



**Hewlett Packard**  
Enterprise

# **HPE 3PAR OS 3.2.1 MU2 Patch 74**

## **Release Notes**

### **Abstract**

This release notes document is for Patch 74 and intended for HPE 3PAR Operating System Software 3.2.1.200 (MU2).

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Edition: 1

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# Purpose

HPE 3PAR OS 3.2.1 MU2 Patch 74 improves controller node down processing for upgrades and controller node restarts.

## Guidance

- This patch is intended for HPE 3PAR OS 3.2.1 MU2.
- This is a recommended patch and is required for upgrading to a later 3PAR OS version.
- All eligible HPE 3PAR StoreServ Storage systems are susceptible to issues corrected in this patch.

## Prerequisites

- SP prerequisite: SP-4.3.0.GA-24
- Base OS: OS-3.2.1.200-MU2

## Patch details

Patch ID: P74

Synopsis: Improves node down processing for upgrades and node restarts.

Date: August 21, 2017, 11:25:43 PDT

Description: See the Modifications below for details about this patch.

Affected Packages: tpd-cli, tpd-kernelpatch, tpd-nodesvr, tpd-prerevert

Obsoletes: None

Requires: OS-3.2.1.200-MU2

Patches Included: OS-3.2.1.200-P11, OS-3.2.1.200-P13, OS-3.2.1.200-P36

Patches Partially Superseded: None

Patches Obsolete by Combination: None

Build Version: **3.2.1.500**

Supports Revert: Yes

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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 74 includes:

| Issue ID | Description  |
|----------|--|
| 193156   | Adds functionality to detect and remove extraneous log entries, which if present, could result in an unexpected array restart during upgrades and controller node down processing. |

## Affected components

| Component        | Version         |
|------------------|-----------------|
| CLI Server       | 3.2.1.500 (P74) |
| TPD Kernel Patch | 3.2.1.500 (P74) |
| Per-Node Server  | 3.2.1.500 (P74) |

## Verification

The installation of P74 can be verified from an interactive CLI session. Issue the CLI command `showversion -a -b` to verify that P74 is listed.

```
showversion -a -b
Patches: P11,P13,P36,P74
```

| Component Name               | Version                |
|------------------------------|------------------------|
| CLI Server                   | <b>3.2.1.500 (P74)</b> |
| CLI Client                   | 3.2.1.500              |
| System Manager               | 3.2.1.408 (P36)        |
| Kernel                       | 3.2.1.200 (MU2)        |
| TPD Kernel Code              | 3.2.1.200 (MU2)        |
| TPD Kernel Patch             | <b>3.2.1.500 (P74)</b> |
| CIM Server                   | 3.2.1.200 (MU2)        |
| WSAPI Server                 | 3.2.1.226 (P11)        |
| Console Menu                 | 3.2.1.200 (MU2)        |
| Event Manager                | 3.2.1.200 (MU2)        |
| Internal Test Tools          | 3.2.1.200 (MU2)        |
| LD Check Tools               | 3.2.1.200 (MU2)        |
| Network Controller           | 3.2.1.226 (P11)        |
| Node Disk Scrubber           | 3.2.1.200 (MU2)        |
| PD Scrubber                  | 3.2.1.200 (MU2)        |
| Per-Node Server              | <b>3.2.1.500 (P74)</b> |
| Persistent Repository        | 3.2.1.200 (MU2)        |
| Powerfail Tools              | 3.2.1.200 (MU2)        |
| Preserved Data Tools         | 3.2.1.200 (MU2)        |
| Process Monitor              | 3.2.1.200 (MU2)        |
| Rolling Upgrade Tools        | 3.2.1.200 (MU2)        |
| Software Updater             | 3.2.1.200 (MU2)        |
| TOC Server                   | 3.2.1.200 (MU2)        |
| VV Check Tools               | 3.2.1.226 (P11)        |
| File Persona                 | 1.0.0.25-20141215      |
| SNMP Agent                   | 1.8.0                  |
| SSH                          | 5.5p1-6+squeezel       |
| VASA Provider                | 2.1.3                  |
| Firmware Database            | 20150406               |
| Drive Firmware               | 20150406               |
| UEFI BIOS                    | 14.08.19               |
| MCU Firmware                 | 4.62                   |
| Cage Firmware (DC1)          | 4.44                   |
| Cage Firmware (DC2)          | 2.64                   |
| Cage Firmware (DC3)          | 08                     |
| Cage Firmware (DC4)          | 2.64                   |
| Cage Firmware (DCS1)         | 3219                   |
| Cage Firmware (DCS2)         | 3219                   |
| Cage Firmware (DCN1)         | 3219                   |
| QLogic QLA4052C HBA Firmware | 03.00.01.77            |
| QLogic QLE8242 CNA Firmware  | 04.11.151              |
| Emulex LP11002 HBA Firmware  | 02.82.x10              |
| Emulex LPe12002 HBA Firmware | 02.02.x15              |
| Emulex LPe12004 HBA Firmware | 02.02.x15              |
| Emulex LPe16002 HBA Firmware | 01.01.65.16            |
| 3PAR FC044X HBA Firmware     | 200A8                  |
| LSI 9201-16e HBA Firmware    | 17.11.00               |
| LSI 9205-8e HBA Firmware     | 17.11.00               |

# 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)



### 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)



## 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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