Software Product Description

PRODUCT NAME: StorageWorks Advanced Media Library, Version 1.0 Software Developer's Kit (SDK) **SPD 63.55.01**

DESCRIPTION

The StorageWorks Advanced Media Library (AML) Software Developer's Kit (SDK) provides the components for implementing management of removable media in storage management applications. AML provides a common, automated media management capability that can be shared by storage management applications such as Archive, Backup and Restore, and Hierarchial Storage Management. AML incorporates the emerging IEEE standard for Physical Volume Library (PVL) and Physical Volume Repository (PVR).

The benefits of AML are:

- Resource sharing by storage management applications of media, robots, and drives.
- Coordinates the use of removable media between storage management applications and across multiple platforms.
- Automation of media storage, transport, and loading.
- Device control of media robots, jukeboxes, and drives.
- Unique identification across the enterprise of each individual piece of media managed by AML.
- Provides media data integrity to ensure content and state of application data on controlled media.
- Security through authentication and authorization.
- Fully distributed media management throughout the enterprise network.

The AML SDK provides an application programming interface for storage applications requiring management of removable media. The SDK contains header files and libraries for the programming interface as well as runtime daemons, utilities, documentation, and sample application code.

CONFORMANCE TO STANDARDS

Standards Industry Practice Conformance

StorageWorks AML tracks the emerging IEEE 1244 standards draft, "Reference Model for Open Storage Systems Interconnection (OSSI), Mass Storage Reference Model Version 5." This model includes technical descriptions of the Physical Volume Library and the Physical Volume Repository on which AML bases its removable media management implementation.

HARDWARE REQUIREMENTS

Processor Support

StorageWorks AML can be used in a single node configuration or fully distributed across several, heterogenous nodes.

StorageWorks AML requires Digital Alpha or Sun SPARC systems listed below.

Alpha-Based Processors

All Alpha-based processors running the DEC OSF/1 operating system are supported. See the DEC OSF/1 Software Product Description (SPD 41.61.xx) for a detailed listing.

SPARC-Based Processors

All SPARC-based processors that are binary compatible with the Sun4c processor and run the Solaris operating system are supported.

Processors Not Supported

VAX-Based Processors, DECstations, DECsystems

Robot Devices Supported

The following robot devices are supported:

Alpha-Based Processors

TL820, TZ877 (SZ107), EXABYTE EXB10i, EXB10e, and EXB-120, and HP Models 10/10LC/20/60, and Virtual Jukebox.

SPARC-Based Processors

Virtual Jukebox

The "Virtual Jukebox" device listed above refers to a jukebox simulator that is provided with the AML SDK kit to help application developers test and debug media management applications.

Human Operator support is restricted to loading and unloading of robot devices. Human Operator support is only supplied for device drives configured as part of a robotic library.

DISK SPACE REQUIREMENTS

For DEC OSF/1 Alpha Systems

Space required for installation (Kilobytes):

	root	/usr
Software Developer's Subset	0	5500
Client Runtime	0	25500
Manual Pages	0	500
Server Runtime (with default DB)	0	9900
OR		
Server Runtime (with Oracle DB)	0	15300
Total (maximum)	0	46800

Permanent space required (Kilobytes):

	root	/usr
Software Developer's Subset	0	5500
Client Runtime	0	25500
Manual Pages	0	500
Server Runtime (with default DB)	0	990
OR		
Server Runtime (with Oracle DB)	0	15300
Total (maximum)	0	46800

For Sun Solaris Systems

Space required for installation (Kilobytes):

	root	/usr
Extracted "tar" File	0	41800
Software Developer's Subset	0	2300
Client Runtime	0	22800
Manual Pages	0	500
Server Runtime (with default DB)	0	4800
OR		
Server Runtime (with Oracle DB)	0	11300
Total (Maximum)	0	78700

Permanent space required (Kilobytes):

	root	/usr
Software Developer's Subset	0	2300
Client Runtime	0	22800
Manual Pages	0	500
Server Runtime (with default DB)	0	4800
OR		
Server Runtime (with Oracle DB)	0	11300
Total (Maximum)	0	36900

Database Considerations

The system(s) executing the AML server processes needs space for online media and object indexes. The amount of disk space required varies depending on the number of media and robot devices managed. The minimum for the AML embedded database is 2 Megabytes per database instance with 1 Kilobyte for each object managed.

SOFTWARE REQUIREMENTS

This section lists the software required to use the StorageWorks AML SDK.

Alpha-Based Processors

DEC OSF/1 Operating System V1.3B, V2.1

Digital DCE for DEC OSF/1

DEC OSF/1 C Compiler

DEC C++ Runtime Shared Library

SPARC-Based Processors

Sun Solaris Operating System V2.3

Transarc DCE for Solaris

SunPro 2.0.1 SPARCompiler C (ANSI C)

SunPro 2.0.1 SPARCompiler C++ Runtime Shared Library

SOFTWARE LICENSING

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

Digital License Management Facility Support (LMF)

AML for DEC OSF/1 requires the DEC OSF/1 License Management Facility.

For more information on the License Management Facility, refer to the DEC OSF/1 Operating System Software Product Description (SPD 41.61.xx) or the License Management Facility manual of the DEC OSF/1 Operating System documentation set.

Solaris Systems License Management

Solaris Systems do not support the Digital License Management Facility. A Product Authorization Key (PAK) is not required for installation or use of this version of the product. Please see the Ordering Information section for purchasing information for Solaris License Certificates.

OPTIONAL SOFTWARE

AML can use Oracle Version 7 for DEC OSF/1 and Solaris Operating Systems in place of the embedded, default database provided. In a distributed StorageWorks AML installation, all nodes may use the same database option or a combination of the database options, as required.

AML offers customers the option of cataloging media using their existing Oracle relational database software. For each AML Physical Volume Library using Oracle on DEC OSF/1 or Solaris system(s), an Oracle Enabler License for that system-type is required. See the Ordering Information section for specific license information.

DEC OSF/1 Systems

SCSI CAM Layered Components for DEC OSF/1 is required for AML to use optical disk devices and robotic media handling devices. DEC OSF/1 support of all SCSI-based random access jukeboxes requires the SCSI CAM LC media changer software. DEC OSF/1 support of all optical devices requires the SCSI CAM LC optical driver software.

This product is available as part of the DEC OSF/1 Layered Product Subscription service on CD-ROM (order number QA-054A*.**).

See the SCSI CAM Layered Components for DEC OSF/1 SPD (SPD 50.68.xx) for details.

GROWTH CONSIDERATIONS

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

The AML database requirements will grow as the number of media and robot devices managed grow. In the embedded database provided with AML each object requires 1 Kilobyte of additional space.

DISTRIBUTION MEDIA

DEC OSF/1 Systems

CD-ROM

Solaris Systems

8mm magnetic tape
DAT (4mm) magnetic tape

ORDERING INFORMATION

DEC OSF/1 Systems

Software Developer's Licenses:
- 1-User: QL-3HAAM-3B
- 5-Users: QL-3HAAM-3C
- Unlimited Use (per system): QL-3HAA9-AA

Oracle Runtime Support License: QL-3HGA9-AA

Software Developer's Media and Documentation Kit:
- CD-ROM: QA-3HAAA-H8

Software Documentation: QA-3HAAA-GZ

Solaris Systems

Software Developer's Licenses:
- 1-User: QL-3HBAJ-3B
- 5-Users: QL-3HBAJ-3C
- Unlimited Use (per system): QL-3HBA9-AA

Oracle Runtime Support License: QL-3HHA9-AA

Software Developer's Media and Documentation Kits:
- 4mm DAT: QA-3HBAA-HP
- 8mm: QA-3HBAB-HP

Software Documentation: QA-3HBAA-GZ

The above information is valid at time of release. Please contact your local Digital office for the most up-to-date information.

SOFTWARE PRODUCT SERVICES

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 of this SPD.