



Hewlett Packard
Enterprise

HPE 3PAR OS 3.3.1 MU2 Patch 60

Release Notes

Abstract

This release notes document is for 3.3.1 MU2 P60.

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Purpose

The HPE 3PAR OS 3.3.1 MU2 P60 provides support for drive firmware updates.

! **IMPORTANT:** See the [HPE 3PAR OS and Service Processor Software Update Guide \(HPE 3PAR OS 3.3.1 HPE 3PAR Service Processor 5.x\)](#) for instructions on updating your specific software.

Guidance

This patch is critical for arrays containing the affected drive models.

Prerequisites

- Minimum Service Processor required: 5.0.3 + latest SP Patch.
- Base OS: 3.3.1 MU2. See the Requires field in the Patch details.

Patch details

Patch ID: P60

Synopsis: Provides support for drive FW updates

Date: March 07, 2019, 13:54:58 PST

Description: See the Release Notes for details about this patch

Affected Packages: tpd-drivefw, tpd-fwdb, tpd-prerevert

Obsoletes: None

Requires: OS-3.3.1.410-MU2,OS-3.3.1.410-P51,OS-3.3.1.410-P52

Build Version: 3.3.1.523

Patches Included: None.

Patches Obsolete by Combination: None.

Supports Revert: Yes

Notes:

NOTE:

Hewlett Packard Enterprise recommends installing patches in the same sequence as they are released, unless instructed otherwise.

Modifications

HPE 3PAR OS 3.3.1 MU2 P60 provides support for drive firmware updates for the following drives:

Drive	Categor y	Capacity	Speed	StoreSer v 10000	StoreSer v 7000	StoreSer v 20000	StoreSer v 8000	StoreSer v 9000	FW
SKST03 00S5xeN 015	FC	300GB	15K	Yes	Yes	Yes	Yes	No	3P01

Table Continued

SKST06 00S5xeN 015	FC	600GB	15K	Yes	Yes	Yes	Yes	No	3P01
SKST06 00S5xeF 015	FC	600GB	15K	Yes	Yes	Yes	Yes	No	3P01
SSKB06 00S5xeN 010	FC	600GB	10K	Yes	Yes	Yes	Yes	No	3P02
SSKB12 00S5xeN 010	FC	1.2TB	10K	Yes	Yes	Yes	Yes	No	3P02
SSKB18 00S5xeN 010	FC	1.8TB	10K	Yes	Yes	Yes	Yes	No	3P02
SSKB12 00S5xeF 010	FC	1.2TB	10K	Yes	Yes	Yes	Yes	No	3P02

HPE 3PAR OS 3.3.1 MU2 P60 addresses the following issues:

Issue ID: 263157

Issue summary: A drive may experience a firmware issue causing it to become unresponsive and eventually fail.

Platforms affected: All StoreServ

Affected software versions: 3.2.2 MU4 - MU6, 3.3.1 GA - MU3

Issue description: A drive firmware issue can create a race condition putting the drive into an infinite loop. This loop results in sudden loss of both SAS ports and leads to a *Degraded drive status* for *Prolonged Missing*. This is followed by reconstruction of the drive's data from other drives in the same RAID set. After all data is successfully reconstructed, the drive will be marked *Failed* and replaced.

Symptoms: Drives are missing.

Conditions of occurrence: Arrays are configured with the following drives:

- KST0300S5xeN015, SKST0600S5xeN015, SKST0600S5xeF015 drives with firmware prior to version 3P01.
- SSKB0600S5xeN010, SSKB1200S5xeN010, SSKB1800S5xeN010, SSKB1200S5xeF010, SKST0300S5xeN015 drives with firmware prior to version 3P02.

Impact: Low

Customer circumvention: None.

Customer recovery steps: None.

Affected components

Component	Version
Firmware Database	3.3.1.523 (P60)
Drive Firmware	3.3.1.523 (P60)

NOTE: Applying an HPE 3PAR OS patch can cause a restart of the affected OS components. This restart is an expected behavior, which will generate events and alerts. The system continues to serve data, but existing CLI or SSMC sessions could be interrupted.

Installing Drive/Cage Firmware

After a firmware patch is installed successfully, the firmware (drive or cage) must be updated manually. To update the firmware, run the CLI command `starttask admithw -ni`. This command runs the update process as a task. Record the task ID for monitoring purposes. Monitor the task for successful completion using the CLI command `showtask -d <task_ID>`. See the appropriate upgrade documentation for details on patch installation. If the task fails, resolve the issue due to which the task failed. After the issue is resolved, issue the CLI command `starttask admithw -ni`. Note the new task ID number and monitor the `admithw` task completion. Run the `admithw` task to successful completion as soon as possible after installing patches.

❗ **IMPORTANT:** While revert is possible, HPE does not recommended reverting a patch that delivers firmware after the `admithw` command has been executed. The `admithw` command will activate/update the new firmware. If the patch is reverted prior to `admithw` being executed, use the command `showfirmwaredb -l` after the patch revert has completed to ensure that the FW status is changed from `degraded (old_firmware)` to `normal (current)`. If the OS on the array is upgraded to a later version after a firmware patch is installed, install firmware patches prior to executing `admithw`.

Verification

The installation of Patch 60 can be verified from an interactive CLI session. Issue the CLI command `showversion -a -b` to verify that Patch 60 is listed:

Release version 3.3.1.410 (MU2)
Patches: P32,P40,P45,P51,P52,P60

Component Name	Version
CLI Server	3.3.1.514 (P51)
CLI Client	3.3.1.514
System Manager	3.3.1.514 (P51)
Kernel	3.3.1.410 (MU2)
TPD Kernel Code	3.3.1.410 (MU2)
TPD Kernel Patch	3.3.1.514 (P51)
CIM Server	3.3.1.410 (MU2)
WSAPI Server	3.3.1.410 (MU2)
Console Menu	3.3.1.410 (MU2)
Event Manager	3.3.1.482 (P45)
Internal Test Tools	3.3.1.410 (MU2)
LD Check Tools	3.3.1.410 (MU2)
Network Controller	3.3.1.410 (MU2)
Node Disk Scrubber	3.3.1.410 (MU2)
PD Scrubber	3.3.1.410 (MU2)
Per-Node Server	3.3.1.482 (P45)
Persistent Repository	3.3.1.514 (P51)
Powerfail Tools	3.3.1.410 (MU2)
Preserved Data Tools	3.3.1.410 (MU2)
Process Monitor	3.3.1.410 (MU2)
Software Updater	3.3.1.467 (P40)
TOC Server	3.3.1.410 (MU2)
VV Check Tools	3.3.1.410 (MU2)
Upgrade Check Scripts	180525.U013.3.3.1.460 (MU3)
File Persona	1.4.2.40-20171006 (MU2)
SNMP Agent	1.10.0
SSH	6.0p1-4+deb7u5
VASA Provider	3.0.17 (MU2)
Firmware Database	3.3.1.523 (P60)
Drive Firmware	3.3.1.523 (P60)
UEFI BIOS	05.02.54 (MU2)
MCU Firmware (OKI)	4.8.60 (MU2)
MCU Firmware (STM)	5.3.17 (MU2)
Cage Firmware (DC1)	4.44 (MU2)
Cage Firmware (DC2)	2.64 (MU2)
Cage Firmware (DC3)	08 (MU2)
Cage Firmware (DC4)	2.64 (MU2)
Cage Firmware (DCN1)	4082 (MU2)
Cage Firmware (DCN2)	4082 (MU2)
Cage Firmware (DCS1)	4082 (MU2)
Cage Firmware (DCS2)	4082 (MU2)
Cage Firmware (DCS5)	2.79 (MU2)
Cage Firmware (DCS6)	2.79 (MU2)
Cage Firmware (DCS7)	4082 (MU2)
Cage Firmware (DCS8)	4082 (MU2)
QLogic QLA4052C HBA Firmware	03.00.01.77 (MU2)
QLogic QLE8242 CNA Firmware	04.15.27
QLogic 260x HBA FC Firmware	174.03.70
QLogic 27xx/268x HBA FC Firmware	174.03.70
QLogic 83xx HBA FCoE Firmware	08.01.05

QLogic 8300 HBA iSCSI Firmware	05.07.35
Emulex LP11002 HBA Firmware	02.82.x10
Emulex LPe12002 HBA Firmware	02.10.x03
Emulex LPe12004 HBA Firmware	02.10.x03
Emulex LPe16002 HBA Firmware	11.1.220.10
Emulex LPe16004 HBA Firmware	11.1.220.10
3PAR FC044X HBA Firmware	200A8
LSI 9201-16e HBA Firmware	17.11.03
LSI 9205-8e HBA Firmware	17.11.03
LSI 9300-8e HBA Firmware	10.10.01

NOTE: When displaying the `showversion` command output from the SP, the CLI Client version is static in the SP code and may differ from the output from any other system.

Websites

General websites

Hewlett Packard Enterprise Information Library

www.hpe.com/info/EIL

Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix

www.hpe.com/storage/spock

Storage white papers and analyst reports

www.hpe.com/storage/whitepapers

For additional websites, see **[Support and other resources](#)**.

Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
<http://www.hpe.com/assistance>
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:
<http://www.hpe.com/support/hpesc>

Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.

- To download product updates:

Hewlett Packard Enterprise Support Center

www.hpe.com/support/hpesc

Hewlett Packard Enterprise Support Center: Software downloads

www.hpe.com/support/downloads

Software Depot

www.hpe.com/support/softwaredepot

- To subscribe to eNewsletters and alerts:

www.hpe.com/support/e-updates

- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page:

www.hpe.com/support/AccessToSupportMaterials



IMPORTANT: Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

<http://www.hpe.com/support/selfrepair>

Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

Remote support and Proactive Care information

HPE Get Connected

www.hpe.com/services/getconnected

HPE Proactive Care services

www.hpe.com/services/proactivecare

HPE Proactive Care service: Supported products list

www.hpe.com/services/proactivecaresupportedproducts

HPE Proactive Care advanced service: Supported products list

www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information

Proactive Care central

www.hpe.com/services/proactivecarecentral

Proactive Care service activation

www.hpe.com/services/proactivecarecentralgetstarted

Warranty information

To view the warranty information for your product, see the links provided below:

HPE ProLiant and IA-32 Servers and Options

www.hpe.com/support/ProLiantServers-Warranties

HPE Enterprise and Cloudline Servers

www.hpe.com/support/EnterpriseServers-Warranties

HPE Storage Products

www.hpe.com/support/Storage-Warranties

HPE Networking Products

www.hpe.com/support/Networking-Warranties

Regulatory information

To view the regulatory information for your product, view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products*, available at the Hewlett Packard Enterprise Support Center:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional regulatory information

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

www.hpe.com/info/reach

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

www.hpe.com/info/ecodata

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

www.hpe.com/info/environment

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