HPE 3PAR OS 3.3.1 MU2 Patch 35 Release Notes

Abstract

This release notes document is for Patch 35.

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Purpose

The HPE 3PAR OS 3.3.1 MU2 Patch 35 provides 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 is an as needed patch.

Prerequisites

- SP prerequisite: SP-5.0.3 plus the latest SP patch.
- Base OS: OS-3.3.1.410-MU2. See Requires in Patch details.

Patch details

Patch ID: P35

Synopsis: Provides support for drive firmware updates

Date: July 09, 2018, 19:08:48 PDT

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-P30

Build Version: 3.3.1.448

Patches Partially Superseded: None

Patches Included: None

Patches Obsolete by Combination: None

Support Revert: Yes

Notes:

NOTE:

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

Modifications

Patch 35 provides firmware updates for the following drives.

Category	Drive Family	Vendor	Type	Capacity	Form	10K	7K	20K	8K	9K	3PAR Model	FW Ver
FW	PM1633	Samsung	SSD	480GB	SFF		x	x	x		AREX0480S5xnNTRI	3P07
FW	PM1633	Samsung	SSD	920GB	SFF		x				AREX0920S5xnNTRI	3P07
FW	PM1633	Samsung	SSD	1.92TB	SFF	x	x	x	x		AREX1920S5xnNTRI	3P07
FW	PM1633	Samsung	SSD	3.84TB	SFF		x	x	x		AREX3840S5xnNTRI	3P07
FW	PM1635	Samsung	SSD	400GB	SFF	x	x	x	x		AREX0400S5xnNTRI	3P03
FW	PM1633 FIPS	Samsung	SSD	920GB	SFF		x	x	x		AREX0920S5xnFTRI	3P03
FW	PM1633 FIPS	Samsung	SSD	1.92TB	SFF		x	x	x		AREX1920S5xnFTRI	3P03
FW	PM1633 FIPS	Samsung	SSD	3.84TB	SFF		x	x	x	x	AREX3840S5xnFTRI	3P03
FW	Optimus Max	SanDisk	SSD	3.84TB	SFF		x	x	x		DOPM3840S5xnNMRI	3P07
FW	Optimus Eco	SanDisk	SSD	480GB	SFF		x	x	x		DOPE0480S5xnNMRI	3P0A
FW	Optimus Eco	SanDisk	SSD	1.92TB	SFF		x	x	x		DOPE1920S5xnNMRI	3P0A
FW	Thunderbolt	Seagate	FC	600GB	SFF	x	x	x	x		STHB0600S5xeN010	3P03
FW	Thunderbolt	Seagate	FC	1.2TB	SFF	x	x	x	x		STHB1200S5xeN010	3P03
FW	Thunderbolt	Seagate	FC	1.8TB	SFF	x	x	x	x		STHB1800S5xeN010	3P03

Patch 35 addresses the following issues.

Issue ID: 210885

Issue Summary: Certain drive models cause data miscompare due to undetected writer head degradation.

Platforms affected: All StoreServ

Affected Software versions: 3.2.2 MU3 – MU6, 3.3.1 MU1 – MU2

Issue Description: The affected drive models can cause a data miscompare due to head element degradation over time which loses the capability to overwrite existing data with new data. This firmware update increases the monitoring frequency and will remove the degraded disk from the system.

The following drive models are affected:

STHB0600S5xeN010

STHB1200S5xeN010

STHB1800S5xeN010

STHB0900S5xeN010

Symptoms: Data inconsistency.

Conditions of Occurrence: The affected drive models are installed.

Impact: Low

Customer Circumvention: None.

Customer Recovery Steps: None..

Issue ID: 207486, 211833, 221852, 235211, 231272, 235211

Issue Summary: Unsuccessful upgrade of HDD firmware for drive models beginning with DOPE and DOPM.

Platforms affected: All StoreServ

Affected Software versions: 3.2.1 MU5, 3.2.2 MU3 – MU6, 3.3.1 MU1 – MU2

Issue Description: The DOPE 3P0A firmware corrects an issue when upgrading DOPE drive models from firmware versions prior to 3P07. All versions of DOPE firmware can now be upgraded using version 3P0A.

The DOPM 3P07 firmware corrects an issue when upgrading DOPM drive models from firmware versions prior to 3P05. All versions of DOPM firmware can now be upgraded using version 3P07.

Symptoms: Data inconsistency.

Conditions of Occurrence: Upgrading firmware on DOPE/DOPM disk drives.

Impact: Medium

Customer Circumvention: None.

Customer Recovery Steps: None.

Issue ID: 215795, 196915

Issue Summary: Upgrading drive firmware on drives with the model name beginning with AREX..

Platforms affected: All StoreServ

Affected Software versions: 3.2.1 MU5, 3.2.2. MU3 – MU6, 3.3.1 MU1 – MU2

Issue Description: The AREX 3P03 and 3P07 firmware corrects a data inconsistency issue with previous firmware versions.

Symptoms: Data inconsistency was reported.

Conditions of Occurrence: AREX0920S5xnFTRI, AREX1920S5xnFTRI, AREX3840S5xnFTRI drives with firmware prior to version 3P03.

AREX0400S5xnNTRI drives with firmware prior to version 3P03.

AREX0480S5xnNTRI, AREX0920S5xnNTRI, AREX1920S5xnNTRI, AREX3840S5xnNTRI drives with firmware prior to version 3P07.

Impact: High

Customer Circumvention: New firmware to address issue.

Customer Recovery Steps: Replace the drive.

Issue ID: 220731

Issue Summary: Updating spares file /opt/tpd/spn/drive.cfg.

Platforms affected: All StoreServ

Affected Software versions: 3.3.1 MU1 – MU2

Issue Description: The spares file /opt/tpd/spn/drive.cfg is updated when new drives are released.

Symptoms: Drives that show UNKNOWN in the Spare_PN field.

Conditions of Occurrence: Systems with SSKB0600S5xeN010, SSKB1200S5xeF010, SSKB1200S5xeN010,

SSKB1800S5xeN010 drives.

Systems with HCFP0600S5xeN010, HCFP1200S5xeF010, HCFP1200S5xeN010 drives.

Impact: Medium

Customer Circumvention: Patch with new spares file to address issue.

Customer Recovery Steps: Replace the drive.

Affected components

Component	Version
Firmware Database	3.3.1.448 (P35)
Drive Firmware	3.3.1.448 (P35)

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 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. The `admithw` task should be run to successful completion as soon as possible after installing patches.

This patch is revertible, however, revert after the supported drives are in use makes them unavailable.

IMPORTANT:

Drive firmware patches that are installed and then reverted prior to activation of the firmware upgrade require that the CLI command `showfirmwaredb -l` is executed after the patch revert is completed. This final, manual step in the revert process ensures that the physical disk state is changed from `degraded old_firmware` back to `normal`. While revert is possible, it is not recommended to revert a patch that delivers firmware after activation (admithw has been run).

Verification

The installation of P35 can be verified from an interactive CLI session. Issue the CLI command `showversion -a -b` to verify that P35 is listed.

```
$ showversion -a -b
Release version 3.3.1.410 (MU2)
Patches:  P30,P35

Component Name                  Version
CLI Server                      3.3.1.410 (MU2)
CLI Client                      3.3.1.410
System Manager                  3.3.1.434 (P30)
Kernel                          3.3.1.410 (MU2)
TPD Kernel Code                 3.3.1.410 (MU2)
TPD Kernel Patch                3.3.1.434 (P30)
CIM Server                      3.3.1.410 (MU2)
WSAPI Server                    3.3.1.410 (MU2)
Console Menu                    3.3.1.410 (MU2)
Event Manager                   3.3.1.410 (MU2)
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                 3.3.1.410 (MU2)
Persistent Repository           3.3.1.410 (MU2)
Powerfail Tools                 3.3.1.410 (MU2)
Preserved Data Tools            3.3.1.410 (MU2)
Process Monitor                 3.3.1.410 (MU2)
Software Updater                3.3.1.410 (MU2)
TOC Server                      3.3.1.410 (MU2)
VV Check Tools                  3.3.1.410 (MU2)
Upgrade Check Scripts           180507.U013
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               3.3.1.448 (P35)
Drive Firmware                  3.3.1.448 (P35)
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 fixed 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 for your product or to view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products* reference document, go to the Enterprise Safety and Compliance website:

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

Additional warranty information

HPE ProLiant and x86 Servers and Options

www.hpe.com/support/ProLiantServers-Warranties

HPE Enterprise 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:

ww.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:

ww.hpe.com/info/reach

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

ww.hpe.com/info/ecodata

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

ww.hpe.com/info/environment

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