYLE.DDIF	Default style guide

Directory	File Name	Description
	DX_STYLE.DOC_STYLE	DX style guide

If you typed YES in response to the prompt that requests a file purge at step 5, previous versions of the CDA Converter Library files are now purged.

Step 8: Observe the Installation Verification Procedure.

If you chose to run the IVP in step 5, VMSINSTAL now calls the IVP to verify that the CDA Converter Library was installed successfully.

```
It is 27-FEB-1989 at 13:56.
Enter a question mark (?) at any time for help.
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
* Do you want to continue anyway [NO]? Y RETURN
* Are you satisfied with the backup of your system disk [YES]? Y RETURN

The following products will be processed:
  CDACVTLIB V1.0

 Beginning installation of CDACVTLIB V1.0 at 13:56
    .
    .
    .
```

The installation procedure now calls the Installation Verification Procedure (IVP) to verify that the CDA Converter Library was successfully installed.

If the CDA Converter Library was successfully installed, the IVP displays the following:

```
Beginning verification of CDA Converter Library

 The CDA Converter Library IVP has completed successfully
 Installation of CDACVTLIB V1.0 completed at 14:14
```

Note that at this point in the installation procedure, previous versions of the CDA Converter Library files are purged if you typed YES in response to the prompt that requests a file purge.

Step 9: End the Installation Procedure.

```
   Installation of CDA Converter Library V1.0 completed at hh:mm

   VMSINSTAL procedure done at hh:mm

$  LOGOUT  RETURN
SYSTEM     logged out at dd-mmm-yyyy hh:mm:ss.ss
```

When the product installation procedure is complete, you can choose to install more products or to log out (as shown here.) If you removed any media from the console drive before beginning the installation, you should replace it now.

VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you are going to continue using the system manager's account and you want to restore these symbols, you should log out and log in again.

1.2.1 Installing CDA Converter Library on a VAXcluster

If you want to run the CDA Converter Library on multiple nodes of a VAXcluster, first check to see that you have the appropriate software license. Then, follow these steps after installing the CDA Converter Library:

1. Issue the LICENSE LOAD command to activate the license on each node in the VAXcluster on which the CDA Converter Library is to be executed as described in the *VMS License Management Utility Manual*.
2. To use the product on other nodes in the VAXcluster, you must replace the version of the DCL tables that is installed on the other VAXcluster nodes. To do this, perform the following steps:
   a. Log in to a node on the cluster.
   b. Run INSTALL and enter the following command at the INSTALL> prompt:

```
INSTALL>  REPLACE SYS$LIBRARY:DCLTABLES.EXE [RETURN]
INSTALL>  REPLACE SYS$LIBRARY:CDA$ACCESS.EXE [RETURN]
```

   c. Repeat steps a and b for each node of the cluster.

1.3 After the Installation on VMS

The CDA Converter Library is now installed and can be invoked by all users with the CONVERT/DOCUMENT command.

The installation procedure does not modify the CONVERT/DOCUMENT command; the previous command table is still in effect for those users who are currently logged in. However, the installation procedure does update the VIEW command. Users must log back in to see the new command.

1.4 Running the Installation Verification Procedure Separately on VMS

The Installation Verification Procedure (IVP) is usually run at installation. If you want to run the IVP separately to ensure the integrity of installed files if system problems occur, execute the following command procedure:

```
$  @SYS$TEST:CDACVTLIB$IVP.COM RETURN
```

If the IVP fails for any reason, messages such as the following are displayed:

```
"Verification failed - CGM front end"
```

Normally, a failed IVP will not cause a failed installation, but any converters that did fail should be reported to a Digital field service representative.

1.5 Error Conditions on VMS

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

```
%VMSINSTAL-E-INSFAIL, The installation of the CDA Converter Library
V1.0 has failed.
```

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

- Operating system version is incorrect.
- Prerequisite software version is incorrect.
- Quotas necessary for successful installation are insufficient (see Section 1.1.4).
- Process quotas required by VMSINSTAL are incorrect (see Section 1.1.8).
- The VMS HELP library is currently in use.
- The product was registered incorrectly or not registered.

For descriptions of the error messages generated by these conditions, see the *VMS System Messages and Recovery Procedures Reference Volume*, Part I and Part II, your processor-specific installation/operations guide, or the *VMS License Management Utility Manual*.

If you are notified that any of these conditions exist, you should take the appropriate action as described in the message. You may need to change a system parameter or increase an authorized quota value.

If the installation fails, you must restart the installation procedure from step 2. If the installation fails due to an IVP failure, contact a Digital field service representative.

1.6 Sample Installation on VMS

This section contains a sample installation of the CDA Converter Library. Note that this is only a sample. Sometimes the installation procedure is modified in maintenance updates of this product. Because this installation guide is not usually revised for maintenance updates, be sure to read the *Read Before Installing or Using the CDA Converter Library* letter before you install this product. This letter notes any significant changes in the installation that vary from this sample.

Sample CDA Converter Library Installation Procedure

```
$ @SYS$UPDATE:VMSINSTAL CDACVTLIB010 MUA0: RETURN

 VAX/VMS Software Product Installation Procedure V5.1

It is 31-MAY-1989 at 16:06.
Enter a question mark (?) at any time for help.

%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
* Do you want to continue anyway [NO]? Y RETURN
* Are you satisfied with the backup of your system disk [YES]? RETURN

The following products will be processed:
  CDACVTLIB V1.0

 Beginning installation of CDACVTLIB V1.0 at 16:08

%VMSINSTAL-I-RESTORE, Restoring product saveset A ...
%VMSINSTAL-I-RELMOVED , The product's release notes have been successfully moved to SYS$HELP.
```

```
   ****************************************************************
   *                                                              *
   *                VAX CDA Converter Library                     *
   *                                                              *
   *                 Installation Procedure                       *
   *                                                              *
   *      This kit may replace files provided with VMS.           *
   *      If you install a newer VMS version after you            *
   *      install the CDA Converter Library, you must install     *
   *      the CDA Converter Library again in order to use the     *
   *      most recent version of the CDA Toolkit. In              *
   *      subsequent VMS installations, the CDA Converter         *
   *      Library commences version checking to ensure that       *
   *      the most recent version of the CDA Toolkit is           *
   *      always in use and is not overwritten by an earlier      *
   *      version.                                                *
   *                                                              *
   ****************************************************************

        Product:      CDA-CONVERTER-LIBRARY
        Producer:     DEC
        Version:      1.0
        Release Date: 31-JUL-89

* Does this product have an authorization key registered and loaded? Y RETURN
* Do you want to purge files replaced by this installation [YES]? RETURN
* Do you want to run the IVP after the installation [YES]? RETURN

    To complete the installation on a standalone VAX 11/780
    will take approximately:

        15 minutes to install
        4 minutes to run the IVP

    All required questions have been asked.
    You can terminate the installation procedure at this time.

* Do you want to continue the installation [YES]? RETURN
%VMSINSTAL-I-RESTORE, Restoring product saveset B ...
%VMSINSTAL-I-RESTORE, Restoring product saveset C ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory  VMI$ROOT:[SYSTEST.CDACVTLIB].
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Beginning the CDA Converter Library T1.0-1 Installation Verification Procedure

Starting verification of the Text front and back ends

Starting verification of the Analysis back end

Starting verification of the PostScript back end

Starting verification of the DTIF to DDIF converter

Starting verification of the viewer

Starting verification of the AFS front and back ends

Starting verification of the CGM front end
```

```
Starting verification of the DCA front and back ends

Starting verification of the DX front and back ends

Starting verification of the Graphics back end

Starting verification of the MACPAINT front and back ends

Starting verification of the SGML front and back ends

Starting verification of the TIFF front and back ends

Starting verification of the ASCII Tabular front and back ends

Starting verification of the CALCGRD front end

Starting verification of the DIF front end

Starting verification of the WK1 front and back ends

CDA Converter Library T1.0-1 IVP has completed successfully.
 Installation of CDACVTLIB V1.0 completed at 16:25

 VMSINSTAL procedure done at 16:25

$
```

Chapter 2

Installing the CDA Converter Library for ULTRIX-32 (VAX)

This chapter describes how to install the CDA Converter Library on ULTRIX-32 ™ (VAX) systems.

2.1 Before You Install the CDA Converter Library on ULTRIX-32 (VAX)

This section describes the prerequisites for installing the CDA Converter Library on ULTRIX-32 (VAX) systems.

2.1.1 Installation Prerequisites

Before you begin, you should perform a system disk(s) backup and make sure that your system meets the following prerequisites:

- Access to the root or super_user account.
- A valid ULTRIX-32 operating system image with ULTRIX-32 Version 3.0 or higher or ULTRIX Worksystem Software Version 2.0 or higher.
- The required hardware, as detailed in the CDA Converter Library Software Product Description (SPD).
- Adequate system disk space. The CDA Converter Library installation requires approximately 150 kilobytes to 6 megabytes in the /usr structure, depending on the converters you choose to install.

The installation requires approximately 5 to 30 minutes, depending on the type of media and your system configuration.

™ ULTRIX is a trademark of Digital Equipment Corporation

2.1.2 Distribution Media

Your distribution kit contains one of the following sets of media:

- One 9-track magnetic tape
- One TK50 cartridge tape

This media contains the CDA Converter Library files.

The following table lists these files and their location on your system after you install them:

Directory and Subset	File Name	Description
/usr/bin		
CDABASE010	cda_dtif_to_ddif	DTIF to DDIF domain converter
	cda_read_cda	DTIF to DDIF domain converter
	cda_write_analysis	Analysis back end
	ddif_read_text	Text front end
	ddif_write_text	Text back end
	ddif_write_ps	PostScript back end
	cdoc	Converters invocation command
	dxvdoc	CDA Viewer workstation command
	vdoc	CDA Viewer character cell command
	ctod	DOTS pack utility
	dtoc	DOTS unpack utility
CDACVTDOC010	ddif_read_afs	AFS front end
	ddif_write_afs	AFS back end
	ddif_read_dca	DCA front end
	ddif_write_dca	DCA back end
	ddif_read_sgml	SGML front end
	ddif_write_sgml	SGML back end
CDACVTDX010	ddif_read_dx	DX front end

Directory and Subset	File Name	Description
	ddif_write_dx	DX back end
CDACVTGRA010	ddif_read_cgm	CGM front end
	ddif_read_macpaint	Macpaint front end
	ddif_write_macpaint	Macpaint back end
	ddif_read_tiff	TIFF front end
	ddif_write_tiff	TIFF back end
CDACVTTBL010	dtif_read_ascii_tabular	ASCII tabular front end
	dtif_write_ascii_tabular	ASCII tabular back end
	dtif_read_calcgrd	CALCGRD front end
	dtif_read_dif	DIF front end
	dtif_read_wk1	WK1 front end
	dtif_write_wk1	WK1 back end
/usr/include		
CDABASE010	cda_def.h	Include files
	cda_msg.h	
	ddif_def.h	
/usr/lib		
CDABASE010	libddif.a	CDA Toolkit
	libddif_be.a	Converter back end main( ).
	libddif_fe.a	Converter front end main( ).
/usr/lib/X11/uid		
CDABASE010	DXvdoc.uid	CDA Viewer workstation .uid file

Directory and Subset	File Name	Description
/usr/lib/cda		
CDABASE010	defstyle.ddif	Default style guide
CDACVTDX010	dx_guide.doc_style	DX style guide
/usr/doc		
CDABASE010	cdabase_010.release_notes	Release notes
	cdoc.txt cdoc.ps	cdoc text and PostScript files
	dxvdoc.txt dxvdoc.ps	dxvdoc text and PostScript files
	vdoc.txt vdoc.ps	vdoc text and PostScript files
CDACVTTBL010	convert_messages.mem	Table and Document Conversion Messages
/usr/lib/help/DDIFviewer		
CDABASE010	About Overview	HELP files
/usr/man/man1		
CDAMAN010	cdoc.1 dxvdoc.1X vdoc.1	Manual page entry
/usr/etc/subsets/ivp/CDA010		

Directory and Subset	File Name	Description
CDABASE010	CDABASE010.IVP	Base system IVP
	base.ddif	Example file
	base.options	Options file
CDACVTDOC010	CDACVTDOC010.IVP	Document subset IVP
	accept.dx	DX example file
	latin.dca	DCA example file
	doc.ddif	DDIF example file
	doc.options	Document options file
CDACVTGRA010	CDACVTGRA010.IVP	Graphics subset IVP
	autumn.tiff	TIFF example file
	champagne.macpaint	Macpaint example file
	gra.options	Graphics options file
	std_test.cgm	CGM example file
CDACVTTBL010	CDACVTTBL010.IVP	Table subset IVP
	input.calc_grd	CALCGRD example file
	input.dif	DIF example file
	input.dtif	DTIF example file
	input.tab	ASCII tabular example file
	input.wk1	WK1 example file
	tbl.options	Table options file

2.1.3 Accessing the Online Release Notes and Command Files

The CDA Converter Library provides online release notes in the directory /usr/doc. To obtain the release notes after the installation, type or print the file cdabase_010.release_notes.

The CDA Converter Library also provides online text and PostScript files of the cdoc, vdoc, and dxvdoc commands in the directory /usr/doc. These online files are provided particularly for users who do not install the manual page entry files. You can print the cdoc, dxvdoc, and vdoc files after the installation.

2.1.4 Special Requirements

If you install ULTRIX Version 3.1 after you install the CDA Converter Library, you must install the CDA Converter Library again in order to use the most recent version of the CDA Toolkit. In subsequent ULTRIX-32 (VAX) installations, the CDA Converter Library commences version checking to ensure that the most recent version of the CDA Toolkit is always in use and is not overwritten by an earlier version.

2.2 Installing the CDA Converter Library on ULTRIX-32 (VAX)

This section tells you how to install the CDA Converter Library files on an ULTRIX-32 system. It also tells you how to restore normal operation, if necessary.

During installation, the system prompts you for a response to several questions. Some prompts have accompanying default responses that appear in brackets ([ ]). To choose a default response, press the RETURN key.

You can request help at any step by typing **help** in response to a prompt. If the prompt requests a YES or NO answer, you can also type anything that does not begin with a *y* or *n* to get help.

When you invoke the installation procedure at step 4, the process is the same if you are using either 9-track magnetic tape or TK50 tape cartridge media, and you should proceed to Section 2.3.1.

At any point during the procedure, you can return to the beginning of step 4 by pressing CTRL/C.

2.3 Performing the Installation on ULTRIX-32 (VAX)

When you have met the prerequisites listed in Section 2.1.1, you are ready to install the CDA Converter Library product.

Perform the installation at your system console, in the following order:

Step 1: Log in to the root account with the root user name and its password.

```
login:  root
password:
#
```

If you are currently logged into another account, you can switch to the root account by issuing the **su** command:

```
%    su
password:
#
```

Step 2: Ensure that no one attempts to use the CDA Converter Library during installation.

If necessary, place your system into single-user mode by issuing the following **shutdown** command:

```
#  /etc/shutdown +5 "Installing CDA Converter Library"
```

This command notifies other users that the system will shut down in 5 minutes (as specified by the +5). Then, in five minutes, it logs them out and enters single-user mode. You should note that, in single user mode, the only valid input device is the console.

Step 3: Invoke the installation procedure as appropriate for your particular media.

If you use 9-track magnetic tape or TK50 tape cartridges, proceed to Section 2.3.1.

2.3.1 9-Track Magnetic Tape and TK50 Tape Cartridge Users

Step 1: Invoke the ULTRIX installation procedure with the following command, substituting your device file unit number for the question mark.

```
#  setld -l /dev/rmt?h
```

When you invoke the installation procedure, the following message and prompt appears, identifying your specific media:

```
Please make sure your installation media is mounted and on-line.
Are you ready (y/n)?: y RETURN
```

Step 2: Respond to the ready prompt.

If you type NO, the system repeats the prompt. If you type YES, the following messages appear, identifying your specific media:

```
The following subsets are mandatory and will be installed automatically:
*** Enter Subset Selections ***
 * CDA Base System

The subsets listed below are optional:
 1) CDA DX Converters                    2) CDA Document Converters
 3) CDA Graphics Converters              4) CDA Table Converters
 5) CDA converter man pages
```

```
 6) All of the Above
 7) None of the Above

Enter your choice(s): 6 RETURN

You are installing the following subsets:
   CDA Base System                          CDA DX Converters
   CDA Document Converters                  CDA Graphics Converters
   CDA Table Converters                     CDA converter man pages

Is this correct? (y/n): y RETURN
```

The system proceeds to display a list of verification messages for the base system and for each subset you installed.

2.4 After the Installation on ULTRIX-32 (VAX)

The CDA Converter Library is now installed and can be invoked by all users with the cdoc command.

2.5 Sample Installation on ULTRIX-32 (VAX)

This section contains a sample installation of the CDA Converter Library. Note that this is only a sample. The installation procedure is sometimes modified in maintenance updates of this product. Because this installation guide is not usually revised for maintenance updates, be sure to read the *Read Before Installing or Using the CDA Converter Library* letter before you install this product. This letter notes any significant changes in the installation that vary from this sample.

Sample CDA Converter Library Installation Procedure

```
# setld -d CDABASE010 RETURN

Deleting CDA Base System (CDABASE010).

# setld -l /dev/rmt0h RETURN
Please make sure your installation media is mounted and on-line.
Are you ready (y/n)?: y RETURN

The following subsets are mandatory and will be installed automatically:
*** Enter Subset Selections ***
 * CDA Base System

The subsets listed below are optional:
 1) CDA DX Converters                    2) CDA Document Converters
 3) CDA Graphics Converters              4) CDA Table Converters
 5) CDA converter man pages
```

```
 6) All of the Above
 7) None of the Above

Enter your choice(s): 6 RETURN

You are installing the following subsets:
   CDA Base System                          CDA DX Converters
   CDA Document Converters                  CDA Graphics Converters
   CDA Table Converters                     CDA converter man pages

Is this correct? (y/n): y RETURN

Copying CDA Base System (CDABASE010) from DISK
Verifying CDA Base System (CDABASE010)

Copying CDA DX Converters (CDACVTDX010) from DISK
Verifying CDA DX Converters (CDACVTDX010)

Copying CDA Document Converters (CDACVTDOC010) from DISK
Verifying CDA Document Converters (CDACVTDOC010)

Copying CDA Graphics Converters (CDACVTGRA010) from DISK
Verifying CDA Graphics Converters (CDACVTGRA010)

Copying CDA Table Converters (CDACVTTBL010) from DISK
Verifying CDA Table Converters (CDACVTTBL010)

Copying CDA converter man pages (CDAMAN010) from DISK
Verifying CDA converter man pages (CDAMAN010)

# setld -v CDABASE010 CDACVTDX010 CDACVTDOC010 CDACVTGRA010 CDACVTTBL010 RETURN
Checking setld data files.

Verifying the installation of CDABASE010
    Checking text back-end and front-end converters
    Checking analysis back-end converter
    Checking ps back-end converter
    Checking dtif front-end converter
The CDABASE010 IVP has completed successfully

Verifying the installation of CDACVTDX010
    Checking dx front-end and back-end converters
The CDACVTDX010 IVP has completed successfully

Verifying the installation of CDACVTDOC010
    Checking afs back-end and front-end converters
    Checking dca front-end and back-end converters
    Checking sgml back-end and front-end converters
The CDACVTDOC010 IVP has completed successfully

Verifying the installation of CDACVTGRA010
    Checking cgm front-end converter
    Checking macpaint front-end and back-end converters
    Checking tiff front-end and back-end converters
The CDACVTGRA010 IVP has completed successfully

Verifying the installation of CDACVTTBL010
    Checking ascii_tabular front-end and back-end converters
    Checking calcgrd front-end converter
    Checking dif front-end converter
    Checking wk1 front-end and back-end converters
The CDACVTTBL010 IVP has completed successfully

#
```

Chapter 3

Installing the CDA Converter Library for ULTRIX-32 (RISC)

This chapter describes how to install the CDA Converter Library on ULTRIX-32 (RISC) systems.

3.1 Before You Install the CDA Converter Library on ULTRIX-32 (RISC)

This section describes the prerequisites for installing the CDA Converter Library on ULTRIX-32 (RISC) systems.

3.1.1 Installation Prerequisites

Before you begin, you should perform a system disk(s) backup and make sure that your system meets the following prerequisites:

- Access to the root or super_user account.
- A valid ULTRIX-32 operating system image with ULTRIX-32 Version 3.0 or higher or ULTRIX-32 Worksystem Software Version 2.0 or higher.
- The required hardware, as detailed in the CDA Converter Library Software Product Description (SPD).
- Adequate system disk space. The CDA Converter Library installation requires up to a maximim of approximately 9 megabytes in the /usr structure, depending on the converters you choose to install.

The installation requires approximately 5 to 30 minutes, depending on the type of media and your system configuration.

3.1.2 Distribution Media

Your distribution kit contains one of the following sets of media:

- One 9-track magnetic tape
- One TK50 cartridge tape

This media contains the CDA Converter Library files.

The following table lists these files and their location on your system after you install them:

Directory and Subset	File Name	Description
/usr/bin		
CDRBASE010	cda_dtif_to_ddif	DTIF to DDIF domain converter
	cda_read_cda	DTIF to DDIF domain converter
	cda_write_analysis	Analysis back end
	ddif_read_text	Text front end
	ddif_write_text	Text back end
	ddif_write_ps	PostScript back end
	cdoc	Converters invocation command
	dxvdoc	CDA Viewer workstation command
	vdoc	CDA Viewer character cell command
	ctod	DOTS pack utility
	dtoc	DOTS unpack utility
CDRCVTDOC010	ddif_read_afs	AFS front end
	ddif_write_afs	AFS back end
	ddif_read_dca	DCA front end
	ddif_write_dca	DCA back end
	ddif_read_sgml	SGML front end
	ddif_write_sgml	SGML back end
CDRCVTDX010	ddif_read_dx	DX front end

Directory and Subset	File Name	Description
	ddif_write_dx	DX back end
CDRCVTGRA010	ddif_read_cgm	CGM front end
	ddif_read_macpaint	Macpaint front end
	ddif_write_macpaint	Macpaint back end
	ddif_read_tiff	TIFF front end
	ddif_write_tiff	TIFF back end
CDRCVTTBL010	dtif_read_ascii_tabular	ASCII tabular front end
	dtif_write_ascii_tabular	ASCII tabular back end
	dtif_read_calcgrd	CALCGRD front end
	dtif_read_dif	DIF front end
	dtif_read_wk1	WK1 front end
	dtif_write_wk1	WK1 back end
/usr/include		
CDRBASE010	cda_def.h	Include files
	cda_msg.h	
	ddif_def.h	
/usr/lib		
CDRBASE010	libddif.a	CDA Toolkit
	libddif_be.a	Converter back end main( ).
	libddif_fe.a	Converter front end main( ).
/usr/lib/X11/uid		
CDRBASE010	DXvdoc.uid	CDA Viewer workstation .uid file

Directory and Subset	File Name	Description
/usr/lib/cda		
CDRBASE010	defstyle.ddif	Default style guide
CDRCVTDX010	dx_guide.doc_style	DX style guide
/usr/doc		
CDRBASE010	cdrbase_010.release_notes	Release notes
	cdoc.txt cdoc.ps	cdoc text and PostScript files
	dxvdoc.txt dxvdoc.ps	dxvdoc text and PostScript files
	vdoc.txt vdoc.ps	vdoc text and PostScript files
CDRCVTTBL010	convert_messages.mem	Table and Document Conversion Messages
/usr/lib/help/DDIFviewer		
CDRBASE010	About Overview	HELP files
/usr/man/man1		
CDRMAN010	cdoc.1 dxvdoc.1X vdoc.1	Manual page entry
/usr/etc/subsets/ivp/CDR010		

Directory and Subset	File Name	Description
CDRBASE010	CDRBASE010.IVP	Base system IVP
	base.ddif	Example file
	base.options	Options file
CDRCVTDOC010	CDRCVTDOC010.IVP	Document subset IVP
	accept.dx	DX example file
	latin.dca	DCA example file
	doc.ddif	DDIF example file
	doc.options	Document options file
CDRCVTGRA010	CDRCVTGRA010.IVP	Graphics subset IVP
	autumn.tiff	TIFF example file
	champagne.macpaint	Macpaint example file
	gra.options	Graphics options file
	std_test.cgm	CGM example file
CDRCVTTBL010	CDRCVTTBL010.IVP	Table subset IVP
	input.calc_grd	CALCGRD example file
	input.dif	DIF example file
	input.dtif	DTIF example file
	input.tab	ASCII tabular example file
	input.wk1	WK1 example file
	tbl.options	Table options file

3.1.3 Accessing the Online Release Notes and Command Files

The CDA Converter Library provides online release notes in the directory /usr/doc. To obtain the release notes after the installation, type or print the file cdrbase_010.release_notes.

The CDA Converter Library also provides online text and PostScript files of the cdoc, vdoc, and dxvdoc commands in the directory /usr/doc. These online files are provided particularly for users who do not install the manual page entry files. You can print the cdoc, dxvdoc, and vdoc files after the installation.

3.1.4 Special Requirements

If you install ULTRIX Version 3.1 after you install the CDA Converter Library, you must install the CDA Converter Library again in order to use the most recent version of the CDA Toolkit. In subsequent ULTRIX-32 (RISC) installations, the CDA Converter Library commences version checking to ensure that the most recent version of the CDA Toolkit is always in use and is not overwritten by an earlier version.

3.2 Installing the CDA Converter Library on ULTRIX-32 (RISC)

This section tells you how to install the CDA Converter Library files on an ULTRIX-32 system. It also tells you how to restore normal operation, if necessary.

During installation, the system prompts you for a response to several questions. Some prompts have accompanying default responses that appear in brackets ([ ]). To choose a default response, press the RETURN key.

You can request help at any step by typing **help** in response to a prompt. If the prompt requests a YES or NO answer, you can also type anything that does not begin with a *y* or *n* to get help.

When you invoke the installation procedure at step 4, the process is the same if you are using either 9-track magnetic tape or TK50 tape cartridge media, and you should proceed to Section 3.3.1.

At any point during the procedure, you can return to the beginning of step 4 by pressing CTRL/C.

3.3 Performing the Installation on ULTRIX-32 (RISC)

When you have met the prerequisites listed in Section 3.1.1, you are ready to install the CDA Converter Library product.

Perform the installation at your system console, in the following order:

Step 1: Log in to the root account with the root user name and its password.

```
login:  root
password:
#
```

If you are currently logged into another account, you can switch to the root account by issuing the **su** command:

```
%    su
password:
#
```

Step 2: Ensure that no one attempts to use the CDA Converter Library during installation.

If necessary, place your system into single-user mode by issuing the following **shutdown** command:

```
#  /etc/shutdown +5 "Installing CDA Converter Library"
```

This command notifies other users that the system will shut down in 5 minutes (as specified by the +5). Then, in five minutes, it logs them out and enters single-user mode. You should note that, in single user mode, the only valid input device is the console.

Step 3: Invoke the installation procedure as appropriate for your particular media.

If you use TK50 tape cartridges, proceed to Section 3.3.1.

3.3.1 9-Track Magnetic Tape and TK50 Tape Cartridge Users

Step 1: Invoke the ULTRIX-32 installation procedure with the following command, substituting your device file unit number for the question mark.

```
#  setld -l /dev/rmt?h
```

When you invoke the installation procedure, the following message and prompt appears, identifying your specific media:

```
Please make sure your installation media is mounted and on-line.
Are you ready (y/n)?: y RETURN
```

Step 2: Respond to the ready prompt.

If you type NO, the system repeats the prompt. If you type YES, the following messages appear, identifying your specific media:

```
The following subsets are mandatory and will be installed automatically:
*** Enter Subset Selections ***
 * CDR Base System

The subsets listed below are optional:
 1) CDR DX Converters                    2) CDR Document Converters
 3) CDR Graphics Converters              4) CDR Table Converters
 5) CDR converter man pages
```

```
 6) All of the Above
 7) None of the Above

Enter your choice(s): 6 RETURN

You are installing the following subsets:
   CDR Base System                          CDR DX Converters
   CDR Document Converters                  CDR Graphics Converters
   CDR Table Converters                     CDR converter man pages

Is this correct? (y/n): y RETURN
```

The system proceeds to display a list of verification messages for the base system and for each subset you installed.

3.4 After the Installation on ULTRIX-32 (RISC)

The CDA Converter Library is now installed and can be invoked by all users with the cdoc command.

3.5 Sample Installation on ULTRIX-32 (RISC)

This section contains a sample installation of the CDA Converter Library. Note that this is only a sample. The installation procedure is sometimes modified in maintenance updates of this product. Because this installation guide is not usually revised for maintenance updates, be sure to read the *Read Before Installing or Using the CDA Converter Library* letter before you install this product. This letter notes any significant changes in the installation that vary from this sample.

Sample CDA Converter Library Installation Procedure

```
# setld -d CDRBASE010 RETURN

Deleting CDR Base System (CDRBASE010).

# setld -l /dev/rmt0h RETURN
Please make sure your installation media is mounted and on-line.
Are you ready (y/n)?: y RETURN

The following subsets are mandatory and will be installed automatically:
*** Enter Subset Selections ***
 * CDR Base System

The subsets listed below are optional:
 1) CDR DX Converters                    2) CDR Document Converters
 3) CDR Graphics Converters              4) CDR Table Converters
 5) CDR converter man pages
```

```
 6) All of the Above
 7) None of the Above

Enter your choice(s): 6 RETURN

You are installing the following subsets:
   CDR Base System                          CDR DX Converters
   CDR Document Converters                  CDR Graphics Converters
   CDR Table Converters                     CDR converter man pages

Is this correct? (y/n): y RETURN

Copying CDR Base System (CDRBASE010) from DISK
Verifying CDR Base System (CDRBASE010)

Copying CDR DX Converters (CDRCVTDX010) from DISK
Verifying CDR DX Converters (CDRCVTDX010)

Copying CDR Document Converters (CDRCVTDOC010) from DISK
Verifying CDR Document Converters (CDRCVTDOC010)

Copying CDR Graphics Converters (CDRCVTGRA010) from DISK
Verifying CDR Graphics Converters (CDRCVTGRA010)

Copying CDR Table Converters (CDRCVTTBL010) from DISK
Verifying CDR Table Converters (CDRCVTTBL010)

Copying CDR converter man pages (CDRMAN010) from DISK
Verifying CDR converter man pages (CDRMAN010)

# setld -v CDRBASE010 CDRCVTDX010 CDRCVTDOC010 CDRCVTGRA010 CDRCVTTBL010 RETURN
Checking setld data files.

Verifying the installation of CDRBASE010
    Checking text back-end and front-end converters
    Checking analysis back-end converter
    Checking ps back-end converter
    Checking dtif front-end converter
The CDRBASE010 IVP has completed successfully

Verifying the installation of CDRCVTDX010
    Checking dx front-end and back-end converters
The CDRCVTDX010 IVP has completed successfully

Verifying the installation of CDRCVTDOC010
    Checking afs back-end and front-end converters
    Checking dca front-end and back-end converters
    Checking sgml back-end and front-end converters
The CDRCVTDOC010 IVP has completed successfully

Verifying the installation of CDRCVTGRA010
    Checking cgm front-end converter
    Checking macpaint front-end and back-end converters
    Checking tiff front-end and back-end converters
The CDRCVTGRA010 IVP has completed successfully

Verifying the installation of CDRCVTTBL010
    Checking ascii_tabular front-end and back-end converters
    Checking calcgrd front-end converter
    Checking dif front-end converter
    Checking wk1 front-end and back-end converters
The CDRCVTTBL010 IVP has completed successfully

#
```