

HP OpenVMS Version 8.4

Dear OpenVMS Customer,

Hewlett-Packard is pleased to introduce the OpenVMS Version 8.4 operating system for both Integrity servers and Alpha platforms. HP is dedicated to providing customers with the most advanced functionality and the highest quality products possible and believes the OpenVMS Version 8.4 operating system release reflects this dedication.

This cover letter discusses the following topics:

- OpenVMS Version 8.4 new features
- Documentation
- Software Product Descriptions
- Operating Environments with Version 8.4
- HP Services Tools
- Release Notes

New Features

The OpenVMS Version 8.4 release provides all the features contained in the OpenVMS Version 8.3-1H1, Version 8.3, Version 8.2, and Version 8.2–1 releases, plus enhancements to system availability, security, and performance. The following are some of the features and enhancements:

- General user features and new product enhancements:
 - Added HP Code Signing for OpenVMS
 - Enhancements to DCL commands
 - Addition of new F\$CUNITS lexical function conversion units
 - Enhancement to F\$GETDVI lexical function
 - Support for 2 TiB disk volume
 - Addition of Per-Process Kernel Thread Limit
 - Dynamically enabling or disabling data cache (XFC)
 - Enabling or disabling XFC while mounting a volume
 - Increased MALLOC to 4 GB
 - Enhancements to Mail utility
 - Addition of new system service \$POWER_CONTROL
 - Addition of new High Precision Time system service \$GETTIM_PREC
 - Increased batch queue maximum limit
- Virtualization features:
 - OpenVMS as a quest operating system on HP Integrity Virtual Machines (Integrity VM)
 - Support for Insight Dynamic Virtual Server Environment (ID-VSE) for OpenVMS



- Performance enhancements:
 - Resource Affinity Domain (RAD) support for Integrity servers
- Disaster Tolerance and Cluster features:
 - Support for Cluster over Internet Protocol
 - Enhancements to HP Volume Shadowing for OpenVMS
- Storage devices and I/O support features:
 - Support for Sound card (HP AD317A PCI) on Integrity servers
 - Additional of storage devices and I/O controllers
- Security features:
 - Security enhancements to HP SSL
 - Global and local mapping of LDAP users
- System management features:
 - Provisioning enhancements using HP SIM
 - vKVM capability for OpenVMS added
 - CPU Component Indictment Dynamic Processor Resilience (DPR) support
 - Improved power management
 - New or modified system parameters
 - Enhancements to HP System Analysis Tools
 - Enhancement to InfoServer utility
- Programming features:
 - Enhancement to Callable Mail
 - Enhancements to HP C Run-Time Library (C RTL)
 - Enhancement to Linker utility
 - Item codes for system services added
 - New "send item" code added
- Associated product features:
 - HP TCP/IP Services Version 5.7 support for OpenVMS
 - Enhancements to DECnet-Plus
 - Enhancements to DECwindows

For a complete list of the new features in the OpenVMS Version 8.4 release, see the HP OpenVMS Version 8.4 New Features and Documentation Overview.

Documentation

The OpenVMS website contains all the OpenVMS manuals in PDF formats. Associated product manuals are also available in support of the Operating Environment products for Integrity servers.

Before you install OpenVMS Version 8.4, see the following documents:

- HP OpenVMS Version 8.4 Upgrade and Installation Manual
- HP OpenVMS Version 8.4 Release Notes
- HP OpenVMS Version 8.4 New Features and Documentation Overview



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 OpenVMS Alpha operating system CD and the OpenVMS for Integrity Servers Operating Environment DVD, see the *Guide to HP OpenVMS Version 8.4 Media*. The file names for the OpenVMS Version 8.4 SPD are OVMS_V84_SPD.PS and OVMS_V84_SPD.TXT.

For the most up-to-date Software Product Descriptions (SPDs), see the SPD website: http://www.hp.com/go/spd/

Operating Environment with OpenVMS Version 8.4

With the OpenVMS Version 8.4 release, the operating environments (OEs) providing OpenVMS elements have been changed:

- The three-tier Operating Environment model, which consists of Foundation Operating Environment (FOE), Enterprise Operating Environment (EOE), and Mission Critical Operating Environment (MCOE) is replaced with a two-tier Operating Environment model consisting of Base Operating Environment (BOE) and High Availability Operating Environment (HA-OE) in OpenVMS Version 8.4.
- BOE license includes all components of FOE and two components from EOE. The following products that were formerly part of the EOE are now part of the BOE:
 - DECram for OpenVMS
 - HP OpenVMS Management Station
- HA-OE license includes all components of MCOE, four components of EOE and Global Work Load Manager (gWLM). The following products that were formerly part of the EOE are now part of the HA-OE:
 - HP Availability Manager
 - OpenView Performance Agent (OVPA) for OpenVMS
 - RMS Journaling for OpenVMS
 - HP Volume Shadowing for OpenVMS
- The FOE Licenses automatically upgrades to BOE and EOE or MCOE licenses automatically upgrades to HA-OE.

HP Services Tools

The Services Tools and associated web pages may contain new diagnosis software that is applicable to the system and should be reviewed for the most recent updates to the diagnosis tools.

The Services Tools for OpenVMS on Integrity Servers distribution contains analysis, diagnosis and remote support software, for example WEBES and ISEE, for use by HPs service engineers and HPs Authorized Service Provider service engineers.

The software and associated documentation for use on systems that have hardware warranty, a service contract, or service obligation is available at:

http://h18023.www1.hp.com/support/svctools/



Release Notes

Read the following release notes before you install OpenVMS Version 8.4.

Note: For the detailed release notes of OpenVMS Version 8.4, please see the *HP OpenVMS Version 8.4* Release Notes.

1. Update Kits

OpenVMS engineering is pleased to release VMS84I_UPDATE-V0100 update kit for OpenVMS Integrity servers operating system Version 8.4 and VMS84A_UPDATE-V0100 updated kit for OpenVMS Alpha operating oystem Version 8.4. This update contains fixes for critical issues found in the OpenVMS operating system Version 8.4. HP recommends a mandatory install of this update on all systems running OpenVMS operating system Version 8.4. The update can be downloaded from: http://itrc.hp.com

2. HP TCP/IP Services for OpenVMS Version 5.7 ECO 1

OpenVMS engineering is pleased to release the HP TCP/IP Services for OpenVMS Version 5.7 ECO 1, which needs to be applied on the OpenVMS operating system Version 8.4. This update contains Streams Controlled Transport Protocol (SCTP) along with a few critical fixes found during the OpenVMS Version 8.4 Field Test. HP recommends a mandatory install of this update on all systems running OpenVMS operating system Version 8.4. The update can be downloaded from: http://itrc.hp.com

3. Support for RAD on Integrity cell-based Servers

OpenVMS Version 8.4 introduces support for Resource Affinity Domains (RAD) on Integrity cellbased servers. With this support, you can choose to change your configuration to include Cell Local Memory (CLM); however OpenVMS requires a minimum of 2 GB Interleaved Memory (ILM) to be configured. For configuration of CLM and ILM, refer to the documentation on Partition Manager (parmgr) at: http://docs.hp.com/en/PARMGR2/

If the system boot disk or dump disk is configured off the Ultra 160 SCSI adapter (Core I/O A9918A or A6794A) on an Integrity cell-based server with CLM configured, ensure that RAD_SUPPORT parameter is not modified from its default value of 10944667. The default RAD_SUPPORT parameter setting ensures that the per-RAD Non-Paged Pool feature is disabled.

Note: Per-RAD Non-Paged Pool feature is not supported with the Ultra 160 SCSI adapter; using it may result in a system hang or a system crash.

4. Availability Manager Data Analyzer

A few seconds after initiating the Availability Manager Data Analyzer Version 3.1 on either Open-VMS Alpha, OpenVMS Integrity servers, or Windows platforms, it stops displaying the node details.

Resolution:

This issue has been fixed. Please install the latest Availability Manager kit available for download at: http://h71000.www7.hp.com/openvms/products/availman/index.html

