HP OpenVMS Alpha Version 7.3–2 Cover Letter

AV-RV91A-TE

October 2003

Dear OpenVMS Customer,

Hewlett-Packard is pleased to introduce the OpenVMS Alpha Version 7.3–2 operating system. HP is dedicated to providing customers with the most advanced functionality and the highest quality products possible and believes the OpenVMS Alpha Version 7.3–2 operating system release reflects this dedication.

This cover letter discusses the following topics:

- OpenVMS Version 7.3–2 New Features

- OpenVMS Freeware

- Service Support

- Service Tools

- Documentation

- Software Product Descriptions

- OpenVMS Source Listings Kits

- Layered Products

Before installation, please take a look at the Release Notes at the end of this cover letter for the latest information about this release.

New Features

The OpenVMS Alpha Version 7.3–2 release provides all of the features contained in the OpenVMS Version Alpha 7.3–1 release, plus enhancements to the OpenVMS SAN offering, system availability, I/O and SMP performance improvements, and enhanced security. The following are some of the features and performance enhancements.

- System and application performance improvements, including:

  - Fast Path for LAN

  - Fast Path for PEdriver

  - Working set in S2 space

  - Sched Spinlock

  - Sched name creation

  - XFC enhancements

  - Smart Array 53*xx* series adapter (KZPDC)

- Enhanced security features, including:

  – A port of Common Data Security Architecture (CDSA) Version 3.14, which provides industry-standard cryptographic interfaces, is integrated into OpenVMS as CDSA Version 2.0.

  – A port of MIT's Kerberos V5 Release 1.2.6, which is integrated into OpenVMS as Kerberos Version 2.0 for OpenVMS.

  – A port of the OpenSSL 0.9.6G toolkit, which implements SSL and TLS protocols, is included with OpenVMS as HP SSL Version 1.1–A for OpenVMS.

  – Authentication and Credentials Management Extensions (ACME), which provides authentication and persona-based credential services.

- UNIX® portability features, including:

  – Improved overall security features of the operating system

  – Improved UNIX style security features that allow for ease of porting UNIX style applications to an OpenVMS system

- System management features, including:

  – Changes to the Backup utility

  – Component indictment

  – Dynamic volume expansion (DVE)

  – Error Log Viewer (ELV) utility

  – Enhanced font sets

  – Galaxy and hard partition support

  – LAN Failover

  – HP Volume Shadowing for OpenVMS features

    * Dissimilar device shadowing (DDS)

    * New SET SHADOW and SHOW SHADOW commands

  – HP StorageWorks Modular SAN array 1000 support (MSA 1000)

  – USB Configuration Manager (UCM) utility

  – FIBRE_SCAN utility for displaying device information

  – POLYCENTER Software Installation (PCSI) utility

- New hardware support for:

  – AlphaServer DS15, ES47, ES80, and GS1280 systems

  – ATI RADEON 7500 2D/3D graphics

- Enhancements to DECdtm programming interface

- Inclusion of HP Secure Web Browser (based on Mozilla)

- Inclusion of HP Secure Web Server (based on Apache)

OpenVMS Freeware Version 6.0

The OpenVMS Freeware CD–ROMs are included in the OpenVMS CD–ROM distribution kit. The Freeware CD–ROMs contain free software tools and utilities for creating applications and managing OpenVMS systems.

NOTE

The OpenVMS Freeware CD–ROMs are provided as is without a warranty. HP imposes no restrictions on its distribution or on the redistribution of its contents. Be aware, however, that some of the packages on the CD–ROMs can carry restrictions on their use imposed by the original authors. Therefore, you should carefully read the documentation that accompanies each product. HP does not support services for this software, fix the software, or guarantee that it works correctly.

Service Support

OpenVMS Alpha Version 7.3–2 includes remedial fixes and enhancements for customers running the OpenVMS Version 7.3 family. Remedial support for OpenVMS Alpha V7.3–1 and all the OpenVMS releases will end pursuant to dates posted on the following web site:

        http://www.hp.com/hps/os/os_openvms.html

This site contains the most current support status for all of the OpenVMS releases.

HP Service Tools and DECevent

The HP Services web-based service tool is known as Web-Based Enterprise Services (WEBES). (WEBES includes the Computer Crash Analysis Tool [CCAT] and System Event Analyzer [SEA] components.) This is the supported service tool for all AlphaServer DS, ES, and GS Series systems running OpenVMS, except for the AlphaServer GS60 and AlphaServer GS140 platforms. The AlphaServer GS60 and GS140 platforms must continue to use the DECevent diagnostic tool.

In addition to WEBES, the HP System Tools CD-ROM includes DECevent, DSNLINK, and the Revision and Configuration Management (RCM) tools.

DECevent and WEBES can be used together in a cluster.

To access the most up-to-date service tool, installation, and documentation information, visit the following web site:

        http://h18000.www1.hp.com/support/svctools/

Documentation

For OpenVMS Version 7.3–2, online documentation is provided on two CD–ROMs to meet the needs of users of multiple formats. One CD–ROM is Files–11 formatted for use on OpenVMS systems; the second is ISO 9660 formatted for users of Windows® and Macintosh systems. The contents of the two CD–ROMs is virtually identical, with the exception of tools supplied for viewing files on the media. The Files–11 CD–ROM includes the HP Secure Web Browser (based on Mozilla) and a command procedure to launch the browser and view the documentation. The ISO 9660 CD–ROM includes the Adobe® Acrobat® Reader Version 5.0 for users who want to view PDF files on the CD.

The OpenVMS Version 7.3–2 Online Documentation CD–ROMs contain all the OpenVMS manuals in HTML and PDF formats. Associated product manuals are also available in HTML, and selected product and archived manuals are available in PDF format.

For more information about OpenVMS and selected layered product documentation, refer to the *Guide to OpenVMS Alpha Version 7.3–2 CD–ROMs* and the *HP OpenVMS Alpha Version 7.3–2 New Features and Documentation Overview*.

Before you install OpenVMS Alpha Version 7.3–2, refer to the following documents:

- *HP OpenVMS Alpha Version 7.3–2 Upgrade and Installation Manual*
- *HP OpenVMS Alpha Version 7.3–2 Release Notes*
- *HP OpenVMS Alpha Version 7.3–2 New Features and Documentation Overview*
- *Guide to OpenVMS Alpha Version 7.3–2 CD–ROMs*

OpenVMS VAX Version 7.3 and OpenVMS Alpha Version 7.3–2 Customers

Customers who receive the consolidated OpenVMS VAX Version 7.3 and OpenVMS Alpha Version 7.3–2 kit will receive not only the *HP OpenVMS Alpha Version 7.3–2 New Features and Documentation Overview*, *HP OpenVMS Alpha Version 7.3–2 Release Notes*, and cover letter, but also the *OpenVMS Version 7.3 New Features and Documentation Overview*, *OpenVMS Version 7.3 Release Notes*, and cover letter.

Software Product Descriptions

Software Product Descriptions (SPDs) for the OpenVMS operating system and System Integrated Products can be found on the OpenVMS distribution media. For information about locating the SPDs on the CD–ROM, refer to the *Guide to OpenVMS Alpha Version 7.3–2 CD–ROMs*. The file names for the OpenVMS Version 7.3–2 SPD are OVMS_732_SPD.PS and OVMS_732_SPD.TXT.

For the most up-to-date Software Product Descriptions (SPDs), visit the following web site:

    http://h18000.www1.hp.com/info/spd/

For software layered products, HP recommends that you obtain updates through the Software Products Library subscription service. The following OpenVMS Alpha Software Products Library subscription services are available:

Library Packages	Package Content	UPI
Operating System and Software Layered Products	Binaries only	5FX
Operating System and Software Layered Products	Binaries and online documentation	5G9
Software Layered Products	Binaries and online documentation	03X

OpenVMS Source Listings Kit

The OpenVMS Alpha Version 7.3–2 Source Listings Kit is available on CD–ROM. The source listing kit contains all nonproprietary source listings files that make up the OpenVMS operating system. The debug symbol files (DSF) are provided on the OpenVMS Alpha Source Listings Kit and contain information used by the OpenVMS Alpha System Code Debugger.

The OpenVMS Alpha Source Listings CD–ROM Kit and License includes the license required to view these files on a standalone system or in an OpenVMS Cluster environment. If you want to make these files available on another system (For example, at a remote site), you must purchase an additional kit. For each kit you purchase, you must sign a source license agreement. Contact your local HP representative for more information.

Use the following order number for the OpenVMS Alpha source listing:

OpenVMS Alpha Source Listings CD–ROM Kit and License: QB–MT1AB–E8

Layered Products

For more information about layered products included with OpenVMS Alpha Version 7.3–2, refer to the *Guide to OpenVMS Alpha Version 7.3–2 CD–ROMs*.

Release Notes

Read the following release notes before installation.

Dual-Controller HSG*nn* with Many LUNs Can Crash Under Heavy I/O Load

V7.3–2

A combination of improvements in driver performance and faster systems has uncovered a limit to the amount of I/O that a dual-controller HSG*nn* storage array configured with a relatively large number of LUNs can handle. When this limit is reached, it is possible for the array to be kept so busy processing I/O that it is unable to complete the normal periodic synchronization between controllers, causing a controller hang or crash and a loss of host access to some or all LUNs until a manual controller reset is performed. In the case of such a controller crash, the Last Failure Codes most likely to be reported on the HSG console are 01960186, 01942088, and 018600A0.

Most HSG*nn* devices will continue to run with no problems. If your site experiences an HSG controller hang or crash when a heavy load is applied and the HSG has more than approximately 24 LUNs configured, it may be possible to avoid future hangs or crashes by reconfiguring the controller with fewer LUNs or distributing I/O so that the HSG is not so heavily loaded.

This issue is being investigated by the appropriate HP engineering groups. For updated information concerning this issue, see the HP StorageWorks web site:

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http://h18006.www1.hp.com/products/storageworks/softwaredrivers/acs/
```

Firmware for OpenVMS Alpha Version 7.3–2

V7.3–2

OpenVMS Alpha Version 7.3–2 was tested with the platform-specific firmware included on the Alpha Systems Firmware CD-ROM Version 6.5. For older platforms no longer included on the Firmware CD-ROM, OpenVMS Version 7.3–2 was tested with the latest released firmware version. HP recommends upgrading to the latest firmware before upgrading OpenVMS.

The OpenVMS Alpha Version 7.3–2 CD-ROM package includes the Alpha Systems Firmware CD-ROM and Release Notes. Read the Release Notes before installing the firmware.

For AlphaServer ES47/ES80/GS1280 systems, use Alpha Systems Firmware Version 6.6 or later. You can obtain Version 6.6 and the latest firmware information from the following web site (URL is case sensitive):

```
ftp://ftp.digital.com/pub/Digital/Alpha/firmware/
```

DECwindows Version 1.3–1 LBX and XPROXY Help Files

V7.3–2

If you intend to install support for Low-Bandwidth X (an optional portion of the DECwindows client installation process), you must enter additional commands after installation to load the help files into the OpenVMS Help Library, so that online help will be available for the LBXPROXY and XPROXYMANAGER applications.

After the DECwindows Motif installation procedure has completed, enter the following command to load the help files into the library:

```
$ LIBRARY/HELP SYS$HELP: HELPLIB.HLB SYS$HELP: DECW$LBXPROXY_HELP.HLP
$ LIBRARY/HELP SYS$HELP: HELPLIB.HLB SYS$HELP: DECWXPROXYMANAGER_HELP.HLP
```

For more information about LBX and its related applications, refer to the *HP DECwindows Motif for OpenVMS Alpha New Features* manual. For more information about installing support for LBX, refer to the *HP DECwindows Motif for OpenVMS Alpha Installation Guide*.

DECwindows Version 1.3–1 — Race Condition May Occur with Certain Applications

V7.3–2

Due to a timing issue, a race condition that places applications into a compute-bound loop can occur on DECwindows Motif systems. Applications that continually display output to the screen by way of the local transport are most likely to see this problem. For example, issuing the DIRECTORY/FULL command continuously on two DECterm windows can trigger the condition.

To stop an application from looping, move or activate an input device (mouse, keyboard, stylus, and so on). This action returns focus to the desktop, clears the race condition, and restores normal system performance.

To reduce the likelihood of this problem occurring with unmonitored applications that run for an extended period of time, run the applications over the DECnet or TCP/IP transport. This slows the protocol traffic and decreases the chances of encountering timing-related issues.

The PWDMIX UAF Flag

V7.3–2

When setting an account to allow for mixed-case passwords, do not specify both the flag and the password operation on the same line. You must specify two separate MODIFY operations: one to set the PWDMIX flag and one to specify the password as a mixed-case password. For example:

```
UAF> MODIFY SYSTEM /FLAG=PWDMIX
UAF> MODIFY SYSTEM /PASS="NewmixedCasePassword"
```

The problem occurs because AUTHORIZE uses the account's current flags to steer the hashing of the new password and does not use any flags that are being set in the operation. This will be fixed in a future release of the OpenVMS operating system.

OpenVMS Support for Galaxy on AlphaServer ES47/ES80/GS1280 Systems

V7.3–2

OpenVMS Alpha Version 7.3–2 support for Galaxy on AlphaServer ES47/ES80/GS1280 systems is still undergoing testing at this time. For the current status of Galaxy support, see "More Information" on the Galaxy site or the "what's new on our site" link on the OpenVMS web site:

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http://h71000.www7.hp.com/availability/galaxy.html

http://www.hp.com/go/openvms
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