

# HPE 3PAR OS 3.3.1 MU2 Patch 57 Release Notes

#### **Abstract**

This release notes document is for 3.3.1 MU2 P57.

Part Number: QL226-10028 Published: March 2019

Edition: 1

#### © Copyright 2019 Hewlett Packard Enterprise Development LP

© 2014-2018, Hewlett Packard Enterprise Development LP

The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Confidential computer software. Valid license from Hewlett Packard Enterprise required for possession, use, or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Export of the information contained in this publication may require authorization from the U.S. Department of Commerce.

Links to third-party websites take you outside the Hewlett Packard Enterprise website. Hewlett Packard Enterprise has no control over and is not responsible for information outside the Hewlett Packard Enterprise website.

#### Acknowledgements

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation.

Adobe® and Acrobat® are trademarks of Adobe Systems Incorporated.

Java and Oracle are registered trademarks of Oracle and/or its affiliates.

UNIX® is a registered trademark of The Open Group.

Intel®, Itanium®, Pentium®, Intel Inside®, and the Intel Inside logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

# Purpose

The HPE 3PAR OS 3.3.1 MU2 Patch 57 improves interactions between the system manger and the cache server.

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 a critical patch.

**IMPORTANT:** Do not install this patch on arrays where File Persona is in use with File Provisioning Groups configured for Remote Copy. For those systems, install a future File Persona based patch, which will include this patch.

#### **Prerequisites**

- Minimum Service Processor required: SP-5.0.3 + latest SP Patch.
- Base OS: 3.3.1 MU2. See the Requires field in the Patch details.

#### Patch details

Patch ID: P57

Synopsis: Improves interactions between the system manger and the cache server

Date: February 22, 2019, 09:21:06 PST

Description: See the Release Notes for details about this patch

Affected Packages: tpd-sysmgr, tpd-prerevert

Obsoletes: None

Requires: OS-3.3.1.410-MU2

Build Version: 3.3.1.519

Patches Included: OS-3.3.1.410-P32,OS-3.3.1.410-P40,OS-3.3.1.410-P45,OS-3.3.1.410-P51

Patches Partially Superseded: None.

Patches Obsolete by Combination: None.

Supports Revert: Yes

Notes:

#### NOTE:

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

### Patches Included in This Release

HPE 3PAR OS 3.3.1 MU2 Patch 57 includes the following patches.

**NOTE:** To learn more about each patch, use the links provided to access the individual patch release notes.

Patch	Description	Obsoletes	Links to Documentation
HPE 3PAR OS 3.3.1 MU2 Patch 32	Provides several critical quality improvements.	None.	https://support.hpe.com/hpsc/doc/ public/display?docId=emr_na- a00051930en_us
HPE 3PAR OS 3.3.1 MU2 Patch 40	Provides several critical quality improvements.	OS-3.3.1.410- P30,OS-3.3.1.410 -P38	https://support.hpe.com/hpsc/doc/ public/display?docId=emr_na- a00057833en_us
HPE 3PAR OS 3.3.1 MU2 Patch 45	Provides several critical quality improvements.	None.	https://support.hpe.com/hpsc/doc/ public/display?docId=emr_na- a00059979en_us
HPE 3PAR OS 3.3.1 MU2 Patch 51	Provides several critical quality improvements.	OS-3.3.1.410-P48	https://support.hpe.com/hpsc/doc/ public/display?docId=emr_na- a00066210en_us

### **Modifications**

HPE 3PAR OS 3.3.1 MU2 P57 addresses the following issues:

Issue ID: 259121

Issue summary: The array becomes unresponsive due to a deadlock between the System Manager and

the cache server.

Platforms affected: All StoreServ

Affected software versions: 3.1.2, 3.2.1, 3.2.2, 3.3.1 GA - MU2

Issue description: A deadlock occurs between the System Manager and the cache server when updating

cache server variables.

**Symptoms:** System Manager and cache server stop responding.

Conditions of occurrence: Normal operation.

Impact: Low

Customer circumvention: Avoid running pre-update checks when the system is busy.

Customer recovery steps: None.

# **Affected components**

Component	Version
System Manager	3.3.1.519 (P57)

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.

# **Verification**

The installation of Patch 57 can be verified from an interactive CLI session. Issue the CLI command showversion -a -b to verify that Patch 57 is listed:

#### \$ showversion -a -b

Release version 3.3.1.410 (MU2) Patches: P32, P40, P45, P51, P57

Component Namo	Version
Component Name CLI Server	3.3.1.514 (P51)
CLI Client	3.3.1.514 (F31)
	3.3.1.519 (P57)
System Manager Kernel	3.3.1.410 (MU2)
TPD Kernel Code	3.3.1.410 (MU2)
TPD Kernel Patch	3.3.1.514 (P51)
CIM Server	3.3.1.410 (MU2)
WSAPI Server	3.3.1.410 (MU2)
Console Menu	3.3.1.410 (MU2)
Event Manager	3.3.1.482 (P45)
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	3.3.1.482 (P45)
Persistent Repository	3.3.1.514 (P51)
Powerfail Tools	3.3.1.410 (MU2)
Preserved Data Tools	3.3.1.410 (MU2)
Process Monitor	3.3.1.410 (MU2)
Software Updater	3.3.1.467 (P40)
TOC Server	3.3.1.410 (MU2)
VV Check Tools	3.3.1.410 (MU2)
Upgrade Check Scripts	181211.U018
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	3.3.1.410 (MU2)
Drive Firmware	3.3.1.410 (MU2)
UEFI BIOS	05.02.54 (MU2)
MCU Firmware (OKI)	
	4.8.60 (MU2)
MCU Firmware (STM)	4.8.60 (MU2) 5.3.17 (MU2)
MCU Firmware (STM) Cage Firmware (DC1)	5.3.17 (MU2)
Cage Firmware (DC1)	5.3.17 (MU2) 4.44 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2) Cage Firmware (DCS5)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 2.79 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2) Cage Firmware (DCS5) Cage Firmware (DCS6)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 2.79 (MU2) 2.79 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2) Cage Firmware (DCS5) Cage Firmware (DCS6) Cage Firmware (DCS7)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 2.79 (MU2) 2.79 (MU2) 4082 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2) Cage Firmware (DCS5) Cage Firmware (DCS6) Cage Firmware (DCS7) Cage Firmware (DCS7) Cage Firmware (DCS8)	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 2.79 (MU2) 2.79 (MU2) 4082 (MU2) 4082 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2) Cage Firmware (DCS5) Cage Firmware (DCS6) Cage Firmware (DCS7) Cage Firmware (DCS8) QLogic QLA4052C HBA Firmware	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 2.79 (MU2) 2.79 (MU2) 2.79 (MU2) 4082 (MU2) 4082 (MU2) 03.00.01.77 (MU2)
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2) Cage Firmware (DCS5) Cage Firmware (DCS6) Cage Firmware (DCS7) Cage Firmware (DCS7) Cage Firmware (DCS8) QLogic QLA4052C HBA Firmware QLogic QLE8242 CNA Firmware	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 2.79 (MU2) 2.79 (MU2) 2.79 (MU2) 4082 (MU2) 4082 (MU2) 03.00.01.77 (MU2) 04.15.27
Cage Firmware (DC1) Cage Firmware (DC2) Cage Firmware (DC3) Cage Firmware (DC4) Cage Firmware (DCN1) Cage Firmware (DCN2) Cage Firmware (DCS1) Cage Firmware (DCS2) Cage Firmware (DCS5) Cage Firmware (DCS6) Cage Firmware (DCS7) Cage Firmware (DCS8) QLogic QLA4052C HBA Firmware	5.3.17 (MU2) 4.44 (MU2) 2.64 (MU2) 08 (MU2) 2.64 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 4082 (MU2) 2.79 (MU2) 2.79 (MU2) 4082 (MU2) 4082 (MU2) 03.00.01.77 (MU2) 04.15.27 174.03.70

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 static 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 information for your product, see the links provided below:

**HPE ProLiant and IA-32 Servers and Options** 

www.hpe.com/support/ProLiantServers-Warranties

**HPE Enterprise and Cloudline 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:

#### 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.