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Overview of OpenVMS  
Documentation

OpenVMS  
**OpenVMS**



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# Overview of OpenVMS Documentation

Order Number: AA-QSBEB-TE

**November 1996**

This manual contains a brief description of the OpenVMS documentation set and includes a short summary of each manual for OpenVMS Alpha Version 7.1 and OpenVMS VAX Version 7.1.

**Revision/Update Information:** This manual supersedes the *Overview of OpenVMS Documentation*, Version 7.0.

**Software Version:** OpenVMS Alpha Version 7.1  
OpenVMS VAX Version 7.1

**Digital Equipment Corporation  
Maynard, Massachusetts**

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**November 1996**

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The OpenVMS documentation set is available on CD-ROM.

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# Preface

## Reader's Comments

Digital welcomes your comments on this manual.

Print or edit the online form SYS\$HELP:OPENVMSDOC\_COMMENTS.TXT and send us your comments by:

Internet	<b>openvmsdoc@zko.mts.dec.com</b>
Fax	603 881-0120, Attention: OSSG Documentation, ZKO3-4/U08
Mail	OSSG Documentation Group, ZKO3-4/U08 110 Spit Brook Rd. Nashua, NH 03062-2698

## How To Order Additional Documentation

Use the following table to order additional documentation or information. If you need help deciding which documentation best meets your needs, call 800-DIGITAL (800-344-4825).

### Telephone and Direct Mail Orders

Location	Call	Fax	Write
U.S.A.	DECdirect 800-DIGITAL 800-344-4825	Fax: 800-234-2298	Digital Equipment Corporation P.O. Box CS2008 Nashua, NH 03061
Puerto Rico	809-781-0505	Fax: 809-749-8300	Digital Equipment Caribbean, Inc. 3 Digital Plaza, 1st Street, Suite 200 P.O. Box 11038 Metro Office Park San Juan, Puerto Rico 00910-2138
Canada	800-267-6215	Fax: 613-592-1946	Digital Equipment of Canada, Ltd. Box 13000 100 Herzberg Road Kanata, Ontario, Canada K2K 2A6 Attn: DECdirect Sales
International	—	—	Local Digital subsidiary or approved distributor
Internal Orders	DTN: 264-4446 603-884-4446	Fax: 603-884-3960	U.S. Software Supply Business Digital Equipment Corporation 10 Cotton Road Nashua, NH 03063-1260

## Conventions

The name of the OpenVMS AXP operating system has been changed to the OpenVMS Alpha operating system. Any references to OpenVMS AXP or AXP are synonymous with OpenVMS Alpha or Alpha.

VMScluster systems are now referred to as OpenVMS Cluster systems. Unless otherwise specified, references to OpenVMS Clusters or clusters in this document are synonymous with VMSclusters.

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## Overview

This manual describes the documentation for OpenVMS Alpha Version 7.1 and OpenVMS VAX Version 7.1. It helps you choose the documentation that best suits your needs, describes the components of the complete OpenVMS documentation set, details the contents of the Documentation CD-ROM, and provides ordering information.

### 1.1 Documentation Delivery

OpenVMS documentation is available in printed form and on the Documentation CD-ROM. In addition, the OpenVMS operating system provides Online Help for OpenVMS routines, utilities, and commands.

#### 1.1.1 Printed Documentation

The OpenVMS printed documentation offering contains two documentation sets which are listed in Table 1-1. The sets can be ordered separately.

**Table 1-1 OpenVMS Documentation Sets**

Set	Order Number
OpenVMS Full Documentation Set	QA-001AA-GZ.7.1
OpenVMS Base Documentation Set (subset of Full Documentation Set)	QA-09SAA-GZ.7.1

The OpenVMS Full Documentation Set contains all current OpenVMS documentation in one offering. It is for users who need extensive explanatory information on all major OpenVMS resources, complete reference information on system routines and utilities, detailed examples, guidelines for OpenVMS Clusters, programming concepts, a master index, and information on the Help Message utility. This set meets the needs of system managers and of system and application programmers. It includes the Base Documentation Set.

The OpenVMS Base Set is a subset of the Full Documentation Set. It includes the most commonly used OpenVMS documents, addressing the needs of general users and system managers of small standalone systems. Documents such as the Release Notes, New Features, and the DCL Dictionary are included in the Base Set.

Refer to Table 2-1 for a complete listing of the documents in the Base and Full Documentation Sets. Each book in these sets can be ordered separately.

The installation guides, the *OpenVMS License Management Utility Manual*, and the *Guide to OpenVMS Version 7.1 CD-ROMs* are included in the media kit with your software. These manuals are not part of the Full Documentation Set and if you do not order media, they must be ordered separately. Refer to Table 2-2 for a complete listing of the installation guides.

## Overview

### 1.1 Documentation Delivery

#### 1.1.2 Documentation CD-ROM

The OpenVMS Documentation CD-ROM consists of manuals in the following formats:

- HTML format

For Version 7.1, several of the OpenVMS manuals are available on the OpenVMS Documentation CD-ROM in a format that is readable with any Level 2 Internet browser. OpenVMS recommends using Netscape Navigator Version 2.01 to read the HTML documentation. Netscape Navigator is available on the OpenVMS Internet Product Suite CD-ROM.

- Bookreader format

OpenVMS customers receive the entire Version 7.1 documentation set in Bookreader format. Use the DECwindows Bookreader application to view the Bookreader format.

- Printable files in ASCII text and PostScript formats

Several OpenVMS and associated layered product manuals are offered in ASCII text and PostScript format. Refer to Section 2.2 for further information on the OpenVMS Documentation CD-ROM.

### 1.2 Changes in Version 7.1 Documentation

This section describes notable changes to the OpenVMS documentation set for OpenVMS Version 7.1.

- The entire OpenVMS Documentation Set has been reprinted for this release. Selected manuals are available in HTML format on the Documentation CD-ROM.
- Several documents have been reorganized. A few new manuals are now available and several manuals from previous releases have been archived.
- A DECnet-Plus Starter Kit is included as part of the OpenVMS Version 7.1 package.

#### 1.2.1 Version 7.1 Documentation

The entire OpenVMS Documentation Set has been reprinted for Version 7.1. In previous releases, many documents were updated in Bookreader format only. For this release all OpenVMS documents are updated in Bookreader and printed formats. In addition, several documents are in HTML format and viewable through an Internet browser.

For the past few releases, outdated information has been archived. For Version 7.1 we have reorganized some information, enhanced Online Help, and continued to archive obsolete information. Refer to Table 3-1 for a complete listing of archived manuals.

#### 1.2.2 Performance Management Documentation

The *Guide to OpenVMS Performance Management* and the *Guide to OpenVMS AXP Performance Management* are now consolidated into one manual titled *OpenVMS Performance Management*.

## 1.2 Changes in Version 7.1 Documentation

## 1.2.3 Migration Documentation

Migration information is located in *Migrating an Application from OpenVMS VAX to OpenVMS Alpha*. This document replaces previous migration documents. The following documents have been archived. Table 3–1 lists the order numbers for these archived documents.

- *A Comparison of System Management on OpenVMS AXP and OpenVMS VAX*
- *Migrating an Environment from OpenVMS VAX to OpenVMS Alpha*
- *Migrating to an OpenVMS AXP System: Planning for Migration*
- *Migrating to an OpenVMS AXP System: Recompiling and Relinking Applications*
- *OpenVMS Compatibility Between VAX and Alpha*

## 1.2.4 Device Support Documentation

OpenVMS device support documentation has been reorganized for OpenVMS Version 7.1. Two manuals about writing OpenVMS Alpha device drivers are now available, and several device support manuals from previous releases have been archived.

The OpenVMS Alpha device driver books available as of OpenVMS Version 7.1 are as follows:

- *Writing OpenVMS Alpha Device Drivers in C* describes how to write device drivers in the C programming language for devices connected to Alpha processors.
- *Creating an OpenVMS Alpha Device Driver from an OpenVMS VAX Device Driver* explains how to change OpenVMS VAX device driver code to be compiled, linked, loaded, and run on OpenVMS Alpha systems. This book also describes OpenVMS Alpha driver entry point routines, system routines, and macros for the MACRO-32 compiler.

Table 1–2 summarizes the Alpha and VAX device support documentation changes for OpenVMS Version 7.1. It lists the device support books that have been archived, and indicates whether the information they contain is available in other books.

**Table 1–2 OpenVMS Version 7.1 Device Support Books**

Title	New Location in Version 7.1
<i>Creating an OpenVMS AXP Step 2 Device Driver from a Step 1 Device Driver</i>	Same
<i>Creating an OpenVMS AXP Step 2 Device Driver from an OpenVMS VAX Device Driver</i>	<i>Creating an OpenVMS Alpha Device Driver from an OpenVMS VAX Device Driver</i> (This book now includes reference information.)
<i>OpenVMS AXP Device Support: Developer's Guide</i>	<i>Writing OpenVMS Alpha Device Drivers in C</i>

(continued on next page)

## Overview

### 1.2 Changes in Version 7.1 Documentation

**Table 1–2 (Cont.) OpenVMS Version 7.1 Device Support Books**

Title	New Location in Version 7.1
<i>OpenVMS AXP Device Support: Reference</i>	C reference information is available in <i>Writing OpenVMS Alpha Device Drivers in C</i> . MACRO-32 reference information is included in the <i>Creating an OpenVMS Alpha Device Driver from an OpenVMS VAX Device Driver</i> book.
<i>OpenVMS VAX Device Support Manual</i>	Same
<i>OpenVMS VAX Device Support Reference Manual</i>	Same

#### 1.2.5 DECnet-Plus for OpenVMS Version 7.1 Documentation

DECnet-Plus, formerly named DECnet/OSI, has replaced DECnet for OpenVMS Phase IV in the main operating installation menu. To assist customers choosing to move from DECnet Phase IV to DECnet-Plus, OpenVMS is delivering a one-time complimentary offering that includes DECnet-Plus binaries and a DECnet-Plus Starter Kit.

The DECnet-Plus Starter Kit for OpenVMS Version 7.1 customers includes the following documents:

- *DECnet-Plus for OpenVMS Applications Installation and Advanced Configuration Manual*
- *DECnet-Plus for OpenVMS Installation and Basic Configuration*
- *DECnet-Plus for OpenVMS Network Management*
- *DECnet-Plus Planning Guide*
- *DECnet-Plus Problem Solving*
- *DECnet-Plus Network Control Language Reference*
- *DECnet-Plus for OpenVMS Introduction and User's Guide*
- *DECnet-Plus for OpenVMS Release Notes*
- *DECnet-Plus for OpenVMS Installation Quick Reference Card*
- *DECnet-Plus for OpenVMS Network Management Quick Reference Guide*

DECnet for OpenVMS Phase IV binaries will continue to ship with the operating system. DECnet Phase IV manuals are included on the OpenVMS Documentation CD-ROM in DECW\$BOOK or PostScript format, or you can order the printed manuals separately through DECdirect (800-344-4825). Table 1–3 lists the DECnet Phase IV manuals.

**Table 1–3 DECnet Phase IV Manuals**

Manual	Order Number
<i>DECnet for OpenVMS Guide to Networking</i>	AA-PV5ZA-TK
<i>DECnet for OpenVMS Networking Manual</i>	AA-PV60A-TK
<i>DECnet for OpenVMS Network Management Utilities</i>	AA-PV61A-TK

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## Documentation Delivery

This chapter describes the following components of OpenVMS information and provides ordering information:

- Printed documentation
- Documentation CD-ROM
- System Integrated Products
- Online Help

### 2.1 Printed Documentation

OpenVMS manuals are available in documentation sets, with your media, or can be purchased separately.

#### 2.1.1 Full and Base Documentation Sets

The following two offerings make up the OpenVMS Documentation Sets:

Set	Order Number
OpenVMS Full Documentation Set	QA-001AA-GZ.7.1
OpenVMS Base Documentation Set (subset of Full Documentation Set)	QA-09SAA-GZ.7.1

Table 2-1 lists the manuals included in the OpenVMS Full and Base Documentation Sets.

**Table 2-1 OpenVMS Full Documentation Set**

Manual	Order Number
<b>OpenVMS Base Set</b>	
<i>Migrating an Application from OpenVMS VAX to OpenVMS Alpha</i>	AA-QSBKB-TE
<i>OpenVMS DCL Dictionary: A-M</i>	AA-PV5KE-TK
<i>OpenVMS DCL Dictionary: N-Z</i>	AA-PV5LE-TK
<i>OpenVMS Guide to System Security</i>	AA-Q2HLC-TE
<i>OpenVMS Management Station Overview and Release Notes</i>	AA-QJGCB-TE
<i>OpenVMS Master Index</i>	AA-QSBSB-TE
<i>OpenVMS System Management Utilities Reference Manual: A-L</i>	AA-PV5PD-TK
<i>OpenVMS System Management Utilities Reference Manual: M-Z</i>	AA-PV5QD-TK

(continued on next page)

## Documentation Delivery

### 2.1 Printed Documentation

**Table 2–1 (Cont.) OpenVMS Full Documentation Set**

<b>Manual</b>	<b>Order Number</b>
<b>OpenVMS Base Set</b>	
<i>OpenVMS System Manager's Manual: Essentials</i>	AA–PV5MD–TK
<i>OpenVMS System Manager's Manual: Tuning, Monitoring, and Complex Systems</i>	AA–PV5ND–TK
<i>OpenVMS User's Manual</i>	AA–PV5JC–TK
<i>OpenVMS Version 7.1 New Features Manual</i>	AA–QSBFB–TE
<i>OpenVMS Version 7.1 Release Notes</i>	AA–QSBTB–TE
<i>Overview of OpenVMS Documentation</i>	AA–QSBEB–TE
<i>TCP/IP Networking on OpenVMS Systems</i>	AA–QJGDB–TE
<b>Continuation of Full Documentation Set</b>	
<i>Creating an OpenVMS Alpha Device Driver from an OpenVMS VAX Device Driver</i>	AA–R0Y8A–TE
<i>DECams User's Guide</i>	AA–Q3JSC–TE
<i>DEC C Run-Time Library Utilities Reference Manual</i>	AA–R238A–TE
<i>DEC Text Processing Utility Reference Manual</i>	AA–PWCCB–TE
<i>Digital Portable Mathematics Library</i>	AA–PV6VC–TE
<i>Extensible Versatile Editor Reference Manual</i>	AA–PWCDB–TE
<i>Guide to Creating OpenVMS Modular Procedures</i>	AA–PV6AB–TK
<i>Guide to DECthreads</i>	AA–QSBPB–TE
<i>Guide to OpenVMS File Applications</i>	AA–PV6PB–TK
<i>Guide to the DEC Text Processing Utility</i>	AA–PWCBB–TE
<i>Guidelines for OpenVMS Cluster Configurations</i>	AA–Q28LB–TK
<i>OpenVMS Alpha Guide to 64-Bit Addressing and VLM Features</i>	AA–QSBCB–TE
<i>OpenVMS Alpha Guide to Upgrading Privileged-Code Applications</i>	AA–QSBGB–TE
<i>OpenVMS Alpha System Dump Analyzer Utility Manual</i>	AA–PV6UC–TE
<i>OpenVMS Calling Standard</i>	AA–QSB BB–TE
<i>OpenVMS Cluster Systems</i>	AA–PV5WC–TK
<i>OpenVMS Command Definition, Librarian, and Message Utilities Manual</i>	AA–QSBDB–TE
<i>OpenVMS Debugger Manual</i>	AA–QSBJB–TE
<i>OpenVMS Delta/XDelta Debugger Manual</i>	AA–PWCAB–TE
<i>OpenVMS I/O User's Reference Manual</i>	AA–PV6SB–TK
<i>OpenVMS Linker Utility Manual</i>	AA–PV6CB–TK
<i>OpenVMS Performance Management</i>	AA–R237A–TE
<i>OpenVMS Programming Concepts Manual</i>	AA–PV67C–TK
<i>OpenVMS Programming Interfaces: Calling a System Routine</i>	AA–PV68B–TK
<i>OpenVMS Record Management Services Reference Manual</i>	AA–PV6RB–TK
<i>OpenVMS Record Management Utilities Reference Manual</i>	AA–PV6QB–TK

(continued on next page)

**Table 2–1 (Cont.) OpenVMS Full Documentation Set**

Manual	Order Number
<b>Continuation of Full Documentation Set</b>	
<i>OpenVMS RTL General Purpose (OTS\$) Manual</i>	AA-PV6HB-TK
<i>OpenVMS RTL Library (LIB\$) Manual</i>	AA-QSBHB-TE
<i>OpenVMS RTL Screen Management (SMG\$) Manual</i>	AA-PV6LB-TK
<i>OpenVMS RTL String Manipulation (STR\$) Manual</i>	AA-PV6MB-TK
<i>OpenVMS System Messages: Companion Guide for Help Message Users</i>	AA-PV5TB-TK
<i>OpenVMS System Services Reference Manual: A-GETMSG</i>	AA-QSBMB-TE
<i>OpenVMS System Services Reference Manual: GETQUI-Z</i>	AA-QSBNB-TE
<i>OpenVMS Utility Routines Manual</i>	AA-PV6EC-TK
<i>OpenVMS VAX RTL Mathematics (MTH\$) Manual</i>	AA-PVXJB-TE
<i>OpenVMS VAX System Dump Analyzer Utility Manual</i>	AA-PV6TB-TE
<i>POLYCENTER Software Installation Utility Developer's Guide</i>	AA-Q28MB-TK
<i>Porting VAX MACRO Code to OpenVMS Alpha</i>	AA-PV64B-TE
<i>VAX MACRO and Instruction Set Reference Manual</i>	AA-PS6GB-TE
<i>Volume Shadowing for OpenVMS</i>	AA-PVXMD-TE
<i>Writing OpenVMS Alpha Device Drivers in C</i>	EY-T133E-DP

### 2.1.2 Upgrade and Installation Documentation

Installation manuals and the *OpenVMS License Management Utility Manual* are included with your media kit.

OpenVMS Alpha customers receive the *OpenVMS Alpha Version 7.1 Upgrade and Installation Manual*. This manual contains step-by-step upgrade and installation information as well as device-naming and booting information.

OpenVMS VAX customers receive the *OpenVMS VAX Version 7.1 Upgrade and Installation Manual*. This manual is your primary source for step-by-step upgrade and installation procedures using the VMSINSTAL utility. In addition to the *OpenVMS VAX Version 7.1 Upgrade and Installation Manual*, you may receive one or more upgrade and installation supplements with your media kit. These manuals contain information specific to your VAX computer. Use your computer-specific supplement in conjunction with the *OpenVMS VAX Version 7.1 Upgrade and Installation Manual* when you install or upgrade your system software.

Table 2–2 lists the titles and the order numbers for the upgrade and installation manuals and supplements.

## Documentation Delivery

### 2.1 Printed Documentation

**Table 2–2 Order Numbers for Upgrade and Installation Manuals**

Manual	Order Number
<b>Upgrade and Installation Manuals</b>	
<i>OpenVMS Alpha Version 7.1 Upgrade and Installation Manual</i>	AA-QSE8B-TE
<i>OpenVMS VAX Version 7.1 Upgrade and Installation Manual</i>	AA-QSBQB-TE
<i>OpenVMS License Management Utility Manual</i>	AA-PVXUD-TK
<i>Guide to OpenVMS Version 7.1 CD-ROMs</i>	AA-QSBRB-TE
<b>Optionally Orderable VAX Upgrade and Installation Supplements</b>	
<i>OpenVMS VAX Upgrade and Installation Supplement: VAX 7000 Series and VAX 10000 Series</i>	AA-PVXTA-TE
<i>OpenVMS VAX Upgrade and Installation Supplement: VAX 9000 Series</i>	AA-PS6TA-TE
<i>OpenVMS VAX Upgrade and Installation Supplement: VAXstation 3100, 4000 and MicroVAX 3100 Series</i>	AA-PS6SA-TE
<i>OpenVMS VAX Upgrade and Installation Supplement: VAX 6000 Series</i>	AA-PS6NA-TE
<i>VMS Installation and Operations: VAX-11/730</i>	AA-LB31B-TE
<i>OpenVMS VAX Installation and Operations: VAXstation II, II/GPX and MicroVAX II</i>	AA-PS6ZA-TE
<i>OpenVMS VAX Upgrade and Installation Supplement: VAXstation 3520, 3540</i>	AA-PS6LA-TE
<i>OpenVMS Upgrade/Installation: VAX 4000 Series, MicroVAX, VAXstation, and VAXserver 32/33/34/35/36/38/3900 Series</i>	AA-PS6RA-TE
<i>OpenVMS VAX Upgrade and Installation Supplement: VAXstation 2000, MicroVAX 2000</i>	AA-PS6YA-TE

#### 2.1.3 Organization of the Documentation Set

The covers of OpenVMS manuals are color coded to help specific audiences quickly find the documents that meet their needs. The color coding is reinforced with a letter designator on the spines of the documents. Refer to Table 2–3 for manual type, color, and letter designator.

**Table 2–3 Color Coding of Manual Covers**

Manual Type	Cover Color	Letter Designator
General user	Blue	G
System management	Red	S
Programming	Green	P

Some documents in the documentation set help meet the needs of several audiences. Keep this in mind when searching for information on specific topics. See Figure 2–1 for an illustration of the OpenVMS documentation set organized by audience.

Figure 2–1 OpenVMS Documentation Set Organized by Audience



### General User Manuals

*DEC Text Processing Utility Reference Manual*  
*Extensible Versatile Editor Reference Manual*  
*Guide to the DEC Text Processing Utility*  
*OpenVMS DCL Dictionary (I & II)*  
*OpenVMS Master Index*

*OpenVMS System Messages:  
Companion Guide for Help Message Users*  
*OpenVMS User's Manual*  
*OpenVMS Version 7.1 New Features Manual*  
*OpenVMS Version 7.1 Release Notes*  
*Overview of OpenVMS Documentation*



### System Management Manuals

*DECcmds User's Guide*  
*Guidelines for OpenVMS Cluster Configurations*  
*OpenVMS Alpha Version 7.1 Upgrade and  
Installation Manual*  
*OpenVMS Cluster Systems*  
*OpenVMS Guide to System Security*  
*OpenVMS License Management Utility Manual*  
*OpenVMS Management Station Overview and  
Release Notes*

*OpenVMS Performance Management*  
*OpenVMS System Management Utilities  
Reference Manuals (I & II)*  
*OpenVMS System Manager's Manuals (I & II)*  
*OpenVMS VAX Version 7.1 Upgrade and Installation Manual*  
*TCP/IP Networking on OpenVMS Systems*  
*Volume Shadowing for OpenVMS*



### Programming Manuals

*Creating an OpenVMS Alpha Device Driver from an  
OpenVMS VAX Device Driver*  
*DEC C Run-Time Library Utilities  
Reference Manual*  
*Digital Portable Mathematics Library*  
*Guide to Creating OpenVMS Modular Procedures*  
*Guide to DECthreads*  
*Guide to OpenVMS File Applications*  
*Migrating an Application from OpenVMS  
VAX to OpenVMS Alpha*  
*OpenVMS Alpha Guide to 64-Bit Addressing  
and VLM Features*  
*OpenVMS Alpha Guide to Upgrading  
Privileged-Code Applications*  
*OpenVMS Alpha System Dump Analyzer  
Utility Manual*  
*OpenVMS Calling Standard*  
*OpenVMS Command Definition, Librarian,  
and Message Utilities Manual*  
*OpenVMS Debugger Manual*  
*OpenVMS Delta/XDelta Debugger Manual*  
*OpenVMS I/O User's Reference Manual*

*OpenVMS Linker Utility Manual*  
*OpenVMS Programming Concepts Manual*  
*OpenVMS Programming Interfaces: Calling a System Routine*  
*OpenVMS Record Management Services Reference Manual*  
*OpenVMS Record Management Utilities Reference Manual*  
*OpenVMS RTL General Purpose (OTS\$) Manual*  
*OpenVMS RTL Library (LIB\$) Manual*  
*OpenVMS RTL Screen Management (SMG\$) Manual*  
*OpenVMS RTL String Manipulation (STR\$) Manual*  
*OpenVMS System Services Reference Manuals (I & II)*  
*OpenVMS Utility Routines Manual*  
*OpenVMS VAX RTL Mathematics (MTH\$) Manual*  
*OpenVMS VAX System Dump Analyzer Utility Manual*  
*POLYCENTER Software Installation Utility Developer's Guide*  
*Porting VAX MACRO Code to OpenVMS Alpha*  
*VAX MACRO and Instruction Set Reference Manual*  
*Writing OpenVMS Alpha Device Drivers in C*

ZK-8927A-GE

## Documentation Delivery

### 2.2 Documentation CD-ROM

## 2.2 Documentation CD-ROM

This section contains information about the contents of the OpenVMS Version 7.1 Documentation CD-ROM. Use the following part number if you wish to order the OpenVMS Version 7.1 Documentation CD-ROM: AG-QSBYB-BE.

The Documentation CD-ROM includes HTML, Bookreader, PostScript, and text files. The files are organized in the following directories:

- [HTML] directory  
Includes a subset of the OpenVMS Documentation Set that can be viewed with an Internet browser
- [DECW\$BOOK] directory  
Includes the OpenVMS documentation set, archived manuals, and layered product files in Bookreader format
- [DOCUMENTATION] directory  
Includes PostScript and text files of the following:
  - OpenVMS release notes, new features, installation manuals, and SPDs
  - Layered product release notes, installation manuals, cover letters, and SPDs
- [OVMS\_ARCHIVED] directory  
Includes archived manuals in PostScript format

For detailed information about the Documentation CD-ROM, refer to the *Guide to OpenVMS Version 7.1 CD-ROMs*.

### 2.2.1 Accessing HTML Documentation

Selected OpenVMS manuals in HTML format are stored in the [HTML] directory.

Use the INDEX.HTM Web page to browse the selected OpenVMS books. You can view these files with any Level 2 Internet browser, but Digital suggests using Netscape Navigator Version 2.01 software. If needed, download the Netscape Navigator from the Internet Product Suite CD-ROM, which is part of your OpenVMS Version 7.1 package.

### 2.2.2 Accessing PostScript and Text Files

PostScript (.PS) and text (.TXT) files are stored in the [DOCUMENTATION] and [OVMS\_ARCHIVED] directories. The [DOCUMENTATION] directory contains the following files:

- PostScript and text files of selected OpenVMS manuals including release notes, installation manuals, SPDs, and the new features manual
- Selected PostScript and text files including release notes, installation guides, and SPDs of the following layered products:
  - DCE
  - DECams
  - DECnet
  - DECnet-Plus
  - DECwindows Motif for OpenVMS
  - Digital TCP/IP Services

- Monitoring Performance History (MPH)
- Wind/U

The [OVMS\_ARCHIVED] directory contains archived manuals in PostScript format.

For more information about the OpenVMS CD-ROM kit and the manuals available on line, refer to the *Guide to OpenVMS Version 7.1 CD-ROMs*.

### 2.2.3 Accessing Bookreader Documentation

The following documentation is in Bookreader format in the [DECW\$BOOK] directory:

- OpenVMS Version 7.1 Full Documentation Set
- Layered-product documentation
- OpenVMS archived manuals

Selected OpenVMS manuals have been archived and are offered in Bookreader format on the OpenVMS Archived Manuals Bookshelf.

If you have a workstation and have installed DECwindows Motif software, you can view the manuals in Bookreader format with DECwindows Bookreader.

During installation or upgrade, the DECwindows Motif software automatically creates a library directory for Bookreader on your system disk and defines the logical name DECW\$BOOK to refer to this directory. When you start Bookreader, it looks for the library file in the directory defined by DECW\$BOOK.

For instructions on reading manuals with DECwindows Bookreader, refer to the *Guide to OpenVMS Version 7.1 CD-ROMs*.

## 2.3 System Integrated Products

Volume Shadowing for OpenVMS, RMS Journaling for OpenVMS, and OpenVMS Clusters are System Integrated Products (SIPs). They are included in the OpenVMS software, but you must purchase separate licenses to enable them. The OpenVMS Cluster, DECamsd, and Volume Shadowing documentation is included in the OpenVMS Full Documentation Set. RMS Journaling documentation must be purchased separately. Table 2-4 lists the order number for the RMS Journaling manual. See Section A.3 for a description of this manual.

**Table 2-4 Order Number for RMS Journaling**

Title	Order Number
<i>RMS Journaling for OpenVMS Manual</i>	AA-JG41C-TE

## 2.4 Online Help

The OpenVMS operating system provides online help for the commands, utilities, and system routines documented in the Full Documentation Set.

## Documentation Delivery

### 2.4 Online Help

#### 2.4.1 Help Message Facility

You can use the Help Message facility to quickly access online descriptions of system messages. In addition, you can add your own source files, such as messages documentation that you have written to the Help Message database. The manual *OpenVMS System Messages: Companion Guide for Help Message Users* explains how to use the Help Message facility. You can also access DCL Help for Help Message by entering:

```
$ HELP HELP/MESSAGE
```

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## Archived and Restructured Documentation

OpenVMS continuously updates, revises, and enhances the OpenVMS operating system information set. Table 3–1 lists the manuals that have been archived since OpenVMS Version 6.2. Table 3–3 lists where information was relocated in previous releases.

### 3.1 Archived Manuals

Table 3–1 lists the OpenVMS manuals that have been archived. Please note the following:

- Archived manuals can be ordered separately in hardcopy format through DECdirect (800-344-4825).
- Archived manuals are available in PostScript and Bookreader formats on the Documentation CD-ROM.
- Most information from the archived manuals has been incorporated in another document or Online Help.

**Table 3–1 Archived OpenVMS Manuals**

Manual	Order Number
<i>A Comparison of System Management on OpenVMS AXP and OpenVMS VAX</i>	AA-PV71B-TE
<i>Building Dependable Systems: The OpenVMS Approach</i>	AA-PV5YB-TE
<i>Creating an OpenVMS AXP Step 2 Device Driver from a Step 1 Device Driver</i>	AA-Q28TA-TE
<i>Creating an OpenVMS AXP Step 2 Device Driver from an OpenVMS VAX Device Driver</i>	AA-Q28UA-TE
<i>Guide to OpenVMS AXP Performance Management</i>	AA-Q28WA-TE
<i>Guide to OpenVMS Performance Management</i>	AA-PV5XA-TE
<i>Migrating an Environment from OpenVMS VAX to OpenVMS Alpha</i>	AA-QSBLA-TE
<i>Migrating to an OpenVMS AXP System: Planning for Migration</i>	AA-PV62A-TE
<i>Migrating to an OpenVMS AXP System: Recompiling and Relinking Applications</i>	AA-PV63A-TE
<i>OpenVMS AXP Device Support: Developer's Guide</i>	AA-Q28SA-TE
<i>OpenVMS AXP Device Support: Reference</i>	AA-Q28PA-TE
<i>OpenVMS Bad Block Locator Utility Manual</i>	AA-PS69A-TE
<i>OpenVMS Compatibility Between VAX and Alpha</i>	AA-PYQ4C-TE

(continued on next page)

## Archived and Restructured Documentation

### 3.1 Archived Manuals

**Table 3–1 (Cont.) Archived OpenVMS Manuals**

Manual	Order Number
<i>OpenVMS Developer's Guide to VMSINSTAL</i>	AA–PWBXA–TE
<i>OpenVMS DIGITAL Standard Runoff Reference Manual</i>	AA–PS6HA–TE
<i>OpenVMS EDT Reference Manual</i>	AA–PS6KA–TE
<i>OpenVMS Exchange Utility Manual</i>	AA–PS6AA–TE
<i>OpenVMS Glossary</i>	AA–PV5UA–TK
<i>OpenVMS National Character Set Utility Manual</i>	AA–PS6FA–TE
<i>OpenVMS Obsolete Features Manual</i>	AA–PS6JA–TE
<i>OpenVMS Programming Environment Manual</i>	AA–PV66B–TK
<i>OpenVMS RTL DECTalk (DTK\$) Manual</i>	AA–PS6CA–TE
<i>OpenVMS RTL Parallel Processing (PPL\$) Manual</i>	AA–PV6JA–TK
<i>OpenVMS Software Overview</i>	AA–PVXHB–TE
<i>OpenVMS SUMSLP Utility Manual</i>	AA–PS6EA–TE
<i>OpenVMS System Messages and Recovery Procedures Reference Manual: A–L</i>	AA–PVXKA–TE
<i>OpenVMS System Messages and Recovery Procedures Reference Manual: M–Z</i>	AA–PVXLA–TE
<i>OpenVMS Terminal Fallback Utility Manual</i>	AA–PS6BA–TE
<i>OpenVMS VAX Card Reader, Line Printer, and LPA11–K I/O User's Reference Manual</i>	AA–PVXGA–TE
<i>OpenVMS VAX Device Support Manual</i>	AA–PWC8A–TE
<i>OpenVMS VAX Device Support Reference Manual</i>	AA–PWC9A–TE
<i>OpenVMS VAX Patch Utility Manual</i>	AA–PS6DA–TE
<i>OpenVMS Wide Area Network I/O User's Reference Manual</i>	AA–PWC7A–TE
<i>PDP–11 TECO User's Guide</i> <sup>1</sup>	AA–K420B–TC
<i>POLYCENTER Software Installation Utility User's Guide</i>	AA–Q28NA–TK

<sup>1</sup>This manual has been archived and is not available as a PostScript file, but you can order it through DECdirect.

#### 3.1.1 Archived Installation Supplements

Table 3–2 lists installation supplements that have been archived and are no longer available on the OpenVMS kit. However, they can be ordered from DECdirect using the order numbers shown in Table 3–2. These supplements are also available on the Documentation CD–ROM in printable PostScript format. For information about how to print these supplements from the Documentation CD–ROM, see *Guide to OpenVMS Version 7.1 CD–ROMs*.

**Table 3–2 Archived Installation Supplements**

Manual	Order Number
<i>OpenVMS VAX Upgrade and Installation Supplement: VAX 8820, 8830, 8840</i>	AA–PS6MA–TE

(continued on next page)

**Table 3–2 (Cont.) Archived Installation Supplements**

Manual	Order Number
<i>OpenVMS VAX Upgrade and Installation Supplement: VAX 8200, 8250, 8300, 8350</i>	AA-PS6PA-TE
<i>OpenVMS VAX Upgrade and Installation Supplement: VAX 8530, 8550, 8810 (8700), and 8820-N (8800)</i>	AA-PS6QA-TE
<i>OpenVMS VAX Upgrade and Installation Supplement: VAX 8600, 8650</i>	AA-PS6UA-TE
<i>VMS Upgrade and Installation Supplement: VAX-11/780, 785</i>	AA-LB29B-TE
<i>VMS Upgrade and Installation Supplement: VAX-11/750</i>	AA-LB30B-TE

## 3.2 Restructured Documentation

Many of the most commonly-used manuals (for example, the *DCL Dictionary*) continue to be published and revised under the same or very similar titles. Other manuals have been discontinued and their information was moved into other manuals or to Online Help. Table 3–3 shows where information from those discontinued manuals can be found in OpenVMS documentation.

**Table 3–3 Where to Find Information**

Discontinued Manual	New Location of Information
<b>General User</b>	
<i>VMS General User Master Index</i>	Discontinued
<i>Introduction to VMS</i>	<i>OpenVMS User's Manual</i>
<i>Guide to Using VMS</i>	
<i>VMS DCL Concepts Manual</i>	
<i>Guide to Using VMS Command Procedures</i>	
<i>VMS Mail Utility Manual</i>	<i>OpenVMS User's Manual</i>
<i>VMS Sort/Merge Utility Manual</i>	Online Help
<i>VMS Phone Utility Manual</i>	
<i>Guide to VMS Text Processing</i>	<i>OpenVMS User's Manual</i> <i>Extensible Versatile Editor Reference Manual</i> <i>OpenVMS DIGITAL Standard Runoff Reference Manual</i> <i>OpenVMS EDT Reference Manual</i> Online Help
<i>Guide to VMS Files and Devices</i>	<i>OpenVMS System Manager's Manual</i>

(continued on next page)

## Archived and Restructured Documentation

### 3.2 Restructured Documentation

**Table 3–3 (Cont.) Where to Find Information**

<b>Discontinued Manual</b>	<b>New Location of Information</b>
<b>System Management</b>	
<i>POLYCENTER Software Installation Utility User's Guide</i>	<i>OpenVMS System Manager's Manual</i>
<i>VMS System Management Master Index</i>	Discontinued
<i>Introduction to VMS System Management</i>	<i>OpenVMS System Manager's Manual</i>
<i>Guide to Setting Up a VMS System</i>	
<i>Guide to Maintaining a VMS System</i>	
<i>Using VMS BACKUP</i>	
<i>VMS SYSMAN Utility Manual</i>	<i>OpenVMS System Management Utilities</i>
<i>VMS Install Utility Manual</i>	<i>Reference Manual</i>
<i>VMS LAT Control Program (LATCP) Manual</i>	Online Help
<i>VMS System Generation Utility Manual</i>	
<i>VMS Analyze/Disk_Structure Utility Manual</i>	
<i>VMS Backup Utility Manual</i>	
<i>VMS Error Log Utility Manual</i>	
<i>VMS Mount Utility Manual</i>	
<i>VMS Access Control List Editor Manual</i>	
<i>VMS Authorize Utility Manual</i>	
<i>VMS Audit Analysis Utility Manual</i>	
<i>VMS Accounting Utility Manual</i>	
<i>VMS Monitor Utility Manual</i>	
<i>VMS Show Cluster Utility Manual</i>	
<i>VMS Exchange Utility Manual</i>	<i>OpenVMS System Manager's Manual</i>
<i>VMS Terminal Fallback Utility Manual</i>	Online Help
<i>VMS Bad Block Locator Utility Manual</i>	
<i>Guide to DECnet-VAX Networking</i>	<i>DECnet for OpenVMS Guide to Networking</i>
<i>VMS Networking Manual</i>	<i>DECnet for OpenVMS Networking Manual</i>
<i>VMS DECnet Test Sender/DECnet Test Receiver Utility Manual</i>	<i>DECnet for OpenVMS Network Management Utilities</i>
<i>VMS Network Control Language Reference Manual</i>	Online Help

(continued on next page)

## Archived and Restructured Documentation 3.2 Restructured Documentation

**Table 3–3 (Cont.) Where to Find Information**

Discontinued Manual	New Location of Information
<b>System Management</b>	
<i>VMS LAD Control Program (LADCP) Manual</i>	<i>OpenVMS System Manager's Manual</i> <i>InfoServer System Operations Guide</i> <i>InfoServer Client for OpenVMS LASTCP and LADCP Utilities</i> Online Help
<b>Programming</b>	
<i>Guide to OpenVMS Performance Management</i>	<i>OpenVMS Performance Management</i>
<i>Guide to OpenVMS AXP Performance Management</i>	<i>OpenVMS Performance Management</i>
<i>Guide to VMS Programming Resources</i>	<i>OpenVMS Programming Environment Manual</i> <i>OpenVMS Programming Concepts Manual</i>
<i>VMS Command Definition Utility Manual</i> <i>VMS Librarian Utility Manual</i> <i>VMS Message Utility Manual</i>	<i>OpenVMS Command Definition, Librarian, and Message Utilities Manual</i> Online Help
<i>VMS Analyze/RMS_File Utility Manual</i> <i>VMS Convert and Convert/Reclaim Utility Manual</i> <i>VMS File Definition Language Facility Manual</i>	<i>OpenVMS Record Management Utilities Reference Manual</i> Online Help
<i>Introduction to VMS System Routines</i>	<i>OpenVMS Programming Interfaces: Calling a System Routine</i> <i>OpenVMS Calling Standard</i>
<i>Introduction to the VMS Run-Time Library</i>	<i>OpenVMS Programming Interfaces: Calling a System Routine</i>
<i>Introduction to VMS System Services</i>	<i>OpenVMS Programming Concepts Manual</i> <i>OpenVMS Programming Interfaces: Calling a System Routine</i>
<i>Migrating to an OpenVMS AXP System: Planning for Migration</i>	<i>Migrating an Application from OpenVMS VAX to OpenVMS Alpha</i>
<i>Migrating to an OpenVMS AXP System: Recompiling and Relinking Applications</i>	<i>Migrating an Application from OpenVMS VAX to OpenVMS Alpha</i>

(continued on next page)

## Archived and Restructured Documentation

### 3.2 Restructured Documentation

**Table 3–3 (Cont.) Where to Find Information**

<b>Discontinued Manual</b>	<b>New Location of Information</b>
<b>Programming</b>	
<i>OpenVMS Compatibility Between VAX and Alpha</i>	<i>Migrating an Environment from OpenVMS VAX to OpenVMS Alpha</i>
<i>A Comparison of System Management on OpenVMS AXP and OpenVMS VAX</i>	<i>Migrating an Environment from OpenVMS VAX to OpenVMS Alpha</i>
<i>VAX Text Processing Utility Manual</i>	<i>DEC Text Processing Utility Reference Manual</i> Online Help
<i>VMS I/O User's Reference Manual: Part I</i>	<i>OpenVMS I/O User's Reference Manual</i> , except Chapters 2, 4, and 5, which are in the <i>OpenVMS VAX Card Reader, Line Printer, and LPA11-K I/O User's Reference Manual</i>
<i>VMS I/O User's Reference Manual: Part II</i>	Chapters 1 through 5: <i>OpenVMS Wide Area Network I/O User's Reference Manual</i> Chapter 6, Ethernet/802 Device Drivers: <i>OpenVMS I/O User's Reference Manual</i>
<b>Device Support Manuals</b>	
<i>Creating an OpenVMS AXP Step 2 Device Driver from a Step 1 Device Driver</i>	Discontinued
<i>Creating an OpenVMS AXP Step 2 Device Driver from an OpenVMS VAX Device Driver</i>	<i>Creating an OpenVMS Alpha Device Driver from an OpenVMS VAX Device Driver</i>
<i>OpenVMS Alpha Device Support: Developer's Guide</i>	<i>Writing OpenVMS Alpha Device Drivers in C</i>
<i>OpenVMS Alpha Device Support: Reference</i>	C reference information is available in <i>Writing OpenVMS Alpha Device Drivers in C</i> . MACRO-32 reference information is included in the <i>Creating an OpenVMS Alpha Device Driver from an OpenVMS VAX Device Driver</i> book.
<i>OpenVMS VAX Device Support Manual</i>	Discontinued
<i>OpenVMS VAX Device Support Reference Manual</i>	Discontinued

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## Descriptions of Documents

This appendix describes each manual in the OpenVMS documentation set. The following table lists the section where the manuals in a specific set are described.

Descriptions of	See Section
Manuals in the OpenVMS Documentation Set	A.1
Manuals in the Media Kit	A.2
System integrated product manual	A.3
Archived manuals	A.4

### A.1 Full Documentation Set

This section provides a description of each manual in the Documentation Set.

***Creating an OpenVMS Alpha Device Driver from an OpenVMS VAX Device Driver***

Describes how to change OpenVMS VAX device driver code to be compiled, linked, loaded, and run on OpenVMS Alpha systems. This book also describes OpenVMS Alpha driver entry point routines, system routines, and macros for the MACRO-32 compiler.

***DECams User's Guide***

Provides information for installing and using the DECams software. DECams is a system management tool that lets you monitor, diagnose, and track events in OpenVMS system and OpenVMS Cluster environments.

***DEC C Run-Time Library Utilities Reference Manual***

Provides detailed usage and reference information about DEC C Run-Time Library utilities for managing localization and time zone data in international software applications.

***DEC Text Processing Utility Reference Manual***

Describes the DEC Text Processing Utility (DECTPU) and provides reference information about the EDT Keypad Emulator interfaces to DECTPU.

***Digital Portable Mathematics Library***

Documents the mathematics routines in the Digital Portable Mathematics Library (DPML), supplied only with OpenVMS Alpha systems. VAX programmers should refer to the *OpenVMS VAX RTL Mathematics (MTH\$) Manual*.

***Extensible Versatile Editor Reference Manual***

Contains command reference information about the EVE text editor. It also provides a cross-reference between EDT and EVE commands.

## Descriptions of Documents

### A.1 Full Documentation Set

#### ***Guidelines for OpenVMS Cluster Configurations***

Provides OpenVMS Cluster configuration information for MEMORY CHANNEL™, SCSI, CI, DSSI, and LAN-based clusters.

#### ***Guide to Creating OpenVMS Modular Procedures***

Describes how to perform a complex programming task by dividing it into modules and coding each module as a separate procedure.

#### ***Guide to DECthreads***

Describes the DECthreads package, Digital's multithreading run-time libraries. Use the routines in this package to create and control multiple threads of execution within the address space provided by a single process. Offering both usage tips and reference synopses, this document describes three DECthreads interfaces: routines that conform to the IEEE POSIX 1003.1c standard (called *pthread*), routines that provide thread-related services in nonthreaded applications (called thread-independent services or *tis*), and a set of Digital proprietary routines (called *cma*) that provide a stable, upwardly compatible interface.

#### ***Guide to OpenVMS File Applications***

Contains guidelines for designing, creating, and maintaining efficient data files by using Record Management Services (RMS). This manual is intended for application programmers and designers responsible for programs that use RMS files, especially if performance is an important consideration.

#### ***Guide to the DEC Text Processing Utility***

Provides an introduction to developing DECTPU programs.

#### ***Migrating an Application from OpenVMS VAX to OpenVMS Alpha***

Describes how to create an OpenVMS Alpha version of an OpenVMS VAX application. It provides an overview of the VAX to Alpha migration process and information to help you plan a migration. It discusses the decisions you must make in planning a migration and the ways to get the information you need to make those decisions. In addition, it describes the migration methods available so that you can estimate the amount of work required for each method and select the method best suited to a given application.

#### ***OpenVMS Alpha Guide to 64-Bit Addressing and VLM Features***

Introduces and describes OpenVMS Alpha operating system support for 64-bit virtual addressing and Very Large Memory (VLM). Intended for system and application programmers, this guide highlights the features and benefits of OpenVMS Alpha 64-bit and VLM capabilities. It also describes how to use these features to enhance application programs to support 64-bit addresses and to efficiently harness very large physical memory.

#### ***OpenVMS Alpha Guide to Upgrading Privileged-Code Applications***

Explains the OpenVMS Alpha Version 7.0 changes that might impact Alpha privileged-code applications and device drivers as a result of the OpenVMS Alpha 64-bit virtual addressing and kernel threads support provided in OpenVMS Alpha Version 7.0.

Privileged-code applications from versions prior to OpenVMS Alpha Version 7.0 might require the source-code changes described in this guide.

***OpenVMS Alpha System Dump Analyzer Utility Manual***

Explains how to use the System Dump Analyzer utility to investigate system failures and examine a running OpenVMS Alpha system. Alpha programmers should refer to this manual; VAX programmers should refer to the *OpenVMS VAX System Dump Analyzer Utility Manual*.

***OpenVMS Calling Standard***

Documents the calling standard for the operating system. This manual indicates aspects of the calling standard that are specific to OpenVMS Alpha or OpenVMS VAX.

***OpenVMS Cluster Systems***

Describes procedures and guidelines for configuring and managing OpenVMS Cluster systems. This document also describes how to provide high availability, building-block growth, and unified system management across coupled systems.

***OpenVMS Command Definition, Librarian, and Message Utilities Manual***

Contains descriptive and reference information about the following utilities:

- Command Definition utility
- Librarian utility
- Message utility

***OpenVMS DCL Dictionary***

Describes the DIGITAL Command Language (DCL) and provides an alphabetical listing of detailed reference information and examples for all DCL commands and lexical functions. This manual is in two parts.

***OpenVMS Debugger Manual***

Explains the features of the OpenVMS Debugger for programmers.

***OpenVMS Delta/XDelta Debugger Manual***

Describes the Delta/XDelta utility used to debug programs that run in privileged processor mode or at an elevated interrupt priority level.

***OpenVMS Guide to System Security***

Describes the security features available in the OpenVMS Alpha and VAX operating systems. It explains the purpose and proper application of each feature in the context of specific security needs.

***OpenVMS I/O User's Reference Manual***

Contains the information that system programmers need to program I/O operations using the device drivers that are supplied with the operating system.

***OpenVMS Linker Utility Manual***

Describes how to use the Linker utility to create images that run on OpenVMS systems. The manual also explains how to control a link operation with link qualifiers and link options.

***OpenVMS Management Station Overview and Release Notes***

Provides an overview of OpenVMS Management Station and describes how to get started using the software. OpenVMS Management Station is a powerful, Microsoft Windows based management tool for system managers and others who perform user account and printer management tasks on OpenVMS systems. OpenVMS Management Station provides a comprehensive user interface to OpenVMS user account and printer management. This document also includes release notes for OpenVMS Management Station.

## Descriptions of Documents

### A.1 Full Documentation Set

#### ***OpenVMS Master Index***

Offers an edited compilation of indexes from the manuals in the Full Documentation Set.

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#### **Note**

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Index entries shown in the Bookreader version of the *OpenVMS Master Index* refer to page numbers in the hardcopy manuals.

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#### ***OpenVMS Performance Management***

Introduces and explains the techniques used to optimize performance on an OpenVMS system.

#### ***OpenVMS Programming Concepts Manual***

Describes concepts such as process creation, kernel threads and the kernel threads process structure, interprocess communication, process control, data sharing, condition handling, and ASTs. This manual uses system services, utility routines, and run-time library (RTL) routines to illustrate mechanisms for utilizing OpenVMS features.

#### ***OpenVMS Programming Interfaces: Calling a System Routine***

Describes the OpenVMS programming interface and defines the standard conventions to call an OpenVMS system routine from a user procedure. The Alpha and VAX data type implementations for various high-level languages are also presented in this manual.

#### ***OpenVMS Record Management Services Reference Manual***

Provides reference and usage information for all programmers who use RMS data files.

#### ***OpenVMS Record Management Utilities Reference Manual***

Contains descriptive and reference information about the following RMS utilities:

- Analyze/RMS\_File utility
- Convert and Convert/Reclaim utilities
- File Definition Language facility

#### ***OpenVMS RTL General Purpose (OTS\$) Manual***

Documents the general-purpose routines contained in the OTS\$ facility of the OpenVMS Run-Time Library. This manual indicates which routines are specific to Alpha or VAX, as well as how routines function differently on each system.

#### ***OpenVMS RTL Library (LIB\$) Manual***

Documents the general-purpose routines contained in the LIB\$ facility of the OpenVMS Run-Time Library. This manual indicates which routines are specific to Alpha or VAX, as well as how routines function differently on each system.

#### ***OpenVMS RTL Screen Management (SMG\$) Manual***

Documents the screen management routines contained in the SMG\$ facility of the OpenVMS Run-Time Library. This manual indicates which routines are specific to Alpha or VAX, as well as how routines function differently on each system.

#### ***OpenVMS RTL String Manipulation (STR\$) Manual***

Documents the string manipulation routines contained in the STR\$ facility of the OpenVMS Run-Time Library. This manual indicates which routines are specific to Alpha or VAX, as well as how routines function differently on each system.

***OpenVMS System Management Utilities Reference Manual***

Presents reference information on the utilities you can use to perform system management tasks on your system as well as the tools to control and monitor system access and resources. This two-part manual also includes a description of the AUTOGEN command procedure.

***OpenVMS System Manager's Manual: Essentials***

Provides instructions for setting up and maintaining routine operations, such as starting up the system, installing software, and setting up print and batch queues. It also documents routine disk and magnetic tape operations.

***OpenVMS System Manager's Manual: Tuning, Monitoring, and Complex Systems***

Describes configuring and controlling the network, monitoring the system and performance, and managing system parameters. The manual also includes information on OpenVMS Cluster and network environments and DECdtm functionality.

***OpenVMS System Messages: Companion Guide for Help Message Users***

Describes features of the Help Message facility, a tool that you can use to display message descriptions. The manual describes the HELP/MESSAGE command and qualifiers and also includes detailed information about customizing the Help Message database. The manual also provides descriptions of messages that can occur when the system and Help Message are not fully operable.

***OpenVMS System Services Reference Manual***

Presents the set of routines that the operating system uses to control resources, allow process communication, control I/O, and perform other such operating system functions. This manual is in two parts.

***OpenVMS User's Manual***

Provides an overview of the operating system and presents basic concepts, task information, and reference information that enable you to perform daily computing tasks. It describes how to work with files and directories. It also includes these additional topics:

- Sending messages with the Mail utility and the Phone utility
- Using the Sort/Merge utility
- Using logical names and symbols
- Writing command procedures
- Editing files with the EVE and EDT text editors
- Processing files with DIGITAL Standard Runoff (DSR)

***OpenVMS Utility Routines Manual***

Describes the routines that allow a program to use the callable interface of selected OpenVMS utilities.

***OpenVMS VAX RTL Mathematics (MTH\$) Manual***

Documents the mathematics routines contained in the MTH\$ facility of the OpenVMS Run-Time Library, which is relevant only to programmers using OpenVMS VAX. (Alpha programmers should refer to *Digital Portable Mathematics Library*.)

## Descriptions of Documents

### A.1 Full Documentation Set

#### ***OpenVMS VAX System Dump Analyzer Utility Manual***

Explains how to use the System Dump Analyzer utility to investigate system failures and examine a running OpenVMS VAX system. VAX programmers should refer to this manual; Alpha programmers should refer to the *OpenVMS Alpha System Dump Analyzer Utility Manual*.

#### ***OpenVMS Version 7.1 New Features Manual***

Describes new and improved components for the Alpha and VAX operating systems for Version 7.1 release.

#### ***OpenVMS Version 7.1 Release Notes***

Describes temporary problems and bug fixes to the Alpha and VAX operating systems.

#### ***Overview of OpenVMS Documentation***

Provides a general introduction to the documentation set. This manual explains how the set is organized, describes all of its components, and provides ordering information.

#### ***POLYCENTER Software Installation Utility Developer's Guide***

Describes the procedure and provides guidelines for developing software products that will be installed using the POLYCENTER Software Installation utility. Intended for developers who are designing installation procedures for software products layered on the OpenVMS operating system.

#### ***Porting VAX MACRO Code to OpenVMS Alpha***

Describes how you can port existing VAX MACRO assembly language code to an OpenVMS Alpha system by using the features of the MACRO-32 compiler. It provides information to help you identify and correct VAX MACRO code that relies on elements of the VAX architecture. The manual examines the function of each compiler directive and built-in, explaining the circumstances under which it is necessary to add a directive or built-in to VAX MACRO assembly language code. It also discusses the qualifiers that govern the behavior of the compiler.

#### ***TCP/IP Networking on OpenVMS Systems***

Provides an introductory overview of TCP/IP networking and describes OpenVMS DCL support for TCP/IP capabilities.

#### ***VAX MACRO and Instruction Set Reference Manual***

Documents both the assembler directives of VAX MACRO and the VAX instruction set.

#### ***Volume Shadowing for OpenVMS***

Describes how to provide high data availability with phase II volume shadowing.

#### ***Writing OpenVMS Alpha Device Drivers in C***

Provides definitive information about writing device drivers in the C programming language for devices connected to Alpha processors.

## A.2 Media Kit

This section provides a description of each manual in the media kit.

#### ***Guide to OpenVMS Version 7.1 CD-ROMs***

Provides information about the OpenVMS Alpha and OpenVMS VAX operating system and documentation CD-ROMs. It lists the contents of the OpenVMS Version 7.1 CD-ROM package, includes pointers to installation information, and gives instructions on how to access manuals on the Documentation CD-ROM.

***OpenVMS Alpha Version 7.1 Upgrade and Installation Manual***

Provides step-by-step instructions for installing and upgrading the OpenVMS Alpha operating system on Alpha computers. It also includes information about booting, shutdown, backup, and licensing procedures.

***OpenVMS VAX Version 7.1 Upgrade and Installation Manual***

Provides step-by-step instructions for installing and upgrading the OpenVMS VAX computers. It also includes information about booting, shutdown, backup, and licensing procedures.

***OpenVMS License Management Utility Manual***

Describes the License Management Facility (LMF), the software license management tool. LMF includes the License Management Utility (LICENSE) and the command procedure VMSLICENSE.COM, which is used to register, manage, and track software licenses on line.

### A.3 System Integrated Product

***RMS Journaling for OpenVMS Manual***

Describes the three types of RMS Journaling as well as other OpenVMS components that support RMS Journaling. This manual also describes the RMS Recovery utility (which is used to recover data saved using journaling), the transaction processing system services, and system management tasks required when using RMS Journaling.

### A.4 Archived Manuals

This section provides a description of each archived manual.

***A Comparison of System Management on OpenVMS AXP and OpenVMS VAX***

Discusses system management tools, the impact of Alpha page sizes on system management operations, the system directory structure, interoperability issues, and performance information. This manual is designed for system managers who need to learn quickly how to manage an OpenVMS Alpha system.

***Building Dependable Systems: The OpenVMS Approach***

Offers practical information about analyzing the dependability requirements of your business applications and deciding how to use your computing systems to support your dependability goals. This information is complemented by technical summaries of the dependability features of OpenVMS and related hardware and layered software products.

***Creating an OpenVMS AXP Step 2 Device Driver from a Step 1 Device Driver***

Provides information for upgrading a Step 1 device driver (used in earlier versions of OpenVMS AXP) to a Step 2 device driver. A Step 2 device driver is required for OpenVMS AXP Version 6.1.

***Creating an OpenVMS AXP Step 2 Device Driver from an OpenVMS VAX Device Driver***

Provides information for migrating a device driver used on OpenVMS VAX to a Step 2 device driver used on OpenVMS AXP Version 6.1.

***Guide to OpenVMS AXP Performance Management***

Introduces and explains the techniques used to optimize performance on an OpenVMS Alpha system.

## Descriptions of Documents

### A.4 Archived Manuals

#### ***Guide to OpenVMS Performance Management***

Introduces and explains the techniques used to optimize performance on an OpenVMS VAX system.

#### ***Migrating an Environment from OpenVMS VAX to OpenVMS Alpha***

Describes how to migrate a computing environment from an OpenVMS VAX system to an OpenVMS Alpha system or a mixed-architecture cluster. It provides an overview of the VAX to Alpha migration process and describes the differences in system and network management on VAX and Alpha computers.

#### ***Migrating to an OpenVMS AXP System: Planning for Migration***

Describes the general characteristics of RISC architectures, compares the Alpha architecture to the VAX architecture, and presents an overview of the migration process and a summary of migration tools provided by Digital. The information in this manual is intended to help you define the optimal migration strategy for your application.

#### ***Migrating to an OpenVMS AXP System: Recompiling and Relinking Applications***

Provides detailed technical information for programmers who must migrate high-level language applications to OpenVMS Alpha. This manual describes how to set up a development environment to facilitate the migration of applications, helps programmers identify application dependencies on elements of the VAX architecture, and introduces compiler features that help resolve these dependencies. Individual sections of this manual discuss specific application dependencies on VAX architectural features, data porting issues (such as alignment concerns), and the process of migrating VAX shareable images.

#### ***OpenVMS AXP Device Support: Developer's Guide***

Describes how to write a driver for OpenVMS Alpha for a device not supplied by Digital.

#### ***OpenVMS AXP Device Support: Reference***

Provides the reference material for the *Writing OpenVMS Alpha Device Drivers in C* by describing the data structures, macros, and routines used in device-driver programming.

#### ***OpenVMS Bad Block Locator Utility Manual***

Describes how to use the Bad Block Locator utility to locate bad blocks on older types of media.

#### ***OpenVMS Compatibility Between VAX and Alpha***

Compares and contrasts OpenVMS on VAX and Alpha computers, focusing on the features provided to end users, system managers, and programmers.

#### ***OpenVMS Developer's Guide to VMSINSTAL***

Describes the VMSINSTAL command procedure and provides guidelines for designing installation procedures that conform to standards recommended by Digital. Intended for developers who are designing installation procedures for software products layered on the OpenVMS operating system.

#### ***OpenVMS DIGITAL Standard Runoff Reference Manual***

Describes the DSR text-formatting utility.

#### ***OpenVMS EDT Reference Manual***

Contains complete reference information for the EDT editor.

***OpenVMS Exchange Utility Manual***

Describes how to use the Exchange utility to transfer files between some foreign format volumes and OpenVMS native volumes.

***OpenVMS Glossary***

Defines terms specific to OpenVMS that are used throughout the documentation.

***OpenVMS National Character Set Utility Manual***

Describes how to use the National character set utility to build NCS definition files.

***OpenVMS Obsolete Features Manual***

Presents the DCL commands, system services, RTL routines, and utilities made obsolete by VMS Version 4.0 through Version 5.0. The manual also has an appendix of DCL commands, RTL routines, and utilities eliminated from VMS Version 4.0.

***OpenVMS Programming Environment Manual***

Provides a general description of Digital products and tools that define the programming environment. This manual introduces facilities and tools such as the compilers, the linker, the debugger, the System Dump Analyzer, system services, and routine libraries.

***OpenVMS RTL DECTalk (DTK\$) Manual***

Documents the DECTalk support routines contained in the DTK\$ facility of the OpenVMS Run-Time Library.

***OpenVMS RTL Parallel Processing (PPL\$) Manual***

Documents the parallel-processing routines contained in the PPL\$ facility of the OpenVMS Run-Time Library. This manual indicates which routines are specific to Alpha or VAX, as well as how routines function differently on each system.

***OpenVMS Software Overview***

Provides an overview of the OpenVMS operating system and some of its available products.

***OpenVMS SUMSLP Utility Manual***

Describes how to use the SUMSLP batch-oriented editor to update source files.

***OpenVMS System Messages and Recovery Procedures Reference Manual***

Contains an alphabetical listing of the errors, warnings, and informational messages issued by the operating system. Also provides the meaning of each message and a statement of the action to be taken in response to each message. This manual is in two parts.

***OpenVMS Terminal Fallback Utility Manual***

Describes how to use the Terminal Fallback utility to manage the libraries, character conversion tables, and terminal parameters that are available within this utility.

***OpenVMS VAX Card Reader, Line Printer, and LPA11-K I/O User's Reference Manual***

Describes the card reader, laboratory peripheral accelerator, and line printer drivers on OpenVMS VAX.

***OpenVMS VAX Device Support Manual***

Describes how to write an OpenVMS VAX driver for a device not supplied by Digital.

## Descriptions of Documents

### A.4 Archived Manuals

#### ***OpenVMS VAX Device Support Reference Manual***

Provides the reference material for the *OpenVMS VAX Device Support Manual* by describing the data structures, macros, and routines used in device-driver programming.

#### ***OpenVMS VAX Patch Utility Manual***

Describes how to use the Patch utility to examine and modify executable and shareable OpenVMS VAX images.

#### ***OpenVMS Wide Area Network I/O User's Reference Manual***

Describes the DMC11/DMR11, DMP11 and DMF32, DR11-W and DRV11-WA, DR32, and asynchronous DDCMP interface drivers on OpenVMS VAX.

#### ***PDP-11 TECO User's Guide***

Describes the operating procedures for the PDP-11 TECO (Text Editor and Corrector) program.

#### ***POLYCENTER Software Installation Utility User's Guide***

Provides information on the POLYCENTER Software Installation utility, a new component that lets you install and manage software products that are compatible with the utility.

