



**Hewlett Packard  
Enterprise**

# **HPE 3PAR OS 3.2.2 MU4 Patch 91**

## **Release Notes**

### **Abstract**

This release notes document is for Patch 91 and intended for HPE 3PAR Operating System Software 3.2.2.612 (MU4).

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# Purpose

The HPE 3PAR OS 3.2.2 MU4 Patch 91 provides support for new second source drives and drive FW updates.

## Guidance

- This patch is intended for 3PAR OS 3.2.2.612-MU4
- This is a recommended patch. This patch affects the drive models listed in the **Modifications** section of the *HPE 3PAR OS 3.2.2 MU4 Patch 91 Release Notes*.

## Prerequisites

- SP prerequisite: SP-4.4.0.GA-58 + latest SP patch
- Base OS: OS-3.2.2.612-MU4. See the Requires field in the Patch Details for prerequisite patches.

## Patch details Patch

ID: P91

Synopsis: Provides support for new second source drives and drive FW updates

Date: August 14, 2017, 15:29:35 PDT

Description: See the Release Notes for details about this patch

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

Obsoletes: OS-3.2.2.612-P90

Requires: OS-3.2.2.612-MU4,OS-3.2.2.612-P59,OS-3.2.2.612-P74,OS-3.2.2.612-P84

Build Version: **3.2.2.682**

Patches Included: None

Patches Partially Superseded: OS-3.2.2.612-P74

Patches Obsolete by Combination: 322 MU4 P81 becomes obsolete by the combination of 322 MU4 P84 and this patch

Supports Revert: Yes

Notes: Description of the incorporated patches:

Patch ID: P90

Synopsis: Provides support for drive FW updates and enhanced logging.

Date: July 31, 2017, 11:43:58 PDT

Description: See the Release Notes for details about this patch

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

Obsoletes: None

Requires: OS-3.2.2.612-MU4,OS-3.2.2.612-P59,OS-3.2.2.612-P74,OS-3.2.2.612-P84

Build Version: 3.2.2.680

Notes:

Purpose

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**NOTE:**

- Applying this patch to the 3PAR OS might restart the affected OS components. With these restarts, events and alerts might be generated and this is an expected behavior. The system continues to serve data, but existing CLI or SSMC sessions might be interrupted.
  - Hewlett Packard Enterprise recommends installing patches in the same sequence as they are released, unless instructed otherwise.
  - When displaying the `showversion` command output from the SP, the CLI Client version is fixed in the SP code and might differ from the output displayed from any other system.
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## Modifications

Patch 91 provides:

- Disabling of the SLTN drive's test port connection, which is known to lead to SLTN drives becoming unresponsive
- Adds enhancements and resolve multiple issues found in previous firmware levels
  - Firmware updates for the following 3PAR StoreServ Storage drive models:

Drive	Category	Speed	StoreServ 10000	StoreServ 7000	StoreServ 8000	StoreServ 20000	FW
SMBP4000S5xeN7.2	NL	7.2K	Yes	Yes	Yes	Yes	3P01
SMBP6000S5xeN7.2	NL	7.2K	Yes	Yes	No	Yes	3P01
SMBP4000S5xeF7.2	NL	7.2K	Yes	Yes	Yes	Yes	3P01
SMBP6000S5xeF7.2	NL	7.2K	Yes	Yes	Yes	Yes	3P01
AREA0480S5xnNTRI	SSD	100K	No	No	Yes	Yes	3P01
AREA1920S5xnFTRI	SSD	100K	Yes	Yes	Yes	Yes	3P00
AREA3840S5xnFTRI	SSD	100K	No	Yes	Yes	Yes	3P00
AREA0920S5xnFTRI	SSD	100K	No	Yes	Yes	Yes	3P00
SLTN0450S5xnN010	10K	10K	Yes	Yes	No	No	3P02
SLTN0600S5xnN010	10K	10K	No	Yes	No	No	3P02
SLTN0900S5xnN010	10K	10K	Yes	Yes	No	No	3P02
SLTN0450S5xnE010	10K	10K	Yes	Yes	No	No	3P01
SLTN0900S5xnE010	10K	10K	Yes	Yes	Yes	No	3P01

SLTN0450S5xnF010	10K	10K	Yes	Yes	No	No	3P01
SLTN0900S5xnF010	10K	10K	Yes	Yes	No	No	3P01

*Table Continued*

#### Modifications

Drive	Category	Speed	StoreServ 10000	StoreServ 7000	StoreServ 8000	StoreServ 20000	FW
AREA0400S5xnNTR I	SSD	150K	No	Yes	Yes	Yes	3P01
AREA0920S5xnNTR I	SSD	150K	No	Yes	No	No	3P01
AREA1920S5xnNTR I	SSD	100K	Yes	Yes	Yes	Yes	3P01
AREA3840S5xnNTR I	SSD	100K	No	Yes	Yes	Yes	3P01

## Affected components

Component	Version
Firmware Database	3.2.2.682 (P91)
Drive Firmware	3.2.2.682 (P91)

## 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.

## Verification

The installation of P91 can be verified from an interactive CLI session. Issue the CLI command `showversion -a -b` to verify that P91 is listed.

```

showversion -a -b
Release version 3.2.2.612 (MU4)
Patches: P56,P59,P74,P84,P91

Component Name          Version
CLI Server              3.2.2.642 (P59)
CLI Client              3.2.2.642
System Manager          3.2.2.678 (P84)
Kernel                  3.2.2.612 (MU4)
TPD Kernel Code         3.2.2.612 (MU4)
TPD Kernel Patch        3.2.2.678 (P84)
CIM Server              3.2.2.612 (MU4)
WSAPI Server            3.2.2.612 (MU4)
Console Menu            3.2.2.612 (MU4)
Event Manager           3.2.2.612 (MU4)
Internal Test Tools     3.2.2.612 (MU4)
LD Check Tools          3.2.2.612 (MU4)
Network Controller      3.2.2.612 (MU4)
Node Disk Scrubber      3.2.2.612 (MU4)
PD Scrubber             3.2.2.612 (MU4)
Per-Node Server         3.2.2.612 (MU4)
Persistent Repository   3.2.2.612 (MU4)
Powerfail Tools         3.2.2.612 (MU4)
Preserved Data Tools    3.2.2.612 (MU4)
Process Monitor         3.2.2.626 (P56)
Rolling Upgrade Tools   3.2.2.612 (MU4)
Software Updater        3.2.2.642 (P59)
TOC Server              3.2.2.612 (MU4)
VV Check Tools          3.2.2.612 (MU4)
File Persona            1.2.2.6-20161017
SNMP Agent              1.8.0
SSH                     6.6p1-4~bpo70+1
VASA Provider           2.2.10
Firmware Database      3.2.2.682 (P91)
Firmware              3.2.2.682 (P91)
04.08.38
MCU Firmware (OKI)      4.8.29
MCU Firmware (STM)      5.2.53
Cage Firmware (DC1)     4.44
Cage Firmware (DC2)     2.64
Cage Firmware (DC3)     08
Cage Firmware (DC4)     2.64
Cage Firmware (DCN1)    4078
Cage Firmware (DCN2)    4078
Cage Firmware (DCS1)    4078
Cage Firmware (DCS2)    4078
Cage Firmware (DCS5)    1.93
Cage Firmware (DCS6)    1.93
Cage Firmware (DCS7)    4078
Cage Firmware (DCS8)    4078
QLogic QLA4052C HBA Firmware 03.00.01.77
QLogic QLE8242 CNA Firmware 04.15.08

```

		<b>Drive</b>
		UEFI BIOS

QLogic 8300 HBA FC Firmware	08.01.05
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Purpose

QLogic 8300 HBA FCoE Firmware	08.01.05
QLogic 8300 HBA iSCSI Firmware	05.07.06
Emulex LP11002 HBA Firmware	02.82.x10
Emulex LPe12002 HBA Firmware	02.03.x11
Emulex LPe12004 HBA Firmware	02.03.x11
Emulex LPe16002 HBA Firmware	10.6.248.4
Emulex LPe16004 HBA Firmware	10.6.248.4
3PAR FC044X HBA Firmware	200A8
LSI 9201-16e HBA Firmware	17.11.00
LSI 9205-8e HBA Firmware	17.11.00
LSI 9300-8e HBA Firmware	07.00.00

# 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)

- To subscribe to eNewsletters and alerts:  
[www.hpe.com/support/e-updates](http://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](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 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:

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

### Additional warranty information

#### HPE ProLiant and x86 Servers and Options

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

#### HPE Enterprise 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)**

Customer self repair

**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)**

### 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](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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