SUPPORT COMMUNICATION - CUSTOMER BULLETIN

Document ID: a00092491en_us

Version: 1

Bulletin: HPE SAS Solid State Drives - Critical Firmware Upgrade Required for Certain HPE SAS Solid State Drive Models to Prevent Drive Failure at 32,768 Hours of Operation

NOTICE: The information in this document, including products and software versions, is current as of the Release Date. This document is subject to change without notice.

Release Date: 2019-11-19 **Last Updated:** 2019-11-22

DESCRIPTION

IMPORTANT: This HPD8 firmware is considered a critical fix and is required to address the issue detailed below. HPE strongly recommends immediate application of this critical fix. Neglecting to update to SSD Firmware Version HPD8 will result in drive failure and data loss at 32,768 hours of operation and require restoration of data from backup in non-fault tolerance, such as RAID 0 and in fault tolerance RAID mode if more drives fail than what is supported by the fault tolerance RAID mode logical drive. By disregarding this notification and not performing the recommended resolution, the customer accepts the risk of incurring future related errors.

HPE was notified by a Solid State Drive (SSD) manufacturer of a firmware defect affecting certain SAS SSD models (reference the table below) used in a number of HPE server and storage products (i.e., HPE ProLiant, Synergy, Apollo, JBOD D3xxx, D6xxx, D8xxx, MSA, StoreVirtual 4335 and StoreVirtual 3200 are affected).

The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours). After the SSD failure occurs, neither the SSD nor the data can be recovered. In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.

To determine total Power-on Hours via Smart Storage Administrator, refer to the link below:

<u>Smart Storage Administrator (SSA) - Quick Guide to Determine SSD Uptime</u>

For more details, please refer to the drive firmware Release Notes for the version with this fix listed in the Resolution section.

SCOPE

Any of the following HPE SAS SSD models running a drive firmware version prior to HPD8:

Important: For SSDs with a firmware fix the week of December 9, 2019, note that due to the nature of the SSD failure not occurring until attaining 32,768 hours of operation, these drives are NOT susceptible to failure during this extended period of time.

HPE Model Number	HPE SKU	HPE SKU DESCRIPTION	HPE Spare Part SKU	HPE Firmware Fix Date
VO0480JFDGT	816562-B21	HP 480GB 12Gb SAS 2.5 RI PLP SC SSD	817047-001	11/22/2019
VO0960JFDGU	816568-B21	HP 960GB 12Gb SAS 2.5 RI PLP SC SSD	817049-001	11/22/2019
VO1920JFDGV	816572-B21	HP 1.92TB 12Gb SAS 2.5 RI PLP SC SSD	817051-001	11/22/2019
VO3840JFDHA	816576-B21	HP 3.84TB 12Gb SAS 2.5 RI PLP SC SSD	817053-001	11/22/2019

MO0400JFFCF	822555-B21	HP 400GB 12Gb SAS 2.5 MU PLP SC SSD S2	822784-001	11/22/2019
MO0800JFFCH	822559-B21	HP 800GB 12Gb SAS 2.5 MU PLP SC SSD S2	822786-001	11/22/2019
MO1600JFFCK	822563-B21	HP 1.6TB 12Gb SAS 2.5 MU PLP SC SSD S2	822788-001	11/22/2019
MO3200JFFCL	822567-B21	HP 3.2TB 12Gb SAS 2.5 MU PLP SC SSD S2	822790-001	11/22/2019
VO000480JWDAR	875311-B21	HPE 480GB SAS SFF RI SC DS SSD	875681-001	Week of 12/9/2019
VO000960JWDAT	875313-B21	HPE 960GB SAS SFF RI SC DS SSD	875682-001	Week of 12/9/2019
VO001920JWDAU	875326-B21	HPE1.92TB SAS RI SFF SC DS SSD	875684-001	Week of 12/9/2019
VO003840JWDAV	875330-B21	HPE 3.84TB SAS RI SFF SC DS SSD	875686-001	Week of 12/9/2019
VO007680JWCNK	870144-B21	HPE 7.68TB SAS 12G RI SFF SC DS SSD	870460-001	Week of 12/9/2019
VO015300JWCNL	870148-B21	HPE 15.3TB SAS 12G RI SFF SC DS SSD	870462-001	Week of 12/9/2019
VK000960JWSSQ	P06584-B21	HPE 960GB SAS RI SFF SC DS SSD	P08608-001	Week of 12/9/2019
VK001920JWSSR	P06586-B21	HPE 1.92TB SAS RI SFF SC DS SSD	P08609-001	Week of 12/9/2019
VK003840JWSST	P06588-B21	HPE 3.84TB SAS RI SFF SC DS SSD	P08610-001	Week of 12/9/2019
VK003840JWSST	P11329-B21	HPE 3.84TB SAS RI LFF SCC DS SPL SSD	P11360-001	Week of 12/9/2019
VK007680JWSSU	P06590-B21	HPE 7.68TB SAS RI SFF SC DS SSD	P08611-001	Week of 12/9/2019
VO015300JWSSV	P06592-B21	HPE 15.3TB SAS RI SFF SC DS SSD	P08612-001	Week of 12/9/2019

RESOLUTION

Immediately upgrade the drive firmware to version HPD8, which HPE has released to prevent the issue described above.

Note: A server reboot is not required if SSDs are attached to a Smart Array Controller.

Obtain HPD8 from one of the following links depending on Operating System and HPE SAS SSD model installed:

HPD8 firmware for VO0480JFDGT, VO0960JFDGU, VO1920JFDGV and VO3840JFDHA drives:

Online Flash Component for VMware ESXi - HPD8

Online Flash Component for Windows - HPD8

Online Flash Component for Linux - HPD8

HPD8 firmware for MO0400JFFCF, MO0800JFFCH, MO1600JFFCK and MO3200JFFCL drives:

Online Flash Component for VMware - HPD8

Online Flash Component for Windows - HPD8

Online Flash Component for Linux - HPD8

Release Notes

Issue Fixed

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.

For more information on the installation instructions, refer to the following link:

HPD8 Installation Instructions

Note

If SSA is not available to determine total Power-on Hours, call Support and reference the advisory a00092485. Click on the following URL to locate the HPE Customer Support phone number in your country:

Technical Support Phone Numbers

RECEIVE PROACTIVE UPDATES: Receive support alerts (such as Customer Advisories), as well as updates on drivers, software, firmware, and customer replaceable components, proactively via e-mail through HPE Subscriber's Choice. Sign up for Subscriber's Choice at the following URL: Proactive Updates Subscription Form.

NAVIGATION TIP: For hints on navigating HPE.com to locate the latest drivers, patches, and other support software downloads for HPE systems and Options, refer to the <u>Navigation Tips document</u>.

SEARCH TIP: For hints on locating similar documents on HPE.com, refer to the <u>Search Tips Document</u>.

Hardware Platforms Affected: HPE Synergy 480 Gen9 Compute Module, HPE Synergy 660 Gen9 Compute Module, HPE 400GB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty MO0400JFFCF Solid State Drive, HPE 800GB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty MO0800JFFCH Solid State Drive, HPE 1.6TB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty MO1600JFFCK Solid State Drive, HPE 3.2TB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty MO3200JFFCL Solid State Drive, HPE 480GB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty VO0480JFDGT Solid State Drive, HPE 960GB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty VO0960JFDGU Solid State Drive, HPE 3.84TB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty VO3840JFDHA Solid State Drive, HPE Synergy 620 Gen9 Compute Module, HPE Synergy 680 Gen9 Compute Module, HPE ProLiant XL270d Gen9 Server, HPE D6020 Disk Enclosure, HPE StoreVirtual 3000 Storage, HPE D8000 Disk Enclosures, HPE ProLiant SL230s Gen8 Server, HPE ProLiant BL460c Gen8 Server Blade, HPE ProLiant BL465c Gen8 Server Blade, HPE ProLiant DL160 Gen8 Server, HPE ProLiant BL420c Gen8 Server Blade, HPE ProLiant DL320e Gen8 Server, HPE ProLiant WS460c Gen8 Graphics Server Blade, HPE ProLiant BL660c Gen8 Server Blade, HPE ProLiant DL560 Gen8 Server, HPE D6000 Disk Enclosure, HPE StoreEasy 1000 Storage, HPE D2220sb Storage Blade, HPE ProLiant SL210t Gen8 Server, HPE StoreVirtual 4335 Hybrid Storage, HPE ProLiant DL580 Gen8 Server, HPE D3000 Disk Enclosures, HPE ProLiant DL160 Gen9 Server, HPE ProLiant DL180 Gen9 Server, HPE ProLiant DL360 Gen9 Server, HPE ProLiant BL460c Gen9 Server Blade, HPE ProLiant DL380 Gen9 Server, HPE ProLiant ML350 Gen9 Server, HPE ProLiant XL230a Gen9 Server, HPE ProLiant DL388 Gen9 Server, HPE ProLiant DL120 Gen9 Server, HPE ProLiant WS460c Gen9 Graphics Server Blade, HPE ProLiant DL580 Gen9 Server, HPE ProLiant BL660c Gen9 Server Blade, HPE ProLiant DL560 Gen9 Server, HPE Apollo 4200 Gen9 Server, HPE Apollo 4500 System, HPE ProLiant XL450 Gen9 Server

Operating Systems Affected: Not Applicable

Software Affected: Not Applicable

Support Communication Cross Reference ID: SIK5130

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