VMS Software

VSI OpenVMS for Integrity Servers Version 8.4-2L3 Release Notes

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Contents

Preface

Introduction

VMS Software, Incorporated (VSI) is pleased to introduce the OpenVMS V8.4-2L3 operating system for HPE Integrity server platforms.

VSI OpenVMS V8.4-2L3 is a consolidated version that rolls up all previously released patch kits for VSI OpenVMS for Integrity servers V8.4-2L1. Future update kits of maintenance fixes and new features will be provided for this consolidated version.

With this release, VSI also introduces support for the HPE Integrity Smart Array P441 (Q9X08A) Controller.

Intended Audience

This document is intended for all users of the VSI OpenVMS V8.4-2L3 operating system. Read this document before you install, upgrade, or use VSI OpenVMS V8.4-2L3.

Document Structure

This document contains the following sections:

- New Features: Describes newly added functionality available in VSI OpenVMS V8.4-2L3.
- Release Notes: Describes software and documentation issues, restrictions, and corrections.

New Features

1. Support for HPE Integrity Smart Array P441 Controller (Q9X08A) on rx2800 i4 and i6 Servers

VSI OpenVMS V8.4-2L3 provides support for using the HPE Integrity Smart Array P441 Controller (Q9X08A) on rx2800 i4 and i6 servers.

For detailed information on setting up an HPE Integrity Smart Array P441 Controller for use with VSI OpenVMS V8.4-2L3, refer to Appendix A in the *VSI OpenVMS Version 8.4-2L3 Installation and Upgrade Manual*.

2. Installing VSI OpenVMS V8.4-2L3 Directly to a 16 Gb Fibre Channel System Disk

With VSI OpenVMS V8.4-2L3, you can install the VSI OpenVMS Integrity server operating environment directly to a Fibre Channel system disk (FC LUN) via a 16 Gb HBA. For detailed information, refer to Appendix B in the *VSI OpenVMS Version 8.4-2L3 Installation and Upgrade Manual*.

Note: Support for installation to a 16 Gb Fibre Channel system disk was first provided with the VSI OpenVMS V8.4-2L1 Update 1 DVD. That support required installation of VSI OpenVMS V8.4-2L1 as well as application of the VSI I64VMS VMS842L1I_UPDATE V1.0 patch kit to an intermediate OpenVMS (non-16 Gb Fibre Channel) system disk. The intermediate system disk was then copied to the desired 16 Gb Fibre Channel volume. An intermediate system disk is not required with VSI OpenVMS V8.4-2L3.

To install the VSI OpenVMS V8.4-2L3 operating environment via a 16 Gb HBA, follow these steps:

1. Engage your SAN team to connect the fibre ports from the 16 Gb HBA on the server to the Fibre Channel switches and update switch zoning, if in use.

2. Engage your SAN team to modify the SAN storage configuration to recognize the new 16 Gb HBA and to enable presentation of the LUNs to the rx2800 i4 or i6 server.

3. Configure your rx2800 i4 or i6 server to boot via your 16 Gb Fibre Channel HBA. Follow the instructions in Section B.3 titled "Enabling the 16 Gb HBA for System Booting" in the *VSI OpenVMS Version 8.4-2L3 Installation and Upgrade Manual*.

4. Boot the VSI OpenVMS V8.4-2L3 distribution media and install it directly to your Fibre Channel LUN.

   Important: Use @SYS$MANAGER:BOOT_OPTIONS.COM to ensure that your boot options are updated to include your new Fibre Channel system disk before moving on to the next step.

5. Follow the instructions in Section B.4 titled "Applying the Final HBA Setting" in the *VSI OpenVMS Version 8.4-2L3 Installation and Upgrade Manual*. For additional details, see Section B.2.3 titled "Use Case 3: Installing V8.4-2L3 via a 16 Gb HBA to a Fibre Channel System Disk for a Standalone Server".

3. OpenSSL Update

VSI SSL111 V1.1-1IA, based on the OpenSSL 1.1.1i code base, is the default SSL offering on VSI OpenVMS V8.4-2L3. All OpenVMS BOE components that are reliant on SSL features have been updated to use VSI SSL111.

VSI's previous versions of OpenSSL – VSI SSL1 V1.0-2UA (based on OpenSSL 1.0.2u) and VSI SSL V1.4-503 (based on OpenSSL 0.9.8ze) – remain available in this release in order to allow existing SSL-based customer applications to continue to run.
VSI SSL111 V1.1-1IA is designed to co-exist in parallel with VSI SSL1 and VSI SSL by means of using different symbols for different versions.

VSI recommends that applications using VSI SSL V1.4 or VSI SSL1 V1.0 be upgraded to use VSI SSL111 in order to stay current with the latest security standards and fixes. These earlier versions of OpenSSL are no longer supported by the OpenSSL community.

VSI OpenVMS V8.4-2L3 is designed to be compatible with, and allow seamless upgrades from, HPE OpenVMS releases, including systems that have had the HPE SSL1 set of patches installed.

4. CHECKSUM Utility Supports SHA1 and SHA256 Algorithms

In VSI OpenVMS V8.4-2L3, the CHECKSUM utility supports the SHA1 and SHA256 secure hash algorithms to calculate file checksums. These algorithms calculate a checksum for all bytes within a file and ignore possible record structures.

Use the CHECKSUM command qualifier /ALGORITHM=option to specify the algorithm for the file checksum calculation.

Refer to the CHECKSUM command help or the *VSI OpenVMS DCL Dictionary: A-M* for information about all supported checksum algorithms.

Release Notes

1. List of Patch Kits Included in VSI OpenVMS V8.4-2L3

The VSI OpenVMS operating system content from all of the following patch kits is included in VSI OpenVMS V8.4-2L3:

VMS842L1I_ACMESRV-V0100
VMS842L1I_AUTOGEN-V0200
VMS842L1I_BACKUP-V0100
VMS842L1I_DEBUG-V0300
VMS842L1I_DPML-V0100
VMS842L1I_DTSDTR-V0100
VMS842L1I_EDT-V0100
VMS842L1I_ENCRYPSHR-V0100
VMS842L1I_F11X-V0200
VMS842L1I_LAN-V0700
VMS842L1I_LCKMGRSTB-V0200
VMS842L1I_LDAP-V0400
VMS842L1I_NETACP-V0100
VMS842L1I_PEDRIVER-V0200
VMS842L1I_PWDMGMT-V0200
VMS842L1I_RTL-V0300
VMS842L1I_SDA-V0100
VMS842L1I_SMIOBJSHR-V0100
VMS842L1I_SORT-V0100
VMS842L1I_SYS-V0200
VMS842L1I_UPDATE-V0100
VMS842L1I_UTILITY-V0100

The release notes in text format from each of these patch kits are contained in the V842L3_SUPPLEMENTAL_PATCH_INFO.ZIP file that is available for download on VSIFTP.

2. AUTOGEN Fails to Create SYSDUMP.DMP on a Dump Off System Disk (DOSD)

When installing or updating to VSI OpenVMS V8.4-2L3 and configuring your system to write the system dump file, SYSDUMP.DMP, to a dump off system disk (DOSD), AUTOGEN fails to create the SYSDUMP.DMP file on DOSD.

As a workaround, copy SYSDUMP.DMP from SYS$SYSTEM on the system disk to the [SYSn.SYSEXE] directory on the dump off system disk.

Note: In some cases, if the dump off system disk has been mounted before running AUTOGEN, AUTOGEN may hang with the following messages:

```
%MOUNT-I-OPRQST, device is already mounted
%MOUNT-I-OPRQST, device _$11$DKB200: (BRIGHT) is not available
for mounting.
%MOUNT-I-NOOPR, no operator available to service request
```

This issue has been seen using a disk on a second P410i controller (configured as DKB) on a dual blade system. As a workaround, dismount the dump off system disk and re-run AUTOGEN.

3. Booting from a Physical DVD on a pre-i2 BL860c Integrity Server Blade May Not Be Successful

Booting from a physical DVD on a pre-i2 BL860c Integrity server blade may not be successful, potentially resulting in a fatal disk error and system hang.

To install or upgrade to VSI OpenVMS Version 8.4-2L3 on this type of system, please refer to the *VSI OpenVMS Version 8.4-2L3 Installation and Upgrade Manual* for alternate methods of installation.

4. MSA Utility: SET DISK Command Included in OpenVMS Documentation

The MSA utility command, SET DISK, that was previously omitted from the *VSI OpenVMS System Management Utilities Reference Manual, Volume II: M-Z* has now been added to the manual. This command is supported only on disks attached to the P411 or P441 Smart Array controller in HBA mode.

5. Spurious Error Messages During Shutdown When Booted from a DVD

When booted from a DVD, such as a V8.4-2L3 distribution DVD, the following messages may be displayed upon system shutdown:

```
DKBT-E-Failed to Send Command to SCSI Device ID( 0), LUN( 0)

**** Boot driver initialization routine returned failure
**** Error log buffer dump canceled, no dump file available

SYSTEM SHUTDOWN COMPLETE
```

The messages appear because the shutdown process mistakenly checks whether it needs to write any updated error log buffers to the system disk. Since the DVD is booted in a read-only fashion, no such buffer update can be performed.

These messages may be ignored. They will be removed in a future release of VSI OpenVMS.

6. System Code Debugger (SCD) Does Not Work as Expected

Booting VSI OpenVMS V8.4-2L3 as a target system with the System Code Debugger (SCD) results in a crash and failure to take a crash dump. This issue will be addressed in a future release of VSI OpenVMS.

7. VSI ABS Displays a Warning Message During Installation

When installing the Archive Backup System (VSI ABS) application on VSI OpenVMS V8.4-2L3, the following message is displayed:

```
This version of OpenVMS software was not available for testing at the
time this software kit was released. Qualification of this software on
this OpenVMS version may have been completed since that time. Check
the Software Product Description or ask a VSI or HP representative to
ensure that this version of software is supported with the version of
OpenVMS software that you are running.

* Do you want to continue the installation [YES]?
```

Press **Enter** to continue the installation. Once installed, VSI ABS will properly operate on V8.4-2L3.

8. VSI ACMS Displays a Warning Message During Installation

When installing Application Control and Management System (VSI ACMS) on VSI OpenVMS V8.4-2L3, Version 8.4-2L3 is not listed as a supported operating system version for this application. The following message is displayed:

```
ACMS V5.3-4 is supported on VSI OpenVMS IA64 V8.4-1H1, V8.4-2, and V8.4-2L1
Do you want to continue [YES]
```

Press **Enter** to continue the installation. Once installed, VSI ACMS will properly operate on V8.4-2L3.

9. VSI C Run-Time Library (C RTL) Update

VSI C Run-Time Library (C RTL) for OpenVMS shipped with VSI OpenVMS V8.4-2L3 includes bug fixes and changes as well as new functions and improvements that were previously provided for VSI OpenVMS V8.4-2L1, including those from the latest CRTL ECO V3.0 kit.

The release notes in text format from the CRTL ECO V3.0 kit are contained in the V842L3_SUPPLEMENTAL_PATCH_INFO.ZIP file that is available for download on VSIFTP.

10.   VSI Enhanced Password Management

The VSI Enhanced Password Management software, originally released as a separately installable patch kit in April 2019, is included in VSI OpenVMS V8.4-2L3. This software provides additional tools for defining and implementing the OpenVMS password policy at your site.

For detailed information, refer to the following documents:

- The associated product release notes in text format contained in the V842L3_SUPPLEMENTAL_PATCH_INFO.ZIP file that is available for download on VSIFTP.
- *VSI OpenVMS Enhanced Password Management Installation and User Guide* that is available on the VMS Software Documentation webpage and also located in the documentation directory on the VSI OpenVMS distribution media.

11. VSI MSAI Generates Error Messages During Upgrade to VSI OpenVMS V8.4-2L3

If you have the Migration Software for Alpha to Integrity Servers (VSI MSAI V3.2) application installed on your system, then the following multiple error messages will be displayed during the upgrade to VSI OpenVMS V8.4-2L3:

```
%PCSI-I-RETAIN, file <filename> will not be replaced because file
from kit has lower generation number
```

This happens because the existing MSAI images have higher generation numbers than the same images provided with VSI OpenVMS V8.4-2L3. You can safely ignore these messages and proceed with the upgrade. This issue will be addressed in a future MSAI release.

VMS Software

12. VSI OpenVMS Installation May Repeat Post-Installation Task Notification

Products that have multiple dependencies on other products may display required post-installation tasks more than once during kit installation. This happens because PCSI uses a recursive method to ensure that all dependencies are found, but it does not screen previous dependencies under all circumstances. You can safely ignore the duplicated displays; follow the instructions only once. VSI will address this behavior in a future release.

13. VSI TCP/IP Services V5.7-13ECO5F

VSI OpenVMS V8.4-2L3 provides TCP/IP communications using VSI TCP/IP Services V5.7-13ECO5F.

VSI TCP/IP Services included with VSI OpenVMS V8.4-2L3 is comprised of a base kit (VSI-I64VMS-TCPIP-V0507-13ECO5F-1) and a recommended patch kit (VSI-I64VMS-TCPIP_PAT-V0507-ECO5O-4).

Note: VSI recommends that you select to include the patch kit VSI-I64VMS-TCPIP_PAT-V0507-ECO5O-4 when you install or upgrade. For detailed information, please refer to the release notes bundled with the kits.

Important: Prior to upgrading to VSI OpenVMS V8.4-2L3, you *must* remove the VSI TCP/IP V10.5 or V10.6 network stack, if this stack is installed on your system. Otherwise, the upgrade will be terminated with the following message:

```
VSI TCP/IP for OpenVMS is not supported for VSI OpenVMS V8.4-2L3

        VSI TCP/IP for OpenVMS is installed on this system disk. This
        product is not supported on VSI OpenVMS V8.4-2L3.

        You must use PRODUCT REMOVE to uninstall the VSI TCP/IP
        for OpenVMS product before you may upgrade this system
        disk to VSI OpenVMS V8.4-2L3.
```

Before removing VSI TCP/IP V10.5 or V10.6, please carefully read and follow the instructions in Section 1.1 titled "Uninstall VSI TCP/IP V10.5 and V10.6" in the *VSI OpenVMS Version 8.4-2L3 Installation and Upgrade Manual*. If after removing VSI TCP/IP, you encounter issues with the default system stack, please contact VSI Support for remediation.

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14. VSI VMSI18N Internationalization Data Kit

The VSI VMSI18N data kit consists of a base kit and a patch kit (VMSI18N842L1I_JA-V0100). Before installing the patch kit, ensure that you have the base kit installed on your system. Otherwise, the installation will be terminated with the following error messages:

```
%PCSI-E-APPLYTOERR, maintenance product VSI I64VMS VMSI18N842L1I_JA V1.0
applies to a product that is not installed
-PCSI-E-APPLYTOPRD, prerequisite product is VSI I64VMS VMSI18N (version minimum
V8.4-2 and version maximum V8.4-2L1)
%PCSIUI-E-ABORT, operation terminated due to an unrecoverable error condition
```

Note: In the error message, Version 8.4-2L3 is not listed as a supported OpenVMS version for this kit. Please ignore this message and install the base kit first and then the patch kit. Once installed, VSI VMSI18N will properly operate on V8.4-2L3.

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