digital™

Software Product Description

PRODUCT NAME: DIGITAL Optical Storage Desktop Software (OSDS) for OpenVMS VAX and Alpha, Version 3.4a **SPD 47.45.06**

DESCRIPTION

The DIGITAL™ Optical Storage Desktop Software (DIGITAL OSDS) for OpenVMS™ product provides OpenVMS applications and users the functionality necessary to access a standalone, multifunction optical drive or drives using the conventional device, file, and record access services provided by the OpenVMS Operating System. In most cases, no changes will be required to existing applications that use magnetic disk storage.

The OpenVMS VAX™ and OpenVMS Alpha versions of DIGITAL OSDS provide local or VMScluster™ access to rewritable or WORM (Write Once, Read Many) media containing FILES-11 on-disk structure using the RWZ5x series of optical drives. DIGITAL OSDS for OpenVMS VAX also provides support for WORM media containing the WORMS–11® on-disk structure using the RWZ5x optical drives. DIGITAL OSDS for OpenVMS Alpha does not support any configuration using WORM media containing the WORMS–11 on-disk structure.

Pseudo-Device Representation

DIGITAL OSDS allows the OpenVMS host to view the media inserted into the optical disk as a virtual disk device. For single-headed drives, this translates to one virtual disk device for each optical disk surface. The optical drive, therefore, appears to applications as a virtual disk device, or pseudo-device. Excluding those functions that are unique to the optical technology, the pseudo-device emulates the operation of a conventional OpenVMS magnetic disk.

Volume Access

Volumes in an optical drive used with DIGITAL OSDS are accessed using the same techniques that are used to access conventional OpenVMS disks. The standard OpenVMS INITIALIZE command is used to prepare each side of an optical disk media for use and the standard OpenVMS MOUNT command is used to make the volume known to OpenVMS. WORM volumes can be ‘‘initialized’’ only once, whereas rewritable volumes, like magnetic disks, can be ‘‘initialized’’ many times.

File Access

Files on volumes under control of DIGITAL OSDS are accessed using the same techniques that are used to access conventional OpenVMS files. Once a volume has been mounted, files can be opened, read, written, and closed using the conventional OpenVMS system services and run-time library functions. WORM volumes can use the FILES-11 or WORMS–11 file system. Rewritable volumes use the FILES-11 file system.

DIGITAL OSDS provides essentially transparent access using standard OpenVMS commands and I/O statements from application programs. DIGITAL OSDS supports all OpenVMS commands and their library routine equivalents, such as, but not limited to:

ALLOCATE	DEALLOCATE	MOUNT
APPEND	DELETE[2]	OPEN
BACKUP[1]	DIFFERENCE	PURGE
CLOSE	DIRECTORY	READ
COPY	DISMOUNT	RENAME
CREATE	EDIT	WRITE
CREATE/DIRECTORY	INITIALIZE[3]	

[1] Not all backup options are supported using WORM media.

[2] This command can be used with WORM media but will not free up additional disk space as with rewritable media.

[3] This command can be used only once with WORM media.

HARDWARE REQUIREMENTS

The person planning a system configuration must understand the hardware requirements of the complete system. Due to the variety of processors that support OpenVMS and the length of time that some OpenVMS systems have been in service, there exist a huge combination of processor, SCSI adapter/controller, and optical subsystem combinations. Some combinations are not supported.

Alpha Processors Supported

DEC™ 2100	**Supported Adapters/Controllers**
A500MP, A600MP	KZTSA, KZPAA
DEC 3000	**Supported Adapters/Controllers**
300, 300L, 300LX 400, 400S 500, 500S, 500X 600, 600S 700 800, 800S 900	KZTSA, PMAZB, PMAZC, and 2nd embedded controller on 400, 500, 600, 700, 800, 900
DEC 7000	**Supported Adapters/Controllers**
600	KZMSA
DEC 10000	**Supported Adapters/Controllers**
600	KZMSA
AlphaServer™	**Supported Adapters/Controllers**
400	KZPSA, KZPAA
1000	KZPSA, KZPAA
1000A	KZPSA, KZPAA
2000	KZPSA, KZPAA
2100	KZPSA, KZPAA
2100A	KZPSA, KZPAA
4100	KZPAA
8200	KZPAA
8400	KZPSA, KZPAA
AlphaStation™	**Supported Adapters/Controllers**
200	KZPSA, KZPAA
250	KZPSA, KZPAA
255	KZPSA, KZPAA
400	KZPSA, KZPAA
500	KZPSA, KZPAA
600	KZPSA, KZPAA

VAX Processors Supported

VAX™ 3100	**Supported Adapters/Controllers**
	uses 2nd embedded controller
VAX 4000	**Supported Adapters/Controllers**
	PMAZ, KZQSA uses 2nd embedded controller
VAXstation™ 3100	**Supported Adapters/Controllers**
30, 38 40, 48 96	uses embedded controllers
VAXstation 4000	**Supported Adapters/Controllers**
60	uses embedded controllers
MicroVAX™ 3100	**Supported Adapters/Controllers**
80	uses 2nd embedded controller

Other Hardware Required: Supported Optical Drives

For OpenVMS VAX and OpenVMS Alpha processors, DIGITAL OSDS for OpenVMS supports the following specific 5.25-inch, multifunction optical drives:

- DIGITAL RWZ52 and RWZ53 5.25-inch, multifunction optical drive

Disk Space Requirements

	Blocks[1]	**Mbytes**
VAX installation	15,000	7.7
VAX use	4,000	2
Alpha installation	15,000	7.7
Alpha use	3,500	1.75

[1] 1 block = 512 bytes

These counts refer to the disk space required on the system disk. Additional disk space might be required based on the user's system environment and configuration, as well as the user options selected at installation time.

The minimum memory supported is 16 Mbytes for VAX systems and 32 Mbytes for Alpha systems. The use of this software in conjunction with increased memory capability improves performance. The memory size suggested for most typical VAX hardware configurations is at least 32 Mbytes.

Processors and Devices Not Supported

The following processors, adapters and optical devices are not supported with this release

Unsupported	
Adapters	PB2HA
Processors	VAXstation 4000 VLC VAXstation 4000 Models 90, 96 All VAXserver Models DEC 4000 Model 600, 700 DEC 10004 Model 200 DEC 2000 Model 200, 500
Optical Libraries	DIGITAL RV272, LSMI 4100

SOFTWARE REQUIREMENTS

Operating System

- OpenVMS VAX V7.1
- OpenVMS Alpha V7.1

ORDERING INFORMATION

Software License for VAX or Alpha Platforms	
QL-0U9A9-AA	DIGITAL OSDS for OpenVMS 5.25 inch
Software Media and Documentation	
QA-0U9AA-H5	TK50 for OpenVMS VAX[1]
QA-0U9AA-H8	CD-ROM for OpenVMS VAX[1]
QA-0U9AB-H8	CD-ROM for OpenVMS Alpha[2]
Software Documentation	
QA-0U9AA-GZ	Documentation for OpenVMS VAX[3]
QA-0U9AB-GZ	Documentation for OpenVMS Alpha[3]
Software Installation Services	
QT-0U9A9-I9	OSDS Installation Service
Software Product Services	
QT-0U9A9-**[4]	DIGITAL OSDS 5.25 inch

[1]This product is also available as part of the OpenVMS VAX Consolidated Software Distribution on CD-ROM.

[2]This product is also available as part of the OpenVMS Alpha Consolidated Software Distribution on CD-ROM.

[3]The software documentation for the OpenVMS product is available as part of the OpenVMS VAX Online Documentation Library on CD-ROM and the OpenVMS Alpha Consolidated Software Distribution on CD-ROM.

[4]**Denotes variant fields. For additional information on available licenses, services, and media, refer to the appropriate price book.

SOFTWARE LICENSING

This software is furnished under the licensing provisions of DIGITAL Equipment Corporation's Standard Terms and Conditions. For more information about DIGITAL licensing terms and policies, contact your local DIGITAL office.

License Management Facility Support

DIGITAL Optical Storage Desktop Software (DIGITAL OSDS) for OpenVMS supports the OpenVMS License Management Facility.

License units for DIGITAL OSDS for OpenVMS VAX and Alpha are allocated on a per system use, capacity or unlimited use.

For more information on the License Management Facility, refer to the OpenVMS VAX Operating System Software Product Description (SPD 25.01.xx), or the OpenVMS Alpha Operating System Software Product Description (SPD 41.87.xx), or the License Management Facility manual of the appropriate version (VAX or Alpha) of the OpenVMS Operating System documentation sets.

CLUSTER ENVIRONMENT

DIGITAL OSDS for OpenVMS VAX and OpenVMS Alpha using RWZ5x optical drives with rewritable or WORM media containing the FILES-11 on-disk structure is supported on local or VMScluster access when installed with a valid and licensed OpenVMS configuration.

DIGITAL OSDS for OpenVMS VAX using RWZ5x optical drives with WORM media containing the WORMS–11 on-disk structure is supported on a local processor access when installed with a valid and licensed OpenVMS configuration. DIGITAL OSDS for OpenVMS Alpha does not support any configuration using WORM media containing WORMS–11 on-disk structure.

OpenVMS cluster configurations are described in the OpenVMS Cluster Software Product Description (SPD 29.78.xx).

OpenVMS TAILORING CLASSES

The following OpenVMS classes are required for full functionality of DIGITAL OSDS for OpenVMS:

- OpenVMS required saveset
- Network support
- Utilities

For more information on OpenVMS classes and tailoring, refer to the OpenVMS VAX Operating System Software Product Description (SPD 25.01.xx) or the OpenVMS Alpha Operating System Software Product Description (SPD 41.87.xx).

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product can be different from the requirements for the current version.

DISTRIBUTION MEDIA

OpenVMS VAX Systems: TK50 and CD-ROM

The software documentation for this product is also available as part of the OpenVMS VAX Online Documentation Library on CD-ROM.

OpenVMS Alpha Systems: CD-ROM

- This product is also available as part of the OpenVMS Alpha Consolidated Software Distribution on CD-ROM.
- The software documentation for this product is also available as part of the OpenVMS Alpha Online Documentation Library on CD-ROM.)

SOFTWARE PRODUCT SERVICES

A variety of service options are available from DIGITAL. For more information, contact your local DIGITAL office.

SOFTWARE WARRANTY

Warranty for this software product is provided by DIGITAL with the purchase of a license for the product as defined in the Software Warranty Addendum provided with the license Product Authorization Key.