



**Hewlett Packard**  
Enterprise

# **HPE 3PAR OS 3.3.1 MU2 Patch 37**

## **Release Notes**

### **Abstract**

This release notes document is for OS 3.3.1 MU2 Patch 37.

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## Notices

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# Purpose

The HPE 3PAR OS 3.3.1 MU2 Patch 37 provides support for drive FW updates.

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❗ **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.

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## Guidance

This is an as needed patch.

## Prerequisites

- Minimum Service Processor required: SP-5.0.3 + latest SP Patch.
- Base OS: OS-3.3.1.410. See the Requires field in the Patch details.

## Patch details

Patch ID: P37

Synopsis: Provides support for drive FW updates

Date: August 23, 2018, 16:18:50 PDT

Description: See the Release Notes for details about this patch Affected Packages: tpd-cfgfiles, tpd-drivefw, tpd-fwdb, tpd-prerevert Obsoletes: OS-3.3.1.410-P35

Requires: OS-3.3.1.410-MU2, OS-3.3.1.410-P30

Build Version: 3.3.1.463

Patches Included: None.

Patches Partially Superseded: None.

Patches Obsolete by Combination: None.

Supports Revert: Yes

Notes: Description of the obsoleted patches:

Patch ID: P35

Synopsis: Provides support for drive FW 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

Notes:

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**NOTE:**

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

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## Modifications

HPE 3PAR OS 3.3.1 MU2 patch 37 provides firmware updates for the following drives.

Drive	Category	Capacity	Speed	SS 10K	SS 7K	SS 20K	SS 8K	SS 9K	FW
AREX0480S5xnNTRI	SSD	480GB	100K	No	Yes	Yes	Yes	No	3P07
AREX0920S5xnNTRI	SSD	920GB	100K	No	Yes	No	No	No	3P07
AREX1920S5xnNTRI	SSD	1.92TB	100K	Yes	Yes	Yes	Yes	No	3P07
AREX3840S5xnNTRI	SSD	3.84TB	100K	No	Yes	Yes	Yes	No	3P07
AREX0400S5xnNTRI	SSD	400GB	150K	Yes	Yes	Yes	Yes	No	3P03
AREX0920S5xnFTRI	SSD	920GB	100K	No	Yes	Yes	Yes	No	3P03
AREX1920S5xnFTRI	SSD	1.92TB	100K	No	Yes	Yes	Yes	No	3P03
AREX3840S5xnFTRI	SSD	3.84TB	100K	No	Yes	Yes	Yes	Yes	3P03
DOPM3840S5xnNMRI	SSD	3.84TB	100K	No	Yes	Yes	Yes	No	3P07
DOPE0480S5xnNMRI	SSD	480GB	100K	No	Yes	Yes	Yes	No	3P0A
DOPE1920S5xnNMRI	SSD	1.92TB	100K	No	Yes	Yes	Yes	No	3P0A
STHB0600S5xeN010	FC	600GB	10K	Yes	Yes	Yes	Yes	NO	3P03
STHB1200S5xeN010	FC	1.2TB	10K	Yes	Yes	Yes	Yes	No	3P03
STHB1800S5xeN010	FC	1.8TB	10K	Yes	Yes	Yes	Yes	No	3P03

Patch 37 addresses the following issues:

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**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.

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**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:** Write protect failure on drive.

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

**Impact:** Medium

**Customer circumvention:** None.

**Customer recovery steps:** None.

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**Issue ID:** 215795, 196915

**Issue summary:** Upgrade 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:** None.

**Customer recovery steps:** Replace the drive.

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**Issue ID:** 220731

**Issue summary:** The field replaceable units file is out of date.

**Platforms affected:** All StoreServ

**Affected software versions:** 3.3.1 MU1 - MU2

**Issue description:** As new drives are released, the array needs to be updated to provide the new field replaceable unit part numbers.

**Symptoms:** Updates the part number file to add new drive part numbers that are used by the array to report replacement part numbers. If the part number file is outdated, alerts may display `UNKNOWN` in the `Spare_PN` field.

**Conditions of Occurrence:** StoreServ Systems with SSKB0600S5xeN010, SSKB1200S5xeF010, SSKB1200S5xeN010, SSKB1800S5xeN010, HCFP0600S5xeN010, HCFP1200S5xeF010, HCFP1200S5xeN010 model drives.

**Impact:** Medium

**Customer circumvention:** None.

**Customer recovery steps:** None.

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**Issue ID:** 245485

**Issue summary:** After installing patch 35, the system generates alerts indicating an invalid file.

**Platforms affected:** All StoreServ

**Affected software versions:** 3.3.1 MU2 + P35

**Issue description:** Following the installation of 3.3.1.410-P35 patch, a periodic background check of the internal drive reports event for `invalid file /opt/tpd/spn/drive.cfg`.

**Symptoms:** The StoreServ generates alerts reporting `invalid file /opt/tpd/spn/drive.cfg`.

**Conditions of occurrence:** Installation of 3.3.1 MU2 plus patch P35.

**Impact:** Low

**Customer circumvention:** None.

**Customer recovery steps:** None.

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## Affected components

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Component	Version
Firmware Database	3.3.1.463 (P37)
Drive Firmware	3.3.1.463 (P37)

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**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.

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## 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.

❗ **IMPORTANT:** Cage firmware patches that are installed and then reverted **prior** to activation of the firmware upgrade require that the CLI command `showfirmwaredb -1` 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 the `admithw` has been run.

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## Verification

The installation of Patch 37 can be verified from an interactive CLI session. Issue the CLI command `showversion -a -b` to verify that Patch 37 is listed:

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**showversion -a -b**

Release version 3.3.1.410 (MU2)

Patches: P30,P37

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)
<b>Firmware Database</b>	<b>3.3.1.463 (P37)</b>
<b>Drive Firmware</b>	<b>3.3.1.463 (P37)</b>
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

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**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.

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# Websites

## **General websites**

**Hewlett Packard Enterprise Information Library**

**[www.hpe.com/info/EIL](http://www.hpe.com/info/EIL)**

**Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix**

**[www.hpe.com/storage/spock](http://www.hpe.com/storage/spock)**

**Storage white papers and analyst reports**

**[www.hpe.com/storage/whitepapers](http://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](http://www.hpe.com/support/hpesc)

### Hewlett Packard Enterprise Support Center: Software downloads

[www.hpe.com/support/downloads](http://www.hpe.com/support/downloads)

### Software Depot

[www.hpe.com/support/softwaredepot](http://www.hpe.com/support/softwaredepot)

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[www.hpe.com/support/e-updates](http://www.hpe.com/support/e-updates)
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[www.hpe.com/support/AccessToSupportMaterials](http://www.hpe.com/support/AccessToSupportMaterials)

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❗ **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.

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## 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](http://www.hpe.com/services/getconnected)

#### HPE Proactive Care services

[www.hpe.com/services/proactivecare](http://www.hpe.com/services/proactivecare)

#### HPE Proactive Care service: Supported products list

[www.hpe.com/services/proactivecaresupportedproducts](http://www.hpe.com/services/proactivecaresupportedproducts)

#### HPE Proactive Care advanced service: Supported products list

[www.hpe.com/services/proactivecareadvancedsupportedproducts](http://www.hpe.com/services/proactivecareadvancedsupportedproducts)

#### Proactive Care customer information

#### Proactive Care central

[www.hpe.com/services/proactivecarecentral](http://www.hpe.com/services/proactivecarecentral)

#### Proactive Care service activation

[www.hpe.com/services/proactivecarecentralgetstarted](http://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](http://www.hpe.com/support/ProLiantServers-Warranties)

#### HPE Enterprise and Cloudline Servers

[www.hpe.com/support/EnterpriseServers-Warranties](http://www.hpe.com/support/EnterpriseServers-Warranties)

#### HPE Storage Products

[www.hpe.com/support/Storage-Warranties](http://www.hpe.com/support/Storage-Warranties)

#### HPE Networking Products

[www.hpe.com/support/Networking-Warranties](http://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](http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts)**

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**[www.hpe.com/info/reach](http://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](http://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](http://www.hpe.com/info/environment)**

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