



**Hewlett Packard
Enterprise**

HPE 3PAR OS 3.2.2 MU4 Patch 80 Release Notes

Abstract

This release notes document is for Patch 80 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 80 provides several quality improvements.

Guidance

- This patch is intended for HPE 3PAR OS 3.2.2 MU4.
- This is a required patch.
- All eligible HPE 3PAR StoreServ Storage systems are susceptible to issues corrected in this patch.

Prerequisites

- SP prerequisite: 4.4.0.GA-58 plus the latest SP patch
- OS prerequisites: 3.2.2 MU4 + P59 or 3.2.2 EMU4

Patch details

Patch ID: P80

Synopsis: Provides several quality improvements

Date: June 21, 2017, 22:32:57 PDT

Description: See the Release Notes for details about this patch

Affected Packages: tpd-kernelpatch, tpd-sysmgr, tpd-prerevert

Obsoletes: OS-3.2.2.612-P76

Patches Included: OS-3.2.2.612-P60

Patches Partially Superseded: OS-3.2.2.612-P59

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

Build Version: 3.2.2.667

Notes: Description of the incorporated patches:

Patch ID: P76

Synopsis: Prevents an issue that causes RC ports to be incorrectly initialized

Date: June 02, 2017, 19:23:38 PDT

Description: See the Release Notes for details about this patch

Affected Packages: tpd-kernelpatch, tpd-prerevert

Obsoletes: None

Requires: OS-3.2.2.612-MU4, OS-3.2.2.612-P59, OS-3.2.2.612-P60

Build Version: 3.2.2.660

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.
-

Modifications

Patch 80 includes:

Issue ID	Description
193758 194548	Resolves an issue where host and Virtual Volume I/Os experience high service times during <code>removevv</code> on snapshots and <code>updatevv</code> or <code>checkvv</code> operations on any volume.
199241	Prevents a condition where outdated metadata causes the DDS and associated TDVVs go offline and require an offline check.
200282	Prevents unexpected controller node restarts due to a metadata inconsistency encountered when a snapshot is removed.
201871	<code>upgradedpd</code> should retry without manual intervention
207933	When <code>flashcache</code> is used as a VVSet, System Manager becomes unresponsive as global lock becomes unavailable. As a result, CLI commands will not be functional as System Manager is unable to get the information. Fix is implemented that the global lock is available when volume is added into set.

Affected components

Component	Version
System Manager	3.2.2.667 (P80)
TPD Kernel Patch	3.2.2.667 (P80)

Verification

The installation of P80 can be verified from an interactive CLI session. Issue the CLI command `showversion -a -b` to verify that P80 is listed:

```
cli% showversion -a -b
Release version 3.2.2.612 (MU4)
Patches: P56,P59,P60,P80
```

Component Name	Version
CLI Server	3.2.2.642 (P59)
CLI Client	3.2.2.642
System Manager	3.2.2.667 (P80)
Kernel	3.2.2.612 (MU4)
TPD Kernel Code	3.2.2.612 (MU4)
TPD Kernel Patch	3.2.2.667 (P80)
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	3.2.2.612 (MU4)
Drive Firmware	3.2.2.612 (MU4)
UEFI BIOS	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
QLogic 8300 HBA FC Firmware	08.01.05
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

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:

www.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

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

Documentation feedback

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (docsfeedback@hpe.com). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.