VAXELN

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Installation Guide

Order Number: AA–EU37F–TE

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This manual describes the VAXELN installation procedure.

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Preface

The *VAXELN Installation Guide* tells you how to install the VAXELN Toolkit as a layered product on a VMS host operating system. The manual describes the installation requirements and preliminary steps for installing the VAXELN Toolkit, the installation procedure itself, and the installation verification procedure (IVP).

This product supports the License Management Facility (LMF) features provided by VMS V5.0 or higher and requires that you register a Product Authorization Key (PAK). To register your PAK, use the command procedure @SYS$UPDATE:VMSLICENSE. See the *VMS License Management Utility Reference Manual* for information about this command procedure and management features of LMF.

Read the chapters of this manual in order and perform the procedures documented in each one.

NOTE

The installation procedure in this manual is for installing the VAXELN software from a binary kit, which is the normal distribution medium. If you are installing the software from a source kit, restore the backup saveset SOURCEKIT.SAV from the distribution volume and read its file, SOURCEKIT.MEM, before proceeding. This file contains the instructions and prerequisites for source kit installations.

Intended Audience

This manual is intended for the system manager or other user who will be performing the installation. The text assumes familiarity with computing terminology.

Document Structure

This manual consists of three chapters and two appendixes, organized as follows:

- Chapter 1, Installation Requirements, describes the requirements for installing the VAXELN Toolkit on a VMS system.
- Chapter 2, Preliminary Steps, describes the steps you must complete before beginning the installation.
- Chapter 3, Installation Procedure, describes the VMSINSTAL command procedure used to install VAXELN.
- Appendix A, Installation Messages, describes messages that might appear during installation.
- Appendix B, VAXELN Files, describes the files that are placed on the output disks by the installation procedure.

Conventions

The following conventions are used in this manual:

Convention	Meaning
UPPERCASE characters	VMS, VAXELN, and language-specific reserved words and identifiers are printed in uppercase characters.
italic characters	The following items are printed in italic characters: • Elements for which you supply a value. For example, the format: `$ SHOW list` • First occurrence of a new term.
red characters	In interactive examples, elements for which you must supply input. For example: `UAF> MODIFY`
Ctrl/*x*	Ctrl/*x* indicates a control key sequence. Press the key labeled Ctrl while you simultaneously press another key. For example: Ctrl/C
n and *x*	When used in items such as names, the variables *n* and *x* represent numeric and nonnumeric characters, respectively. For example: VMS V4.*n*

Associated Documents

The following documents are associated with this guide:

- *VAXELN Release Notes*
- *VAXELN Installation Guide*
- *Introduction to VAXELN*
- *VAXELN Development Utilities Guide*
- *VAXELN Runtime Facilities Guide*
- *VAXELN Application Design Guide*
- *VAXELN Pascal Language Reference Manual*
- *VAXELN Pascal Runtime Library Reference Manual*
- *VAXELN C Reference Manual*
- *VAXELN C Runtime Library Reference Manual*
- *VAXELN FORTRAN Runtime Library Reference Manual*
- *VAXELN Pocket Reference*
- *VAXELN Messages Manual*
- *VAXELN Guide to DECwindows*
- *VAXELN Master Index and Glossary*

Chapter 1

Installation Requirements

This chapter describes the requirements for installing the VAXELN Toolkit on a VMS system. Before proceeding with the installation, read this material and be sure your system meets these requirements.

The chapter covers the requirements for the following:

- Prerequisite Software, Section 1.1
- Disk Storage, Section 1.2
- Account Privileges and Quotas, Section 1.3
- Installation Time, Section 1.4

1.1 Prerequisite Software

To install VAXELN you must have the following:

- A valid VMS operating system configuration running VMS Version 4.7 or higher.
- If DECwindows support is needed, VMS Version 5.1 or higher.
- DECnet software must be installed to use the down-line loading boot method.
- VAX C, Version 2.4 or higher.

You might also want to install VAX FORTRAN, VAX ADA, and the Language-Sensitive Editor (LSE).

NOTE

The VAXELN installation procedure attempts to update the VAXELN Pascal Language-Sensitive Editor (LSE) templates to accommodate new capabilities. If LSE is already installed on your system, the VAXELN installation procedure updates the templates. If, however, you intend to use LSE to program VAXELN Pascal applications, you must install LSE before installing the VAXELN Toolkit.

1.2 Disk Storage

The installation procedure uses a target disk and a VAXELN disk. You can use a single disk on your VMS system to serve both purposes if the disk has sufficient space, or you can use two separate disks.

The *target disk* receives the distribution software copied from magnetic tape (or other distribution media) early in the installation. The distribution software is copied by the installation procedure to this disk.

The *VAXELN disk* holds the development software after the installation is complete. The installed VAXELN Toolkit uses the system logical name ELN$ to refer to the directory on this disk containing the VAXELN software. The installation procedure creates or redefines this name if necessary.

Both disks must be mounted and write-enabled before you begin the installation.

If a single disk is used for installation, it must have at least 40,000 free blocks. If the DECwindows software is supported, at least 67,000 blocks are required. At the completion of the installation procedure, about 8000 blocks are freed.

1.3 Account Privileges and Quotas

To install VAXELN you must be logged in to the system manager's account (SYSTEM) or an account with the following quotas and privileges:

- Open file limit: 20
- AST limit: 20
- Working set quota: 250 pages (minimum), 1000 pages (optimum)
- Paging file quota: 4000 pages
- SETPRV privilege
- Virtual memory: 4000 pages

One of the preliminary steps in Chapter 2 checks and, if necessary, corrects the account quotas.

1.4 Installation Time

In general, the VAXELN installation procedure, including running the installation certification program (ICP), takes between 30 and 90 minutes, depending on the VAX system processor and configuration, with faster processors requiring less time. (If DECwindows software is supported, the time is closer to 90 minutes; otherwise, it is closer to 30 minutes.)

Chapter 2

Preliminary Steps

This chapter describes the preliminary steps you must complete before beginning the installation.

The steps to complete are:

- System disk backup, Section 2.1
- Check user account limits, Section 2.2

In the hardcopy version of this manual, the interactive commands that you must issue appear in red type. The parameters you must supply appear in italics:

```
$ COMMAND parameter
```

You terminate all commands by pressing the Return key.

2.1 System Disk Backup

Make a backup copy of your system disk before you install VAXELN.

For more information on backing up your system disk, see the VMS system management documentation.

2.2 Check Account Privileges and Quotas

Be sure that the following limits in the user account authorization record are set equal to or greater than the listed values:

```
Open file limit (Fillm) = 20
AST limit (ASTlm) = 20
Working set quota (WSquo) = 250 (1000 optimum)
Paging file quota (Pgflquo) = 4000
```

Perform these procedures in the following order:

1. To check the user account limits, run the Authorize Utility (AUTHORIZE) by entering the following commands:

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

2. When the system responds with the UAF> prompt, enter this command (*user* is the user name for the account from which the installation will be done):

   ```
   UAF> SHOW user
   ```

   AUTHORIZE responds by displaying the current limits of the user account's authorization file.

3. If the current limits need to be modified, use the AUTHORIZE command MODIFY in the following form:

   ```
   UAF> MODIFY user/limit=new_value
   ```

   For example, to increase the open file (Fillm) limit to 20 for the SYSTEM account, use the following command:

   ```
   UAF> MODIFY SYSTEM/FILLM=20
   ```

4. When you have completed the modifications, return to DCL command level by entering the EXIT command at the UAF> prompt. You must then log out and log in again for the changes to take effect.

2.3 Sample Account Privileges and Quotas Check

```
Username:  SYSTEM
Password:
        Welcome to VMS version V4.7 on node XVAX

$  SHOW DEVICE SYS$SYSDEVICE

Device                Device          Error    Volume         Free  Trans Mnt
 Name                 Status          Count     Label        Blocks Count Cnt

XVAX$DRA0:            Mounted             0  XVAX$SYS        133814  145   1

$  SET DEFAULT SYS$SYSTEM

$  RUN AUTHORIZE
UAF>  SHOW SYSTEM

Username: SYSTEM                          Owner:  SYSTEM MANAGER
Account:  SYSTEM                          UIC:    [1,4] ([SYSTEM]
CLI:      DCL                             Tables:
Default:  SYS$SYSROOT:[SYSMGR]
LGICMD:   SYS$SYSROOT:[SYSMGR.LOG]LOGIN
Login Flags:
Primary days:    Mon Tue Wed Thu Fri
Secondary days:                   Sat Sun
No access restrictions
Expiration:            (none)     Pwdminimum:  6   Login Fails:     0
Pwdlifetime:         30 00:00     Pwdchange:  6-FEB-1990 07:22

Last Login: 20-FEB-1990 06:46 (interactive), 20-FEB-1990 06:00 (non-interactive)


Maxjobs:          0  Fillm:        60  Bytlm:        32000
Maxacctjobs:      0  Shrfillm:     20  Pbytlm:           0
Maxdetach:        0  BIOlm:       100  JTquota:       1024
Prclm:           10  DIOlm:        60  WSdef:          400
Prio:             4  ASTlm:       100  WSquo:          512
Queprio:          0  TQElm:       100  WSextent:      2048
CPU:         (none)  Enqlm:       300  Pgflquo:      10000

Authorized Privileges:
  CMKRNL CMEXEC SYSNAM GRPNAM ALLSPOOL DETACH DIAGNOSE LOG_IO
  GROUP ACNT PRMCEB PRMMBX PSWAPM ALTPRI SETPRV TMPMBX WORLD
  OPER EXQUOTA NETMBX VOLPRO PHY_IO BUGCHK PRMGBL SYSGBL MOUNT
  PFNMAP SHMEM SYSPRV BYPASS SYSLCK SHARE GRPPRV READALL
  SECURITY
```

```
Default Privileges:
  CMKRNL CMEXEC SYSNAM GRPNAM ALLSPOOL DETACH DIAGNOSE LOG_IO
  GROUP ACNT PRMCEB PRMMBX PSWAPM ALTPRI SETPRV TMPMBX WORLD
  OPER EXQUOTA NETMBX VOLPRO PHY_IO BUGCHK PRMGBL SYSGBL MOUNT
  PFNMAP SHMEM SYSPRV BYPASS SYSLCK SHARE GRPPRV READALL
  SECURITY
UAF>  EXIT

%UAF-I-NOMODS, no modifications made to system authorization file
```

Chapter 3

Installation Procedure

This chapter explains how to use the VMSINSTAL command procedure to install the VAXELN Toolkit. The topics are as follows:

- Installing the kit, Section 3.1
- Installation in a VAXcluster environment, Section 3.2
- Verifying installation, Section 3.3
- Sample installation procedures, Section 3.4

3.1 Installing the Kit

The VMSINSTAL command procedure is used to install the VAXELN Toolkit. You can obtain help at any time during the execution of VMSINSTAL by typing a question mark (?). To abort the installation procedure at any time, press Ctrl/Y. All files created by that procedure are then deleted, and you are returned to DCL level.

During the installation, the system (VMS V5.0 or higher) asks whether you have registered the VAXELN license and loaded the appropriate authorization key. You must register and load your license for VAXELN before you start the installation in order to run the installation verification procedure (IVP) and 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 Key (PAK).

- At the DCL prompt, issue the LICENSE REGISTER command with the appropriate qualifiers that correspond to PAK information.

Perform the following procedures in the given order; sample installation dialogs are shown at the end of this chapter.

1. Load the distribution volume (for example, tape), but do not mount it.
2. Verify that you have sufficient space on the target disk to carry out the procedure. You can do this by issuing the SHOW DEVICE command, as follows:

   ```
   $ SHOW DEVICE target
   ```

   If a single disk is used for installation, it must have at least 40,000 free blocks. If the DECwindows software is supported, at least 67,000 blocks are required. At the completion of the installation procedure, about 8000 blocks are freed. A maximum of 14,000 blocks are used by the optional ICP system image files.
3. Invoke the VMSINSTAL installation procedure by issuing a command with the following syntax:

   ```
   $ @SYS$UPDATE:VMSINSTAL ELN041 source: [destination]
   ```

   where:

ELN041	Product name for the Version 4.1 VAXELN Toolkit
source	Device drive containing the VAXELN distribution volume
destination	Target disk

   By default, VMSINSTAL assumes that the target disk is the system disk. In the following command line, VMSINSTAL is invoked to install VAXELN from magnetic tape to the system disk:

   ```
   $ @SYS$UPDATE:VMSINSTAL ELN041 MTA0:
   ```

4. The VAXELN Toolkit distribution volume includes Release Notes in the form of a file, which VMSINSTAL copies to SYS$HELP for other users to read. To print or display the Release Notes, use the OPTIONS N parameter of VMSINSTAL.

   If you do not include the OPTIONS N parameter, VMSINSTAL does not ask you about the Release Notes. You should review the Release Notes before proceeding with the installation in case they contain new information about the installation.

You can select several other options when you invoke VMSINSTAL. See the VMS documentation on software installation in the VMS System Management Subkit for information on these options. If you specify more than one option, separate the options with commas (OPTIONS A,N).

A sample invocation follows:

```
$ @SYS$UPDATE:VMSINSTAL ELN041 MTA0: OPTIONS N
```

5. If a previous version of VAXELN software is installed on your system, you can use the existing VAXELN directory by answering Yes to the prompt:

   ```
   Do you want to use the existing VAXELN Toolkit directory?
   ```

   Otherwise, you are asked to specify the VAXELN disk with the following prompt:

   ```
   Specify device for VAXELN Toolkit directory [SYS$SYSDEVICE:]:
   DBA1
   ```

   The VAXELN disk must be mounted. In addition, if you press Return, the VAXELN device is the same as the target device.

   In all cases, the installation procedure then asks whether files that are replaced by the installation are to be purged. Press the Return key to answer Yes.

6. You should now read the console log carefully; look for error and warning messages that indicate tasks you must perform manually. See Appendix A if you need more information about a message.
7. When the installation is finished, the logical name ELN$ is defined for the whole system. You must edit the system start-up command procedure (SYS$MANAGER:SYSTARTUP.COM for VMS V4.*n* and SYS$MANAGER:SYSTARTUP_V5.COM for VMS V5.*n* so that ELN$ is defined correctly every time the system reboots (that is, by means of ASSIGN/SYSTEM *xxxx*:[ELN]ELN$).
8. This installation procedure modifies the DCL command table so that the VAXELN DCL commands are recognized and processed. However, the previous DCL command table is still in effect for those users who are currently logged in. All logged-in users who want to use the VAXELN DCL commands must log out of the system and log in again.

3.2 Installation in a VAXcluster Environment

VAXELN software is fully supported when installed on any valid VAXcluster configuration or Local Area VAXcluster configuration, including those systems that use a common system disk. You must install the software on each node that has a different system disk. For VAXcluster systems that access a common system disk, you must first execute the following commands:

```
$ INSTALL
INSTALL> REPLACE SYS$LIBRARY:DCLTABLES
$ ASSIGN/SYSTEM xxxx:[ELN]ELN$
```

You must register a VAXELN license under VMS (V5.0 or higher) for each member of the cluster. 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 Key (PAK).
- At the DCL prompt, issue the LICENSE REGISTER command with the appropriate qualifiers that correspond to PAK information.

3.3 Verifying Installation

After the VAXELN software is installed, and the new VAXELN DCL commands are in effect, it is recommended that you run the installation verification procedure (IVP) to verify that the VAXELN software is available on your system. The following DCL command invokes the IVP:

```
$ @SYS$TEST:ELN$IVP
```

To verify that the installed software is functional, boot a sample VAXELN system image that has been placed in your directory. The following list identifies the system images that match each target processor type and loading method:

Target	Disk Booting	Down-Line Loading
MicroVAX I MicroVAX II (KA630) MicroVAX 3NNN rtVAX 1000 (KA620)	QBUS_ICP.SYS	QBUS_ICP_DOWNLINE.SYS
MicroVAX 2000	410_ICP.SYS	410_ICP_DOWNLINE.SYS
VAX–11/725 VAX–11/730 VAX–11/750	UBUS_ICP.SYS	UBUS_ICP_DOWNLINE.SYS
VAX 85NN VAX 8700	8NN_ICP.SYS	8NN_ICP_DOWNLINE.SYS
VAX 8800	MPK_ICP.SYS	MPK_ICP_DOWNLINE.SYS
VAX 6000_2NN VAX 6000_3NN	VAX 6000_ 2NN_ICP.SYS	6000_2NN_ICP_DOWNLINE.SYS
VAX 6000_4NN	6000_4NN_ ICP.SYS	6000_4NN_ICP_DOWNLINE.SYS
VAXstation II/GPX VAXstation 3200 VAXstation 3500		GAA_ICP_DOWNLINE.SYS
VAXstation 2000 VAXstation 3100		GAB_ICP_DOWNLINE.SYS

For instructions on disk booting or down-line loading, see the *VAXELN Development Utilities Guide*.

See Appendix B for a list of the files that the installation procedure has placed in ELN$ and in other output-disk directories.

3.4 Sample Installation Procedures

The VAXELN kit is divided into several savesets. Saveset A contains the release notes and enough information for VMS to decide whether the device on which the kit is to be installed has enough free blocks. If there are not enough free blocks, VMSINSTAL displays the following warning message: *The VAXELN disk requires at least nnn free blocks for this installation.* The size of each saveset follows:

Savesets	Blocks
A	1044
B	13644
C	12834
D	8388
E	9342
F	12888
G	6840

NOTE

You may wish to enlarge the display window in the DECwindows Bookreader to view the sample installation procedures more easily.

3.4.1 Sample Installation on VMS, V4.7

The following installation procedure was carried out on a VMS operating system, Version 4.7.

```
$ @SYS$UPDATE:VMSINSTAL

 VAX/VMS Software Product Installation Procedure V4.7

It is 5-MAR-1990 at 09:29.
Enter a question mark (?) at any time for help.
* Are you satisfied with the backup of your system disk [YES]?
* Where will the distribution volumes be mounted: MUA0:

Enter the products to be processed from the first distribution volume set.
* Products: ELN041
The following products will be processed:
```

```
  ELN V4.1

 Beginning installation of ELN V4.1 at 09:30

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

VAXELN V4.1 Installation Procedure

This product requires that the following products already be installed:

    VMS V4.7 or later

The installation procedure will now verify that these products are present.

* Do you want to install the VAXELN Toolkit [YES]? YES
* Number of copies of the release notes to be printed [0]:
* Specify device for VAXELN Toolkit directory [SYS$SYSDEVICE:]: $DISK1
%VMSINSTAL-I-SYSDISK, This product creates system disk directory $DISK1:[ELN].
* Do you want to purge files replaced by this installation [YES]?

   There are no more questions, unless additional media are needed.  The
   remainder of the installation procedure will take approximately 30-90
   minutes depending on options chosen.

%VMSINSTAL-I-RESTORE, Restoring product saveset B...
%VMSINSTAL-I-RESTORE, Restoring product saveset C...
%VMSINSTAL-I-RESTORE, Restoring product saveset D...
%ELN-W-NOLSE, This product is not being installed with VAX
Language-Sensitive Editor support because the editor isn't installed
on your system.

If you want the VAX Language-Sensitive Editor support you must do
the following:

 1. Install the VAX Language-Sensitive Editor
 2. Reinstall this product.


 This product contains an Installation Verification Program (IVP) to verify
 the correct installation of the VAXELN Toolkit.

 To run the IVP, type:

 $ @SYS$TEST:ELN$IVP

 This can be done anytime after installation. See the "VAXELN Installation
 Guide" for further information.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
 Installation of ELN V4.1 completed at 10:09

Enter the products to be processed from the next distribution volume set.
* Products: EXIT

 VMSINSTAL procedure done at 13:08
$
```

3.4.2 Sample Installation on VMS, Version 5.2–1

The following installation procedure was carried out on a VMS operating system, Version 5.2–1.

```
$ @SYS$UPDATE:VMSINSTAL

 VAX/VMS Software Product Installation Procedure V5.2-1


It is 6-MAR-1990 at 17:39.
Enter a question mark (?) at any time for help.

* Are you satisfied with the backup of your system disk [YES]?
* Where will the distribution volumes be mounted: MUA0:

Enter the products to be processed from the first distribution volume set.
* Products: eln041

* Enter installation options you wish to use (none):
Please mount the first volume of the set on MUA0:
* Are you ready [YES]?
%MOUNT-I-MOUNTED, ELN mounted on MUA0:

The following products will be processed:

  ELN V4.1

 Beginning installation of ELN V4.1 at 17:42

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

VAXELN V4.1 Installation Procedure

This product requires that the following products already be installed:

    VMS V4.7 or later

The installation procedure will now verify that these products are present.

* Do you want to install the VAXELN Toolkit [YES]?
* Number of copies of the release notes to be printed [0]:
* Do you want to include VAXELN DECwindows support [NO]? YES

        Product:      VAXELN-TOOLKIT
        Producer:     DEC
        Version:      4.1
        Release Date: 4-APR-1990

* Does this product have an authorization key registered and loaded? YES
* Specify device for VAXELN Toolkit directory [SYS$SYSDEVICE:]: $DISK1
* Do you want to purge files replaced by this installation [YES]?

   There are no more questions, unless additional media are needed.  The
   remainder of the installation procedure will take approximately 30-90
   minutes depending on options chosen.
```

```
%DCL-I-SUPERSEDE, previous value of ELN$DWINCL has been superseded
%DCL-I-SUPERSEDE, previous value of ELN$DW75DPI has been superseded
%DCL-I-SUPERSEDE, previous value of ELN$DW100DPI has been superseded
%DCL-I-SUPERSEDE, previous value of ELN$DWKEYMP$ has been superseded
%VMSINSTAL-I-RESTORE, Restoring product saveset B ...
%VMSINSTAL-I-RESTORE, Restoring product saveset C ...
%VMSINSTAL-I-RESTORE, Restoring product saveset D ...
%VMSINSTAL-I-RESTORE, Restoring product saveset E ...
%VMSINSTAL-I-RESTORE, Restoring product saveset F ...
%VMSINSTAL-I-RESTORE, Restoring product saveset G ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
 VMI$ROOT:[SYSTEST.ELN].
%CREATE-I-EXISTS, VMI$ROOT:[SYSTEST.ELN] already exists
%ELN-I-LSEINST, EPASCAL templates added to system LSE environment.

 This product contains an Installation Verification Program (IVP) to verify the
 correct installation of the VAXELN Toolkit.

 To run the IVP, type:

 $ @SYS$TEST:ELN$IVP

 This can be done anytime after installation.  See the "VAXELN Installation
 Guide" for further information.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
Installation of ELN V4.1 completed at 14:37


 Installation of ELN V4.1 completed at 19:07

Enter the products to be processed from the next distribution volume set.
* Products: EXIT

 VMSINSTAL procedure done at 08:06
$
```

3.4.3 Sample Installation Verification Procedure on VMS

The following IVP was carried out on a VMS operating system, V5.1.

```
$ @SYS$TEST:ELN$IVP

 VAXELN V4.1 Installation Verification Procedure

The Installation Verification Procedure (IVP) will use the host components
of VAXELN to build an Installation Certification Procedure (ICP), which you
can load and run on your target computer.

The Installation Certification Program (ICP) can be built for each target
CPU type. Answer YES if you want an ICP built for any of the following
targets. Note that to build ICPs for the VAXstation systems you must have
VAXELN DECwindows support installed.

The .SYS file(s) will be placed in your current directory.

Do you want to build an ICP for an rtVAX or MicroVAX I, II, 3200, 3300, 3400,
35NN, 36NN, 3800, 3900 ?
Do you want to build an ICP for 725, 730, 750 ?
Do you want to build an ICP for 85NN, 8700 ?
Do you want to build an ICP for 8800 ?
Do you want to build an ICP for MicroVAX 2000 ?
Do you want to build an ICP for 6000-2NN, 6000-3NN ?
Do you want to build an ICP for 6000-4NN ? YES
Do you want to build an ICP for 8250 ?
Do you want to build an ICP for VAXstation II/GPX, VAXstation 3200 ? YES
Do you want to build an ICP for VAXstation 2000, VAXstation 3100 ?

The Installation Verification Procedure is compiling the programs...

The Installation Verification Procedure is linking the programs...

The Installation Verification Procedure is building the system...

Building the ICP for 6000-4NN series ...
System image size is 530 pages (265 Kbytes); file size is 530 blocks
System image size is 530 pages (265 Kbytes); file size is 531 blocks

Building the ICP for VAXstation II/GPX and VAXstation 3200 ...
System image size is 2695 pages (1348 Kbytes); file size is 2696 blocks

Verification of the VAXELN Toolkit is complete. Please follow the instructions
in the "VAXELN Installation Guide" to boot the ICP system you have just built
on a standalone VAX system.

VAXELN V4.1 Installation Verification Procedure has succeeded.

$
```

Appendix A

Installation Messages

This appendix describes messages that may appear during installation.

Messages can be of the following types:

- *Informational messages*, identified by the prefix ELN–I–, Section A.1. Installation continues but may require you to rectify some situations. (Most of these are related to problems, such as a write-locked disk, that you can fix without stopping the installation.)
- *Error (warning) messages*, identified by the prefix ELN–W–, Section A.2. Prerequisite conditions have not been met. If the installation subsequently fails, you should correct the conditions before trying the installation again. If the installation succeeds, you can ignore these messages.
- *Error (fatal) messages*, identified by ELN–E–, Section A.3. Fatal errors have aborted the installation. Correct the condition and restart the installation.

A.1 Informational Messages

The following messages are displayed when a problem exists that you can fix without stopping the installation. For example, you would get a message if you responded to the prompt for the target disk with an incorrect device name or with the disk not mounted. The prompt is repeated so you can correct the problem.

```
ELN-I-INVELNDIR, The logical name ELN$ is ELNdirectory, which is an
invalid directory.
```

ELNdirectory is the translation of the existing logical name ELN$. *ELNdirectory* was used as the VAXELN directory and is an invalid directory specification.

```
ELN-I-INVDEVNAM, Invalid device name ELNdevice.
```

ELNdevice, the device name you specified for a disk, is not a syntactically valid device name.

```
ELN-I-NOSUCHDEV, No such device ELNdevice.
```

ELNdevice, the device name you specified for a disk, is a possible device name, but there is no such device.

```
ELN-I-DEVNOTMOUNT, Device ELNdevice is not mounted.
```

ELNdevice is not mounted; mount it before you proceed.

```
ELN-I-IVP, It is recommended that you run the IVP after the license is
installed.
```

```
ELN-I-WRITELOCK, Volume on ELNdevice is write locked.
```

Use the switch on the disk drive to remove write protection.

The following messages inform you that an operation within the installation has completed successfully:

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

%VMSINSTAL-I-RESTORE, Restoring product saveset B...
%VMSINSTAL-I-RESTORE, Restoring product saveset C...
%VMSINSTAL-I-RESTORE, Restoring product saveset D...
%VMSINSTAL-I-RESTORE, Restoring product saveset E...
%VMSINSTAL-I-RESTORE, Restoring product saveset F...
%VMSINSTAL-I-RESTORE, Restoring product saveset G...

ELN-I-LSEINST, EPASCAL templates added to system LSE environment
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
```

A.2 Error (Warning) Messages

The following messages inform you that there is a problem with the installation:

```
ELN-W-INSUFAST, Installation may fail because of the small AST quota.

ELN-W-INSUFFIL, Installation may fail because of the small open file
  quota.

ELN-W-INSUFPGFL, Installation may fail because of the small paging
  file size.

ELN-W-INSUFWS, Installation may fail because of the small working
  set size.


ELN-W-NOIVP, IVP will not be run, license not installed.

ELN-W-NOLSE, This product is not being installed with VAX
  Language-Sensitive Editor support because the editor is
  not installed on your system.

  If you want the VAX Language-Sensitive Editor support you
  must do the following:

  1. Install the VAX Language-Sensitive Editor
  2. Reinstall this product

ELN-W-NORELNOTE, Unable to locate release notes.

ELN-W-NOSPACE, The VAXELN disk requires at least nnn free blocks.
```

A.3 Error (Fatal) Messages

The following messages inform you of a problem with the installation that cannot be fixed without restarting the procedure. Since these are fatal errors, the installation is aborted, and you must restart it after correcting the condition.

```
ELN-E-NOSPACE, This product requires at least nnn free blocks.
```

This message means that the target disk does not have enough free space to finish the installation. See Section 1.2 for storage requirements.

```
ELN-E-VMS_VERSION, Invalid VMS version, V4.7 or higher is required.
```

Install the new version of VMS before proceeding.

Appendix B
VAXELN Files

This appendix describes the files that are placed on the output disks by the VAXELN installation procedure. Files are placed in the following directories:

- The VMS directory SYS$MESSAGE, Section B.1
- The VMS directory SYS$HELP, Section B.2
- The VMS directory SYS$LIBRARY, Section B.4
- The VAXELN directory ELN$, Section B.5

B.1 SYS$MESSAGE Directory File

The following file is placed in the VMS directory SYS$MESSAGE:

ELNMSG.EXE	Message text image

B.2 SYS$HELP Directory File

The following file is placed in the VMS directory SYS$HELP:

ELN041.RELEASE_NOTES	Release notes for the current version of VAXELN

B.3 SYS$TEST Directory File

The following file is placed in the VMS directory SYS$TEST:

ELN$IVP.COM

If VAXELN DECwindows support is installed, the following files are placed in the VMS directory SYS$COMMON:[SYSTEST.ELN]

ELN$IVP.CURSOR

ELN$IVP.FIXED

B.4 SYS$LIBRARY Directory File

The following file is placed in the VMS directory SYS$LIBRARY:

LSE$SYSTEM_ENVIRONMENT.ENV	VAX Language-Sensitive Editor system environment library — if present, is updated with VAXELN Pascal templates

B.5 ELN$ Directory Files

Table B–1 describes the files that are placed in the current directory, that is, the working directory from which you invoked the ELN$IVP.COM command procedure.

Tables B–2 to B–17 describe the files that are placed in the VAXELN directory ELN$:

Table B–2, Tools and Utilities Used Under VMS
Table B–3, Kernel Files
Table B–4, VAXELN Utility Programs
Table B–5, VAXELN Utility Shareable Images
Table B–6, VAXELN General Runtime Library
Table B–7, VAXELN Pascal Runtime Library
Table B–8, Pascal Source for VAXELN Runtime Library
Table B–9, VAXELN C Runtime Library
Table B–10, VAXELN Drivers

Table B–11, Source for VAXELN Drivers
Table B–12, Source for Sample Applications
Table B–13, VAXELN FORTRAN Runtime Library
Table B–14, DECwindows Files
Table B–15, DECwindows Images
Table B–16, MIT C XLIB and Toolkit DECwindows Include Files
Table B–17, Language-Specific DECwindows Include Files

Table B–1: Installation Verification Procedure Files

File	Description
410_ICP.SYS	Installation certification program system image (MicroVAX 2000, disk)
410_ICP_DOWNLINE.SYS	Installation certification program system image (MicroVAX 2000, down-line load)
6000_2NN_ICP.SYS	Installation certification program system image (VAX 6000_2NN, disk)
6000_2NN_ICP_ DOWNLINE.SYS	Installation certification program system image (VAX 6000_2NN, down-line load)
6000_4NN_ICP.SYS	Installation certification program system image (VAX 6000_4NN, disk)
6000_4NN_ICP_ DOWNLINE.SYS	Installation certification program system image (VAX 6000_4NN, down-line load)
8NN_ICP.SYS	Installation certification program system image (VAX 85*nn* or VAX 8700, disk)
8NN_ICP_DOWNLINE.SYS	Installation certification program system image (VAX 85*nn* or VAX 8700, down-line load)
GAA_ICP_DOWNLINE.SYS	Installation certification program system image (VAXstation 2000, or VAXstation 3100, down-line load)
GAB_ICP_DOWNLINE.SYS	Installation certification program system image (VAXstation II/GPX, VAXstation 3200, or VAXstation 3500, down-line load)
MPK_ICP.SYS	Installation certification program system image (VAX 8800, disk)
MPK_ICP_DOWNLINE.SYS	Installation certification program system image (VAX 8800, down-line load)
QBUS_ICP.SYS	Installation certification program system image (MicroVAX I, MicroVAX II (KA630), or KA620, disk)

Table B–1 (Cont.): Installation Verification Procedure Files

File	Description
QBUS_ICP_DOWNLINE.SYS	Installation certification program system image (MicroVAX I, MicroVAX II (KA630), or KA620, down-line load)
UBUS_ICP.SYS	Installation certification program system image (VAX–11/725, /730, or /750, disk)
UBUS_ICP_DOWNLINE.SYS	Installation certification program system image (VAX–11/725, /730, or /750, down-line load)

Table B–2: Tools and Utilities Used Under VMS

File	Description
BDABOO.COM	Console command procedure for BDA disk booting a VAX 85*nn* or VAX 8700
BDABOO8.COM	Console command procedure for BDA disk booting a VAX 8800
COPYSYS.COM	Command procedure to create a bootable VAXELN disk
COPYSYS_UTILITY.EXE	Utility image run by COPYSYS command procedure to change network information
DATATOBJ.CLD	Command definition file for the DATAOBJ utility
DATATOBJ.EXE	Utility image for creating VAX–11/750 microcode update programs
DEFBOO.COM	Sample console command procedure for booting a VAX 85*nn* or VAX 8700 target using the DEBNT
DEFBOO8.COM	Sample console command procedure for booting a VAX 8800 target using the DEBNT
DFLOATRTL.COM	Command procedure to convert the VAXELN runtime library routines to D_FLOAT
DLLSHR.EXE	Shareable image of the Down-Line Load service
DLL_UTILITY.FOR	Down-Line Load service source declarations
EBUILD.EXE	System Builder utility image
EBUILD.HLB	Help library used by System Builder
EDEBUG.EXE	Remote debugger image, host-side
EDEBUG.HLB	Help library used by VAXELN Debugger
ELNLDR.EXE	Bootstrap image for DEBNI down-line loading and BDA disk booting on VAX85*nn* and VAX 8700, and tape booting on the VAX 6000 series

Table B–2 (Cont.): Tools and Utilities Used Under VMS

File	Description
ELNLDR8.EXE	Bootstrap image for DEBNI down-line loading and BDA disk booting on the VAX 8800
ELNMOM.EXE	Down-line load image
ELSE$SHUTDOWN.COM	Command procedure to stop the error log server
ELSE$STARTUP.COM	Command procedure to start the error log server
ELSE.EXE	Error log server image
EPAAV_MAIN.EXE	VAXELN Performance Analyzer (EPA) analyzer image
EPACVMAIN.EXE	EPA collector image, host-side
EPASCAL.EXE	Pascal compiler image
EPA_HELP.HLB	Help library used by EPA
ERFRTV021.A	Saveset for the rtVAX (KA620) error format utility
ETABOO.COM	Sample console command procedure for booting a VAX 85*nn* or VAX 8700 target using the DEBNT
ETABOO8.COM	Sample console command procedure for booting a VAX 8800 target using the DEBNT
ETBOOT.EXE	Bootstrap image for DEBNT down-line loading, VAX 85*nn* or VAX 8700 version
ETBOOT8.EXE	Bootstrap image for DEBNT down-line loading, VAX 8800 version
GFLOATRTL.COM	Command procedure to convert the VAXELN runtime library routines to G_FLOAT
NEWBOOT.COM	Command procedure to add down-line loading to the VAX console media for the VAX–11/750 and VAX–11/730 or to build a console floppy for booting a system image on a VAX 85*nn*, 8700, or 8800
NMIRESET.COM	Sample console command procedure for trigger booting using the DEBNT, VAX 85*nn*, or VAX 8700 version
NMIRESET8.COM	Sample console command procedure for trigger booting using the DEBNT, VAX 8800 version
P750UCODE.OBJ	Object module used with the DATAOBJ utility
RESTAR.COM	Command procedure for restarting a VAX 85*nn*, 8700, or 8800 target
SAMPLE_SCSI_ DRIVER.PAS	Sample SCSI driver written in Pascal

Table B–2 (Cont.): Tools and Utilities Used Under VMS

File	Description
SAMPLE_SCSI_ DRIVER.FOR	Sample SCSI driver written in FORTRAN
SAMPLE_SCSI_ DRIVER.C	Sample SCSI driver written in C
SECBOO8.COM	Sample console command procedure for booting the secondary CPU on the VAX 8800
XE0BOO.CMD	Console media boot command procedure for DEUNA down-line loading
XEABOO.COM	Sample console command procedure for booting a VAX 85*nn* or VAX 8700 target using the DEUNA
XEABOO8.COM	Sample console command procedure for booting a VAX 8800 target using the DEUNA
XEBOOT.EXE	Bootstrap image for DEUNA down-line loading, VAX 85*nn*, VAX 8700 version
XEBOOT8.EXE	Bootstrap image for DEUNA down-line loading, VAX 8800 version
XIABOO.COM	Sample console command procedure for booting a VAX 85*nn* or VAX 8700 target using the DEBNI (Declancontroller 200).
XIABOO8.COM	Sample command procedure for booting a VAX 8800 target using the DEBNI.

Table B–3: Kernel Files

File	Description
300KER.EXE	Kernel for rtVAX 300 processors
300KER.MAP	Linker map for rtVAX 300 kernel
300KER.STB	Linker symbol table for the rtVAX 300
4NNKER.EXE	Kernel image for MicroVAX 2000 processors
4NNKER.MAP	Linker map of the MicroVAX 2000 kernel image
4NNKER.STB	Linker symbol table of the MicroVAX 2000 kernel image
6CCKER.EXE	Kernel image for VAX 6000_2NN processors
6CCKER.MAP	Linker map of the 6CC kernel image
6CCKER.STB	Linker symbol table of the 6CC kernel image

Table B–3 (Cont.): Kernel Files

File	Description
800KER.EXE	Kernel image for a KA800
800KER.MAP	Linker map of the KA800 kernel image
800KER.STB	Linker symbol table of the KA800 kernel image
8NNKER.EXE	Kernel image for a VAX 85*nn* or VAX 8700 system
8NNKER.MAP	Linker map of the VAX 85*nn*/8700 kernel image
8NNKER.STB	Linker symbol table of the VAX 85*nn*/8700 kernel image
9RRKER.EXE	Kernel image for the KA64A
9RRKER.MAP	Linker map of the KA64A kernel image
9RRKER.STB	Linker symbol table of the KA64A kernel image
CIO9RR.EXE	Console I/O image for KA64A
CIOVAX.EXE	Console I/O image for MicroVAX II
CIOVCB02.EXE	Console I/O image for VAXstation II/GPX, 3200, and 3500
CIO800.EXE	Console I/O image for KA800
CIO300.EXE	Console I/O image for rtVAX 300
CIO8800.EXE	Console I/O image for VAX 8800
CIO6CC.EXE	Console I/O image for 62*nn* and 63*nn*
CIO4NN.EXE	Console I/O image for MicroVAX 2000
CIOVS40.EXE	Console I/O image for VAXstation 2000 and 3100
KERNELDEF.FOR	Kernel definitions (FORTRAN)
KERNELDEF.H	Kernel definitions (C)
KERNELDEF.MAR	Kernel definitions (MACRO)
KERNELDEF.PAS	Kernel definitions (Pascal)
MP8800KER.EXE	Kernel image for a VAX 8800 system
MP8800KER.MAP	Linker map of the VAX 8800 kernel image
MP8800KER.STB	Linker symbol table of the VAX 8800 kernel image
QBUSKER.EXE	Kernel image for a MicroVAX I, MicroVAX II (KA630), or KA620 system
QBUSKER.MAP	Linker map of the MicroVAX I, MicroVAX II, KA620 kernel image

Table B–3 (Cont.): Kernel Files

File	Description
QBUSKER.STB	Linker symbol table of the MicroVAX I, MicroVAX II, KA620 kernel image
UBUSKER.EXE	Kernel image for a VAX–11/725/730/750 system
UBUSKER.MAP	Linker map of the VAX–11/725/730/750 kernel image
UBUSKER.STB	Linker symbol table of the VAX–11/725/730/750 kernel image

Table B–4: VAXELN Utility Programs

File	Description
AUTHORIZE.EXE	Authorization Service image
ECL.EXE	VAXELN Command Language (ECL) utility image
ECL.HLP	Help file used by ECL
EDEBUGLCL.EXE	Local debugger image
EDEBUGREM.EXE	Remote debugger image, target-side
EDISPLAY.EXE	VAXELN Display (EDISPLAY) utility image
EPACEMAIN.EXE	VAXELN Performance Analyzer (EPA) collector image, target-side
ERRFORMAT.EXE	Error format job image
FALSERVER.EXE	File Access Listener image
JOBCNTRL.EXE	ECL job control program image
REMSERVER.EXE	ECL remote server program image
RTDRIVER.EXE	Inbound CTERM
SET_HOST.EXE	Outbound CTERM

Table B–5: VAXELN Utility Shareable Images

File	Description
BDA.EXE	KDB port driver image
BVPSSP.EXE	BVP port driver image
DSSIP.EXE	DSSI port driver image
DUMPDRIVR.EXE	System dump facility driver

Table B–5 (Cont.): VAXELN Utility Shareable Images

File	Description
FILE.EXE	Disk file service image
FPEMUL.EXE	MicroVAX floating-point instruction emulation image
MSCPCLASS.EXE	MSCP class image
NETMANSHR.EXE	Shareable image for network management
NETWORK.EXE	Network service image
TAPE.EXE	Tape file service image
TMSCPCLASS.EXE	TMSCP class image
UQSSP.EXE	UNIBUS and Q-bus port driver image
VAXEMUL.EXE	MicroVAX string instruction emulation image

Table B–6: VAXELN General Runtime Library

File	Description
ADQ32_UTILITY.EXE	ADQ32 shareable routines
CMSG.MSG	Source of the C$_ prefixed status codes
DAP.EXE	Shareable image for the DAP routines
DDA.EXE	Shareable image for the DDA routines
DDCMP.EXE	Shareable image for the DDCMP protocol routines
DDCMP_V2.EXE	Shareable image for enhanced DDCMP protocol routines
DFLOATRTL.OBS	Object modules to convert the VAXELN runtime library routines to D_FLOAT
DISK.EXE	Shareable image for the disk utilities
DMATH.EXE	Shareable image for the math routines using no G_FLOAT instructions
ELNACCESS.EXE	Shareable image for ELNACCESS
ELNMSG.MSG	Source of the ELN$_ prefixed status codes
FILE.OLB	Disk file service object library
FILEUTIL.EXE	Shareable image for the file utilities
FORMSG.MSG	Source of the FOR$_ prefixed status codes
GETMSGSHR.EXE	Shareable image for VAXELN system shareable status text

Table B–6 (Cont.): VAXELN General Runtime Library

File	Description
GFLOATRTL.OBS	Object modules to convert the VAXELN runtime library routines to G_FLOAT
GMATH.EXE	Shareable image for the math routines using no D_FLOAT instructions
IARP.EXE	Internet address resolution
INTERNET.EXE	IP/UDP/TCP shareable image—used by datalink drivers
INTERNETNULL.EXE	NULL IP/UDP/TCP shareable image—used by datalink drivers
KERNELMSG.MSG	Source of the KER$_ prefixed status codes
LIBCOMMON.EXE	Shareable image of condition-handling routines and conversion routines
LIBMSC.EXE	Shareable image of date/time routines and access to machine
LIBMSG.MSG	Source of the LIB$_ prefixed status codes
LIBVM.EXE	Shareable image of the memory allocation routines
MTHMSG.MSG	Source of the MTH$_ prefixed status codes
OTSMSG.MSG	Source of the OTS$_ prefixed status codes
PASCALMSC.EXE	Shareable image for the miscellaneous Pascal routines
PASCALMSG.MSG	Source of the PAS$_ prefixed status codes
PRGLOADER.EXE	Shareable image for the loader routines
RTL.OLB	Required object library
RTLOBJECT.OLB	Complete object library
RTLSHARE.OLB	Shareable image library
SCSI_UTILITY.EXE	SCSI shareable message class utility routines
SSMSG.MSG	Source of the SS$_ prefixed status codes
STRMSG.MSG	Source of the STR$_ prefixed status codes
SYSTEMLIB.MLB	VAX–11 MACRO definitions of the kernel services
TERMCLASS.EXE	Shareable image for enhanced terminal driver routines
TERMINAL.EXE	Shareable image for the terminal driver routines

Table B–7: VAXELN Pascal Runtime Library

File	Description
DPASCALIO.EXE	Shareable image for the Pascal I/O routines using no G_FLOAT instructions
GPASCALIO.EXE	Shareable image for the Pascal I/O routines using no D_FLOAT instructions
SHARED_STATUS_TEXT.EXE	Shareable image for shared status text

Table B–8: Pascal Source for VAXELN Runtime Library

File	Description
DAP.PAS	Pascal source for the DAP definitions
DAPSTATUS.PAS	Pascal source for the DAP status definitions
DATALINK.PAS	Pascal source for the interface to the network datalink drivers
DDAUTIL.PAS	Pascal source for the DDA routines
DDCMP.PAS	Pascal source for the DDCMP routines
DDCMP_V2.PAS	Pascal source for enhanced DDCMP routines
DISKUTIL.PAS	Pascal source for the disk utilities
FILEUTIL.PAS	Pascal source for the file utilities
PASIODEF.PAS	Pascal source for the Pascal I/O routine definitions
TAPE.PAS	Pascal source for the tape definitions
TAPEUTIL.PAS	Pascal source for the tape utilities
TERMCLASS.PAS	Pascal source for enhanced terminal driver routines
TERMINAL.PAS	Pascal source for the terminal driver routines

Table B–9: VAXELN C Runtime Library

File	Description
CMSC.EXE	Shareable image for the miscellaneous C routines
CRTLOBJECT.OLB	C object library
CRTLSHARE.OLB	C shareable image library
DCIO.EXE	Shareable image for the C I/O routines using D_FLOAT

Table B–9 (Cont.): VAXELN C Runtime Library

File	Description
DCMATH.EXE	Shareable image for the C math routines using D_FLOAT
DFLOATCRTL.OBS	C object modules to convert the VAXELN C runtime library routines to D_FLOAT
ELNCMSG.EXE	Message text image for the VAXELN C runtime library routines
GCIO.EXE	Shareable image for the C I/O routines using G_FLOAT
GCMATH.EXE	Shareable image for the C math routines using G_FLOAT
GFLOATCRTL.OBS	C object modules to convert the VAXELN C runtime library routines to G_FLOAT
VAXELNC.TLB	C macro library for VAXELN C programming

Table B–10: VAXELN Drivers

File	Description
BDDRIVER.EXE	KDB50 controller driver image
BUDRIVER.EXE	MSCP class driver image for BVP controller
CONSOLE.EXE	Console driver image
CONSOLE9RR.EXE	Console driver image for KA64A
CSDRIVER.EXE	RX50 driver image on VAX 8800 console
CXDRIVER.EXE	CXA16/CXB16 driver image
DDDRIVER.EXE	TU58 driver image
DHVDRIVER.EXE	DHV11 driver image
DIDRIVER.EXE	DSSI driver image
DQDRIVER.EXE	VAX–11/730 IDC driver image
DUDRIVER.EXE	MSCP (KDA50, UDA50, RQDX) driver image
DVSDRIVER.EXE	ST506 disk driver for MicroVAX 2000
DZSDRIVER.EXE	Serial line driver for MicroVAX 2000
DZVDRIVER.EXE	DZV11 driver image
ESDRIVER.EXE	Ethernet driver for MicroVAX 2000
ETDRIVER.EXE	DEBNI driver
EZDRIVER.EXE	SGEC driver

Table B–10 (Cont.): VAXELN Drivers

File	Description
GPDRIVER.EXE	IEQ11–A driver image
LCDRIVER.EXE	DMF–32 printer driver image
LIDRIVER.EXE	DMB32 driver image
LPVDRIVER.EXE	LPV11 driver image
MUDRIVER.EXE	TMSCP driver image
SCDRIVER.EXE	SCSI driver
SCNDRIVER.EXE	Driver for Signetics DUART chip on the rtVAX 300
VMDRIVER.EXE	Virtual disk driver image
XBDRIVER.EXE	VAXBI/Ethernet controller driver image
XEDRIVER.EXE	DEUNA driver image
XQDRIVER.EXE	DEQNA driver image
YCDRIVER.EXE	DMF–32 terminal driver image

Table B–11: Source for VAXELN Drivers

File	Description
AAV_DEC.PAS	AAV11 driver source declarations
AAV_DRIVER.PAS	AAV11 driver source code
ADQ32_BODY.C	ADQ32 source file
ADQ32.FOR	ADQ32 FORTRAN include file
ADQ32.PAS	ADQ32 Pascal include file
ADV11DBODY.PAS	ADV11D driver source code
ADV11DUTIL.PAS	ADV11D driver source declarations
ANALOG.PAS	Exerciser program for the AXV11C and KWV11C device drivers
AXVKWVBODY.PAS	AXV11C and KWV11C driver source code
AXVUTIL.PAS	AXV11C driver source declarations
BDDRIVER.PAS	KDB50 controller driver source
BUDRIVER.PAS	The calls to start the MSCP class driver on a BVP controller
CONSOLE.PAS	Console driver source

Table B–11 (Cont.): Source for VAXELN Drivers

File	Description
CONSOLE9RR.PAS	Console driver source for KA64A
COPY_NI.MAR	Ethernet driver MACRO routines
CSDRIVER.PAS	Driver for the RX50 device on the VAX 85*nn*/8700/8800 console source
CXDRIVER.PAS	CXA16/CXB16 driver source
DDDRIVER.PAS	TU58 driver source
DHVDRIVER.PAS	DHV11 driver source
DIDRIVER.PAS	DSSI driver source
DLVBODY.PAS	DLVJ1 driver source code
DLVUTIL.PAS	DLVJ1 driver source declarations
DMB_UTIL.PAS	DMBDRIVER and LIDRIVER source declarations
DQDRIVER.PAS	VAX–11/730 IDC driver source
DR11C.PAS	DR11C driver source
DRBBODY.PAS	DRB32 driver source code
DRBUTIL.PAS	DRB32 driver source declarations
DRQ3BBODY.PAS	DRQ3B driver source code
DRQ3BUTIL.PAS	DRQ3B driver source declarations
DRV11WABODY.PAS	DRV11–W driver source code
DRV11WAUTIL.PAS	DRV11–W driver source declarations
DRVBODY.PAS	DRV11–J driver source code
DRVUTIL.PAS	DRV11–J driver source declarations
DUDRIVER.PAS	MSCP (KDA50, UDA50, RQDX) driver source
DVSDRIVER.C	DVS driver source
DVSSTRING.MAR	DVS source declarations
DZVDRIVER.PAS	DZV11 driver source
ELNMSG.PAS	Message definitions for VAXELN error codes
ESDRIVER.PAS	Ethernet driver source
ESPROCESS.PAS	VS410, KA640, and KA42 NI controller
ETDRIVER.PAS	Source for DEBNI driver

Table B–11 (Cont.): Source for VAXELN Drivers

File	Description
ETPROCESS.PAS	DEBNI (BI/Ethernet) controller process and initialization routine
EXITUTIL.PAS	Pascal source for the exit handler utilities
EZDRIVER.PAS	Source for second generation Ethernet driver
EZPROCESS.PAS	VAX second generation Ethernet controller process and initialization routine (SGEC)
GPDRIVER.PAS	IEQ11–A driver source
GPIB_SUB.PAS	IEQ11–A driver interface source code
GPIB_UTIL.PAS	IEQ11–A driver source declarations
KWVUTIL.PAS	KWV11C driver source declarations
LCDRIVER.PAS	DMF–32 printer driver source
LIDRIVER.PAS	DMB32 driver source
LPVDRIVER.PAS	LPV11 driver source
MUDRIVER.PAS	TMSCP driver source
SCNDRIVER.PAS	Driver for Signetics DUART chip 300
SCDRIVER.C	SCSI startup
SCSISNIF.C	SCSI bus sniffer
SCSIDISK.C	SCSI disk class driver
SCSI5380.C	SCSI port driver
SCSIGNRC.C	SCSI generic class driver
SCSIUTIL.PAS	SCSI Epascal definition file for message class
SCSIVECTOR.MAR	SCSI shareable message class vectors
$SCSI_BODY.C	SCSI message class utility routines (body)
VMDRIVER.PAS	Virtual disk driver source
XBDRIVER.PAS	VAXBI/Ethernet controller driver source

Table B–11 (Cont.): Source for VAXELN Drivers

File	Description
XEDRIVER.PAS	DEUNA driver source
XQDRIVER.PAS	DEQNA driver source
XBPROCESS.PAS	VAX BI AIA NI (BI/Ethernet) process and initialization routine
XEPROCESS.PAS	VAX DEUNA/DELUA (UNIBUS/Ethernet process and initialization routine)
XQPROCESS.PAS	VAX QNA (Q-bus/Ethernet) process and initialization routine
YCDRIVER.PAS	DMF–32 terminal driver source

Table B–12: Source for Sample Applications

File	Description
APPLICATION1.PAS	Pascal source for Application 1
APPLICATION2.C	C source for Application 2
APPLICATION3.C	C source for Application 3
APPLICATION4.PAS	Pascal source for Application 4
APPLICATION5A.C	C source for Application 5
APPLICATION5B.PAS	Pascal source for Application 5
APPLICATION5C.FOR	FORTRAN source for Application 5
APPLICATION6A.PAS	Pascal source for Application 6
APPLICATION6B.PAS	Pascal source for Application 6
APPLICATION7.PAS	Pascal source for Application 7
APPLICATION8.PAS	Pascal source for Application 8
APPLICATION9A.C	C source for Application 9
APPLICATION9B.C	C source for Application 9
APPLICATION9C.PAS	Pascal source for Application 9
APPLICATION9D.PAS	Pascal source for Application 9
APPLICATION10.PAS	Pascal source for Application 10
APPLICATION11.PAS	Pascal source for Application 11
APPLICATION12.PAS	Pascal source for Application 12

Table B–12 (Cont.): Source for Sample Applications

File	Description
APPLICATION15A.PAS	Pascal source for Application 15
APPLICATION15B.PAS	Pascal source for Application 15
APPLICATION15C.PAS	Pascal source for Application 15
SAMPLE_CCTIME.C	C support module for SAMPLE_SENDER.FOR
SAMPLE_DEBUG.LOG	SET HOST/LOG record of sample debugging session in *Introduction to VAXELN*
SAMPLE_GLOBALS.PAS	Pascal source module for sample application in *Introduction to VAXELN*
SAMPLE_RECEIVER.PAS	Pascal source for sample application in *Introduction to VAXELN*
SAMPLE_SENDER.C	C source for sample application in *Introduction to VAXELN*
SAMPLE_SENDER.FOR	FORTRAN source for sample application in *Introduction to VAXELN*
SAMPLE_SENDER.PAS	Pascal source for sample application in *Introduction to VAXELN*
SAMPLE_UTILITIES.PAS	Pascal source module for sample application in *Introduction to VAXELN*

Table B–13: VAXELN FORTRAN Runtime Library

File	Description
FORTRAN_DEFS.FOR	VAXELN definitions for FORTRAN programming
FRTLOBJECT.OLB	The complete object library
MESSAGES.FOR	VAXELN message code definitions for FORTRAN programming
NET_DEFINITIONS.FOR	FORTRAN RTL module
NETMAN_UTILITY.FOR	FORTRAN source for network management routines

Table B–14: DECwindows Files

File	Description
CONVERT_UID_FORMAT.COM	Converter from VMS UID files to ELN-compatible UID files
ELNDECW_DWTERRDB.DAT	XUI error data base
ELNDECW_DWTLIB.OLB	XUI object library

Table B–14 (Cont.): DECwindows Files

File	Description
ELNDECW_DWTLIBSHR.OLB	XUI shareable image library
ELNDECW_WINMGR.DAT	Window manager resource data base
ELNDECW_WINMGR.UID	Window manager UID file
ELNDECW_XLIB.OLB	XLIB object library
ELNDECW_XLIBERRDB.DAT	XLIB error data base
ELNDECW_XLIBSHR.OLB	XLIB shareable image library

Table B–15: DECwindows Images

File	Description
ELNDECW_CONSOLE.EXE	Console
ELNDECW_DWTLIBSHR.EXE	XUI shareable image
ELNDECW_DWTMSG.EXE	XUI toolkit message
ELNDECW_SERVER_GAA.EXE	Server for VAXstation II/GPX, 3200, and 3500
ELNDECW_SERVER_GAB.EXE	Server for VAXstation 2000 and 3100
ELNDECW_TE.EXE	Terminal emulator
ELNDECW_WINMGR.EXE	Window manager
ELNDECW_XLIBMSG.EXE	XLIB messages
ELNDECW_XLIBSHR.EXE	XLIB shareable image

Table B–16: MIT C XLIB and Toolkit DECwindows Include Files

COMPOBJ.H
COMPOBJP.H
COMPOSITE.H
COMPOSITEP.H
CONSTRAINP.H
CONSTRAINT.H
CONVERT.H

Table B–16 (Cont.): MIT C XLIB and Toolkit DECwindows Include Files

CORE.H
COREP.H
CURSORFONT.H
DECW$CURSOR.H
DECWDWTAPPLPROG.H
DECWDWTWIDGETPROG.H
DECWMHINTS.H
DWTAPPL.H
DWTWIDGET.H
EVENT.H
INTRINSIC.H
INTRINSICP.H
KEYSYM.H
KEYSYMDEF.H
OBJECT.H
OBJECTP.H
RECTOBJ.H
RECTOBJP.H
SELECTION.H
SHELL.H
SHELLP.H
STRINGDEFS.H
TRANSLATE.H
VENDOR.H
VENDORP.H
WINDOWOBJ.H
WINDOWOBJP.H
X.H
XATOM.H
XLIB.H

Table B–16 (Cont.): MIT C XLIB and Toolkit DECwindows Include Files

XMD.H
XOS.H
XPROTO.H
XPROTOSTR.H
XRESOURCE.H
XUTIL.H

Table B–17: Language-Specific DECwindows Include Files

File	Description
CDA$DEF.H	
CDA$MSG.H	
CSTEXTP.H	
DDIF$DEF.H	
DECW$DWTENTRY.FOR	XUI toolkit for FORTRAN
DECW$DWTENTRY.H	XUI toolkit for VAX C
DECW$DWTENTRY.PAS	XUI toolkit for Pascal
DECW$DWTSTRUCT.FOR	XUI toolkit for FORTRAN
DECW$DWTSTRUCT.H	XUI toolkit for VAX C
DECW$DWTSTRUCT.PAS	XUI toolkit for Pascal
DECW$DWTWIDGETSTRUCT.FOR	XUI toolkit for FORTRAN
DECW$DWTWIDGETSTRUCT.H	XUI toolkit for VAX C
DECW$DWTWIDGETSTRUCT.PAS	XUI toolkit for Pascal
DECW$DWTDEF.FOR	XUI toolkit for FORTRAN
DECW$DWTDEF.H	XUI toolkit for VAX C
DECW$DWTDEF.PAS	XUI toolkit for Pascal
DECW$DWTMSG.FOR	XUI toolkit message for FORTRAN
DECW$DWTMSG.H	XUI toolkit message for VAX C
DECW$DWTMSG.PAS	XUI toolkit message for Pascal
DECW$DWTWIDGETDEF.FOR	XUI toolkit widget for FORTRAN

Table B–17 (Cont.): Language-Specific DECwindows Include Files

File	Description
DECW$DWTWIDGETDEF.H	XUI toolkit widget for VAX C
DECW$DWTWIDGETDEF.PAS	XUI toolkit widget for Pascal
DECW$XLIBDEF.FOR	XLIB for FORTRAN
DECW$XLIBDEF.H	XLIB for VAX C
DECW$XLIBDEF.PAS	XLIB for Pascal
DECW$XLIBMSG.FOR	XLIB message for FORTRAN
DECW$XLIBMSG.H	XLIB message for VAX C
DECW$XLIBMSG.PAS	XLIB message for Pascal
DECW$DWT_.ADA	XUI toolkit for Ada
DECW$X_.ADA	XLIB for Ada
DRMDECLS.H	
DRMPUBLIC.H	

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