Hewlett Packard Enterprise

HPE 3PAR Service Processor Software 4.4.x Release Notes

Abstract

These release notes are for storage administrators of the HPE 3PAR Storage System. This document is cumulative and includes subsequent updates relating to the latest HPE 3PAR Service Processor Software 4.4.0.

Acknowledgments

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Introduction

The HPE 3PAR Service Processor Software SP-4.4.0 Release Notes document is cumulative and includes information about the base release of 3PAR Service Processor Software SP-4.4.0 and subsequent updates. Read this entire document before you install the SP-4.4.0 software.

Related Documentation

The following documents provide information related to HPE 3PAR StoreServ Storage systems and the HPE 3PAR Operating System.

These documents are available on the Hewlett Packard Enterprise Storage Information Library:

http://www.hpe.com/info/storage/docs

For information about…	Read the…
Using the Command Line Interface (CLI) to configure and administer 3PAR StoreServ Storage	3PAR Command Line Interface Administrator's Manual and Command Line Interface Reference
Using the HPE 3PAR StoreServ Management Console graphical user interface to configure and administer 3PAR Storage systems	3PAR StoreServ Management Console User Guide 3PAR StoreServ Management Console Administrator Guide
HPE 3PAR Storage system concepts and terminology	3PAR StoreServ Storage Concepts Guide
Using Remote Copy	HPE 3PAR Remote Copy Software User's Guide
Determining HPE 3PAR storage system hardware specifications, installation considerations, power requirements, networking options, and cabling	HPE 3PAR StoreServ 10000 Storage Physical Planning Manual HPE 3PAR StoreServ 7000 and 7000c Storage Site Planning Manual HPE 3PAR StoreServ 7450 and 7450c Storage Site Planning Manual HPE 3PAR StoreServ 8000 Storage Site Planning Manual HPE 3PAR StoreServ 20000 Storage Site Planning Manual
Using the service processor to communicate with the 3PAR Storage system	3PAR Service Processor Software User Guide
Performing a customer self-upgrade of the Service Processor software or HPE 3PAR OS	3PAR Customer Self Update Instructions

See the HPE 3PAR Service Processor Support Matrix on the HPE Storage Single Point of Connectivity Knowledge (SPOCK) website at: **http://www.hpe.com/storage/spock**. Select **3PAR** under the **Other Hardware** menu. Locate **Other 3PAR Support Matrices**.

Supported Platforms

See the Storage Single Point of Connectivity Knowledge (SPOCK) website at **http://www.hpe.com/storage/spock** for 3PAR OS hardware support information.

> **NOTE:**
>
> The physical Service Processor and virtual Service Processor (VSP) are supported only on English-locale platforms.

The following table describes the Service Processors supported with release level 4.4.0.

Service Processor	Platform type	Supported models
Virtual Service Processor	Virtual	ESXi 5.0 ESXi 5.1 ESXi 5.5
Virtual Service Processor	Virtual	Hyper-V Server 2008 R2 Hyper-V Server 2012 Hyper-V Server 2012 R2
HPE ProLiant	Physical	DL120 DL320e DL360e
Supermicro	Physical	Supermicro II

> **NOTE:**
>
> ESXi 6.0 is supported with SP-4.4.0 MU1 (SP-4.4.0.GA-30) or later release.

Service Processor Software SP-4.4.0.GA-22 Release

The following release notes are for the 3PAR Service Processor (SP) Software 4.4.0 release.

The software build number of the SP-4.4.0 release is SP-4.4.0.GA-22.

What's New in the Service Processor

HPE 3PAR Service Processor functions as the communication interface between the customer's IP network and 3PAR Central by managing all service-related communications in both directions. The Service Processor leverages the industry-standard HTTP over Secure Socket Layer (HTTPS) protocol to secure and encrypt data communication.

> **NOTE:**
>
> Upgrading will cause the Service Processor to restart to activate changes. It may take up to 5 minutes for the Service Processor to become available. You will be disconnected and must log in to the Service Processor once the restart completes. The StoreServ continues to serve data during the SP restart.

This release includes the following enhancements:

- Support added for HPE 3PAR StoreServ Storage arrays belonging to a Federation.

- Support added for DL120 physical platforms.

  > **NOTE:**
  >
  > Port 2 on the DL120 is reserved for maintenance by Hewlett Packard Enterprise service personnel only.

- Support added for the 3PAR StoreServ 8000 Storage and 3PAR StoreServ 20000 Storage array families.

- Support added for importing a CA Certificate for SPOCC, using the **SP Certificate** option on the **Support** > **Service Processor** screen. A CA Certificate eliminates the untrusted certificate warning that appears when a web browser connects to the SP using the default self-signed certificate.

- Support added to accommodate a 10–character StoreServ serial number.

- Support added to the Service Processor to accommodate Russian DST changes in the HPE 3PAR Management Console OS.

- Support added for retrieving log files in spmaint for multiple crash dumps.

- Time out value updated to 1800 seconds for simple upgrades where File Persona is active and added error message for offline and advanced upgrade.

- Subject lines for Local Notification alert emails from the Service Processor were modified to include "3PAR" and the serial number of the 3PAR StoreServ Storage system

- Commands `showvvolvm -sc sys:all -d` and `showvvolsc` added in InSplore, as well as the `showvvolsc` command in the `cli_get_config` for weekly capture.
- Added the execution of `cli checkupgrade -revertnode` while reverting the nodes during an Advanced upgrade of the 3PAR OS.

Modifications to the Service Processor

The following issues have been addressed in this release.

Issue ID	Description
97378	SP was supporting only self-signed certificates through version SP-4.3.0.GA-24. SP-4.4 supports CA-signed certificates.
101864	Blank screen appeared after executing a command using the **Execute a command on node** option in SPOCC using Microsoft Internet Explorer 10. SP-4.4 addresses this issue.
102395	Older releases of 3PAR OS packages appeared as new updates. SP-4.4 addresses this issue.
109813	A staged SP package appears available even after it is deleted using manual clean up. SP-4.4 addresses this issue.
116068	SP-4.4 addresses various potential, low-risk vulnerabilities identified with httpd and openssl.
122673	The SSH daemon configuration file on SP was modified to remove weak ciphers and MAC (media access control) addresses in the SP-4.4 release.
125546	Following an all nodes down node rescue, it is now possible to reload the network configuration via the node console. Following an all nodes down node rescue, the system must reload the network configuration. Users can now select the console option **Finish SP-to-node rescue procedure** to do this.
139166	Error in network configuration while using StorageSetupWizard to install SP-4.3.0.GA-24. StorageSetupWizard shows a networking error when the command to set new IP address on the StoreServ times out. If the command fails, SP retries the command after 15 seconds. SP-4.4 resolves this issue.
142082	SP unable to clean up old splor files. The remove_oldfiles script failed to clean up old splor files on SP because of incorrect directory path. This has been fixed with SP 4.4.
143402	Addresses a security issue in the Service Processor software.

Known Issues with the Service Processor

Issue ID	Description
129529	A fresh installation of the SP software fails when an .iso image is created on CD-R media. Use only DVD+R or DVD-R media if you create your own media from downloaded 3PAR Service Processor or 3PAR OS updates. The media must be closed after burning the DVD.
131725	After upgrading to SP-4.4.0, connection to SP or SPMAINT fails with the message `No compatible cipher. The server supports these ciphers: aes256-ctr, aes192-ctr, aes128-ctr, arcfour256.` Beginning with SP-4.4.0, 3PAR has removed support for some weak ciphers, which causes this message to appear. This is expected behavior. • **AES-256-CTR** • **AES-192-CTR** • **AES-128-CTR**
133365	With FP (File Persona) enabled systems, an OS upgrade failure can cause the FP nodes to remain in upgrading state. While the FP nodes are in upgrading state, SP might fail to collect the File Services logs from StoreServ and fail to transfer FS logs to HQ. The FS logs will be available on the StoreServ. They must be manually copied and made available for troubleshooting the upgrade failure. 1. Log in to the StoreServ node console. 2. Log in to VM node console. 3. Collect the logs and archive them in `/local` directory. 4. Log out the VM node console. 5. SCP the logs from VM node to `/common` on StoreServ node. Example: `scp node1fs:/local/<archived logs> /common` 6. Repeat the steps preceding steps for the remaining VM nodes. 7. SCP all the VM node logs from StoreServ to an external server.

Table Continued

Issue ID	Description
133520	When adding a StoreServ on Microsoft Hyper-V platforms, dynamic memory issues can cause the add/remove process to fail repeatedly. This is a Hyper-V memory issue. As a workaround for this issue, perform the following: 1. On the Hyper-V Manager Admin console, select the SP VM and shut down the SP. 2. Select the SP VM, right-click, and launch the **Settings Configuration** option. 3. In the **Settings** window, click the **Memory** tab. 4. On the **Memory Management** pane, change the **Memory Management** mode from the default, **Dynamic**, to **Static**. 5. Set the **RAM size** to `2048 MB`. **NOTE:** `2048 MB` is the recommended value. However, if memory is a constraint, the **RAM size** can be set to the default value of `1024 MB`, but will result in slow performance of the Service Processor.
135417	If a `checkupgrade` is not healthy while performing an advanced upgrade of the 3PAR OS when all nodes are in old state, the user has the option of entering `n` to abort the upgrade. However, doing so does not abort the upgrade; nodes remain in the old state. To abort the upgrade use `upgradesys -abort` from an SPMAINT CLI session. **NOTE:** Advanced upgrades are performed by service personnel only.
139954	When performing an Advanced upgrade of the 3PAR OS, a 15 minute wait is expected for each node reboot. If the reboot is successful, the upgrade will proceed automatically. If the reboot has not succeeded or has exceeded 15 minute wait time, further prompts are displayed, along with the error log.
141019	Executing the `starttask admithw -ni` command from the `Interactive CLI` option in SPMaint results in permission denied errors. The workaround is to connect to SPOCC and navigate to **SPMaint** > **Storage System Product Maintenance** > **Run admithw**.
141035	When performing a Simple, Advanced, or Offline upgrade of the SP software, upgrade checks can take up to 2 minutes to complete without progress messages appearing to alert the user.
141419	In SPMAINT, the `Update Drive Code` menu option on the `StoreServ Product Maintenance Menu` does not work.
142127	When using SmartStart to initialize the SP, the SP setup wizard browser does not close automatically at the completion of the SP setup. Manually close the browser and resume the remaining setup using SmartStart.

Table Continued

Issue ID	Description
142618	**Caution:** Before starting the StoreServ initialization and setup, ensure the SP and the StoreServ are connected to a reliable network for completing this process. While initializing the StoreServ using Storage System Setup Wizard, **setup system volumes** normally takes 10 minutes to 2 hours, depending on the configuration. During this time, if a network issue occurs, this can cause the system to hang without a pop-up window that prompts for retry or offers any help. If this condition persists for more than 2 hours, contact your authorized support provider for assistance.
142877	While initializing the StoreServ using Storage System Setup Wizard, if a network issue occurs during the **Setup System Volumes** step, a pop-up window might appear that describes the network issue and prompts for a retry or cancel. Clicking **Retry** does not always work. If this condition persists, contact your authorized support provider for assistance.
144889	When performing the online upgrade of the 3PAR OS using SPOCC, if the upgrade does not complete and the same upgrade failure message keeps appearing for over 10 minutes, please contact Hewlett Packard Enterprise Support. After fixing the 3PAR OS issue, click the **Update** tab, and then click **Update 3PAR OS** to retry the upgrade.
145070	Towards the end of the Storage System Setup wizard, an error message might appear stating that the storage system was not added to the Service Processor. If this happens, click **Retry** to fix the issue. If the issue persists, click **Ignore** and follow the instructions in the error message.

Service Processor Software SP-4.4.0.GA-22 P002 Release

The following release notes are for the HPE 3PAR Service Processor (SP) Software 4.4.0.GA-22 P002 release.

SP-4.4.0.GA-22 P002 is a mandatory patch for SP-4.4.0.GA-22.

Modifications to the Service Processor

HPE domain names are changed from hp.com to hpe.com. This patch ensures that the SP will connect to the new HPE domain.

Before performing the upgrade to the Service Processor patch SP-4.4.0.GA-22 P002, ensure that there are no customer firewall restrictions to the existing HP servers and new HPE servers on port 443. Firewall and proxy server configuration must be updated to allow outbound connections from the Service Processor to the existing HP servers and new HPE servers.

The following are the details of the HP and HPE server host names and IP addresses:

- Collector Server:

  - **https://storage-support.glb.itcs.hpe.com** (16.248.72.63)

  - **https://storage-support1.itcs.hpe.com** (16.248.72.63)

  - **https://storage-support2.itcs.hpe.com**(16.250.72.82)

- HPE Remote Support Connectivity Global Access Servers (GAS):

  - **https://c4t18808.itcs.hpe.com** (16.249.3.18)

  - **https://c4t18809.itcs.hpe.com** (16.249.3.14)

  - **https://c9t18806.itcs.hpe.com** (16.251.3.82)

  - **https://c9t18807.itcs.hpe.com** (16.251.4.224)

- HP Remote Support Connectivity Global Access Servers (GAS):

  - **https://g4t2481g.houston.hp.com** (15.201.200.205)

  - **https://g4t2482g.houston.hp.com** (15.201.200.206)

  - **https://g9t1615g.houston.hp.com** (15.240.0.73)

  - **https://g9t1616g.houston.hp.com** (15.240.0.74)

After the upgrade, Service Processors configured in Secure Network Mode are automatically reconfigured to connect to the new servers.

⚠ **CAUTION:**

Failure to modify the firewall settings to accommodate the new HPE servers might result in the loss of the file transfer to HQ. Other operations like remote operations and package deployment might be affected.

The following issue is addressed in this release:

Issue ID	Description
171156	Issue with the automatic and regular package deployment via Secure Service Architecture is resolved and now it depends on the Customer Control Access (CCA) settings on the SP. SP and HPE 3PAR OS Software updates from HPE are allowed only when bidirectional option is selected and automatic software downloads is enabled in the CCA settings.

Service Processor Software SP-4.4.0.GA-30 (MU1) Release

The following release notes are for the HP 3PAR Service Processor (SP) Software 4.4.0 MU1 release.

The software build number of the SP-4.4.0 MU1 release is SP-4.4.0.GA-30.

What's New in the Service Processor

This release includes the following enhancements:

- For 3parcust users, downgrade of the HPE 3PAR Operating System software on HPE 3PAR StoreServ 7000 and 8000 systems using SPOCC is not supported.

- Installation on the Hyper-V platform creates a Virtual SP with 2 GB static memory instead of 1 GB minimum dynamic memory.

Modifications to the Service Processor

Issue ID	Description
131813	Resolved an issue where StoreServ Setup Wizard fails to detect StoreServ.
133520	Resolved an issue where after adding a StoreServ on Microsoft Hyper-V platforms, dynamic memory issues can cause the add/remove process to fail repeatedly.
141871	Service Processor firewall allows DNS queries over UDP protocol and TCP protocol.
142301	A 3parcust user cannot downgrade StoreServ 7xxx and 8xxx Storage systems after upgrading to SP 4.4 MU1.
149358	Installation on the Hyper-V platform creates a Virtual SP with 2 GB static memory instead of 1 GB minimum dynamic memory.
150306	SP legacy mode option is removed only from SP MOB using console. To configure SP from SNM to legacy mode, use CPMaint option.

Known Issues with the Service Processor

Issue ID	Description
145070	Towards the end of the Storage System setup wizard, it might fail to add the Storage system to Service Processor and display an error message. **Workaround**: Click **Retry** to try the operation again. If the issue still persists, click **Ignore** and follow the instruction in the error message.
147508	The configure and verify remote support connectivity step fails. **Workaround**: If the configure and verify remote support connectivity step fails, follow the troubleshooting recommendation shown in the ***warning*** window and click retry. If it does not resolve the issue, click **Continue** and finish the SP initialization. Then logon to SPOCC and select **SPmaint** > **option 2 (Connection Portal Control)** > **option 7 (Test 3PAR Secure Service Collector Server)** and ensure that the ping test is successful. If the ping test fails, then contact HPE support.
155293	If the DNS server is down or an invalid or non-responding DNS IP address is entered, the SPOCC page takes time to load. **Workaround**: Resolve the DNS server issue and reload the SPOCC page. If resolving the DNS server issue does not resolve SPOCC page loading issue, do the following: 1. Login to SPMAINT console as 3parcust user. 2. Select **2 - Network configuration** > **9 - Change DNS configuration**. 3. Enter: `none`. Do not enter any value other than **none**. When a valid DNS IP address is available, add the DNS server via SPOCC. Launch SPOCC and click **SPMaint** from the left navigation pane. Select **2 - Network configuration** > **9 - Add DNS server** option. **NOTE:** If the SP IP address is not responding, reboot might resolve the issue. There might be a delay in the reboot. If the issue still exists, contact HPE support.

Table Continued

Issue ID	Description

154796	While performing an HP 3PAR OS upgrade using the IE browser, the text or the host data title bar might appear distorted on the check host page.
	
	Workaround: To resolve this issue, change the default IE compatibility mode.
	
	To change the IE Compatibility mode:
	
	1. Do one of the following:
	
	   • Press **F12**.
	
	   • Press **Alt** and then select **Tool** > **Developer Tools**.
	
	2. From the compatibility mode list, select any browser mode except 7. 7 is the default browser mode.
	
	NOTE:
	There is no impact on the OS upgrade due to browser compatibility mode.

156010	When configuring IP address for a physical SP using SetIpAddress wizard: • If the wizard fails and displays error message `Configuring IP address failed with the following error: Failed to set SP IP address.` , wait for 10 minutes and then click the **Retry** button. • If the wizard becomes unresponsive after **Configuring IP address..** step and no message is displayed for more than 10 minutes, close the browser and launch the SetIpAddress wizard again.

Service Processor Software SP-4.4.0.GA-30 (MU1) P001 Release

The following release notes are for the HP 3PAR Service Processor (SP) Software 4.4.0 MU1 P001 release.

SP-4.4.0.GA-30 P001 is a mandatory patch for SP-4.4.0.GA-30.

Modification to the Service Processor

HPE domain names are changed from hp.com to hpe.com. This patch ensures that the SP will connect to the new HPE domain.

Before performing the upgrade to the Service Processor patch SP-4.4.0 MU1 P001, ensure that there are no customer firewall restrictions to the existing HP servers and new HPE servers on port 443. Firewall and proxy server configuration must be updated to allow outbound connections from the Service Processor to the existing HP servers and new HPE servers.

The following are the details of the HP and HPE server host names and IP addresses:

- Collector Server:

  ◦ **https://storage-support.glb.itcs.hpe.com** (16.248.72.63)

  ◦ **https://storage-support1.itcs.hpe.com** (16.248.72.63)

  ◦ **https://storage-support2.itcs.hpe.com** (16.250.72.82)

- HPE Remote Support Connectivity Global Access Servers (GAS):

  ◦ **https://c4t18808.itcs.hpe.com** (16.249.3.18)

  ◦ **https://c4t18809.itcs.hpe.com** (16.249.3.14)

  ◦ **https://c9t18806.itcs.hpe.com** (16.251.3.82)

  ◦ **https://c9t18807.itcs.hpe.com** (16.251.4.224)

- HP Remote Support Connectivity Global Access Servers (GAS):

  ◦ **https://g4t2481g.houston.hp.com** (15.201.200.205)

  ◦ **https://g4t2482g.houston.hp.com** (15.201.200.206)

  ◦ **https://g9t1615g.houston.hp.com** (15.240.0.73)

  ◦ **https://g9t1616g.houston.hp.com** (15.240.0.74)

After the upgrade, Service Processors configured in Secure Network Mode are automatically reconfigured to connect to the new servers.

⚠ **CAUTION:**

Failure to modify the firewall settings to accommodate the new HPE servers might result in the loss of the file transfer to HQ. Other operations like remote operations and package deployment might be affected.

Service Processor Software SP-4.4.0.GA-30 (MU1) P003 Release

The following release notes are for the HP 3PAR Service Processor (SP) Software 4.4.0 MU1 P003 release.

SP-4.4.0.GA-30 P003 is a mandatory patch for SP-4.4.0.GA-30 and SP-4.4.0.GA-30 P001.

HPE 3PAR Service Processor (SP) Software 4.4.0.GA-30 (MU1) P003 is cumulative and includes updates from SP 4.4.0.GA-30 (MU1) P001.

If you are upgrading to Service Processor patch SP-4.4.0 MU1 P003 from Service Processor version SP-4.4.0 MU1 or earlier, ensure that there are no customer firewall restrictions to the existing HP servers and new HPE servers on port 443. For more details, see **Service Processor Software SP-4.4.0.GA-30 (MU1) P001 Release**.

Modification to the Service Processor

Column Head	Column Head
171148	Issue with the automatic and regular package deployment via Secure Service Architecture is resolved and now it depends on the Customer Control Access (CCA) settings on the SP. SP and HPE 3PAR OS Software updates from HPE are allowed only when bidirectional option is selected and automatic software downloads is enabled in the CCA settings.

Service Processor Software SP-4.4.0.GA-53 (MU2) Release

The following release notes are for the HP 3PAR Service Processor (SP) Software 4.4.0 MU2 release.

The software build number of the SP-4.4.0 MU2 release is SP-4.4.0.GA-53.

> **NOTE:**
>
> HPE 3PAR Service Processor 4.4.0.GA-53 (MU2) provides support for HPE 3PAR OS 3.2.2 MU3 only.

What's New in the Service Processor

This release includes the following enhancements:

- Restricts cpmaint account to cpmaint menu only. Shell access is not provided to cpmaint user.

- Provides an option to the 3parcust user to change the cpmaint password.

- Provides connectivity to the new HPE domains as HP domain names are changed from hp.com to hpe.com.

Before performing the upgrade to the Service Processor SP-4.4.0 MU2, ensure that there are no customer firewall restrictions to the existing HP servers and new HPE servers on port 443. Firewall and proxy server configuration must be updated to allow outbound connections from the Service Processor to the existing HP servers and new HPE servers.

The following are the details of the HP and HPE server host names and IP addresses:

- Collector Server:

    ◦ **https://storage-support.glb.itcs.hpe.com** (16.248.72.63)

    ◦ **https://storage-support1.itcs.hpe.com** (16.248.72.63)

    ◦ **https://storage-support2.itcs.hpe.com** (16.250.72.82)

- HPE Remote Support Connectivity Global Access Servers (GAS):

    ◦ **https://c4t18808.itcs.hpe.com** (16.249.3.18)

    ◦ **https://c4t18809.itcs.hpe.com** (16.249.3.14)

    ◦ **https://c9t18806.itcs.hpe.com** (16.251.3.82)

    ◦ **https://c9t18807.itcs.hpe.com** (16.251.4.224)

- HP Remote Support Connectivity Global Access Servers (GAS):

    ◦ **https://g4t2481g.houston.hp.com** (15.201.200.205)

    ◦ **https://g4t2482g.houston.hp.com** (15.201.200.206)

- **https://g9t1615g.houston.hp.com** (15.240.0.73)
- **https://g9t1616g.houston.hp.com** (15.240.0.74)

After the upgrade, Service Processors configured in Secure Network Mode are automatically reconfigured to connect to the new HPE servers.

⚠ **CAUTION:**

Failure to modify the firewall settings to accommodate the new HPE servers might result in the loss of the file transfer to HQ. Other operations like remote operations and package deployment might be affected.

Modifications to the Service Processor

Issue ID	Description
142127	Resolved an issue where Firefox browser does not close automatically after clicking finish button in SP Setup Wizard.
154102	The minimum Secure CRT version required to connect to SP is 7.3.7.
154661	Resolved an issue which puts restriction on the characters that can be used in some fields for Certificate Signing Request (CSR) generation. Now, all the fields accept spaces, periods, and other valid characters.
155862	When an invalid DNS is set through SPOCC, an error message is displayed.
155926	When the same IP address is used to configure the DNS server again, an error message is displayed.
156804	A maximum of three DNS servers can be configured.
157777	HPE certificate is updated for new HPE SSA-ITG servers.
159756	The SPMAINT menu does not provide option to change connection portal parameters. This functionality is available in CPMAINT menu only.
161018	Provides connectivity to the new HPE domains as HP domain names are changed from hp.com to hpe.com.
164781	SPOCC allows patch installation for all the patches which have dependent patches listed either in active patch installation list or which are installed on StoreServ.
170834	Issue with the automatic and regular package deployment via Secure Service Architecture is resolved and now it depends on the Customer Control Access (CCA) settings on the SP. SP and HPE 3PAR OS Software updates from HPE are allowed only when bidirectional option is selected and automatic software downloads is enabled in the CCA settings.

Known Issues with the Service Processor

Issue ID	Description
166788	When the `revert last patch` option is used to revert the last installed patch, it reverts the last installed patch. However, SPOCC output shows an incorrect patch number for the patch reverted if the patch reverted is earlier in sequential order than currently staged patch.
177923	Service Processor upgrade on Hyper-V virtual Service Processor (VSP) cannot proceed when SP DVD Drive option is selected. **Workaround**: Use ISO option on SPOCC to upgrade the SP package on Hyper-V VSP. Sometimes, Service Processor upgrade for physical Service Processor (PSP) cannot proceed when SP DVD Drive option is selected and ISO is mounted from iLO. **Workaround**: Use ISO option on SPOCC or physical DVD in the DVD drive to upgrade the SP package on PSP.

Service Processor Software SP-4.4.0.GA-53 (MU2) P005 Release

The following release notes are for the HPE 3PAR Service Processor (SP) Software 4.4.0 MU2 P005 release.

SP-4.4.0.GA-53 P005 patch must be installed in following cases only:

- SP rebuild

- Replacement of SP 4.4.0.GA-53 (MU2)

- Fresh install

△ **CAUTION:**

Do not use this package for upgrading the SP.

NOTE:

SP 4.4.0.GA-53 (MU2) P005 is NOT a mandatory patch for HPE 3PAR OS upgrades.

Modifications to the Service Processor

Issue ID	Description
193141	The collection server configuration is optimized in console MOB.

Service Processor Software SP-4.4.0.GA-58 (MU3) Release

The following release notes are for the HPE 3PAR Service Processor (SP) Software 4.4.0 MU3 release.

The software build number of the SP-4.4.0 MU3 release is SP-4.4.0.GA-58.

> **NOTE:**
>
> HPE 3PAR Service Processor 4.4.0.GA-58 (MU3) provides support for HPE 3PAR OS 3.2.2 MU4 only.

If you are upgrading to Service Processor 4.4.0.GA-58 (MU3) from Service Processor 4.4.0.GA-30 (MU1) or earlier, ensure that there are no customer firewall restrictions to the existing HP servers and new HPE servers on port 443. For more details, see **Service Processor Software SP-4.4.0.GA-30 (MU1) P001 Release**.

Modifications to the Service Processor

Issue ID	Description
171420	The existing CCA (Customer Controlled Access) feature is enhanced to handle the out-bound only and bi directional settings. Depending on this setting, automatic software download option is enabled or disabled.
175101	The option to create a new custom user is not available in the SPMAINT and SPOCC menu.
177923	Resolved an issue where Service Processor upgrade on Hyper-V virtual Service Processor (VSP) cannot proceed when SP DVD Drive option is selected.

Known Issues with the Service Processor

Issue ID	Description
190605	Service Processor upgrade for physical Service Processor (PSP) cannot proceed when SP DVD Drive option is selected and ISO is mounted from iLO. **Workaround**: Use ISO option on SPOCC or physical DVD in the DVD drive to upgrade the SP package on PSP.

Service Processor Software SP-4.4.0.GA-58 (MU3) P006 Release

The following release notes are for the HPE 3PAR Service Processor (SP) Software 4.4.0 MU3 P006 release.

SP-4.4.0.GA-58 P006 is a mandatory patch for SP-4.4.0.GA-58.

If you are upgrading to Service Processor SP 4.4.0 MU3 P006 from Service Processor SP 4.4.0 MU1 or earlier, ensure that there are no customer firewall restrictions to the existing HP servers and new HPE servers on port 443. Firewall and proxy server configuration must be updated to allow outbound connections from the Service Processor to the existing HP servers and new HPE servers.

The following are the details of the HP and HPE server host names and IP addresses:

- Collector Server:

  ◦ **https://storage-support.glb.itcs.hpe.com** (16.248.72.63)
  ◦ **https://storage-support1.itcs.hpe.com** (16.248.72.63)
  ◦ **https://storage-support2.itcs.hpe.com** (16.250.72.82)
  ◦ **https://s54t0109g.sdc.ext.hpe.com** (15.203.174.94)
  ◦ **https://s54t0108g.sdc.ext.hpe.com** (15.203.174.95)
  ◦ **https://s54t0107g.sdc.ext.hpe.com** (15.203.174.96)
  ◦ **https://g4t8660g.houston.hpe.com** (15.241.136.80)
  ◦ **https://s79t0166g.sgp.ext.hpe.com** (15.211.158.65)
  ◦ **https://s79t0165g.sgp.ext.hpe.com** (15.211.158.66)
  ◦ **https://g9t6659g.houston.hpe.com** (15.241.48.100)

- HPE Remote Support Connectivity Global Access Servers (GAS):

  ◦ **https://c4t18808.itcs.hpe.com** (16.249.3.18)
  ◦ **https://c4t18809.itcs.hpe.com** (16.249.3.14)
  ◦ **https://c9t18806.itcs.hpe.com** (16.251.3.82)
  ◦ **https://c9t18807.itcs.hpe.com** (16.251.4.224)

- HP Remote Support Connectivity Global Access Servers (GAS):

  ◦ **https://g4t2481g.houston.hp.com** (15.201.200.205)
  ◦ **https://g4t2482g.houston.hp.com** (15.201.200.206)
  ◦ **https://g9t1615g.houston.hp.com** (15.240.0.73)
  ◦ **https://g9t1616g.houston.hp.com** (15.240.0.74)

After the upgrade, Service Processors configured in Secure Network Mode are automatically reconfigured to connect to the new HPE servers.

What's New in the Service Processor

This release includes the following enhancements:

- Adds support for the new transport agent Remote Device Access (RDA) when Service Processor is configured in Secure Network Mode.

- Provides an option to select the transport agent as either Secure Service Agent (SSA) or Remote Device Access (RDA).

- Provides File Transfer support to STaTs (HQ) when the SP is configured with RDA.

- Provides the ability to enable or disable Remote Operation when the SP is configured with RDA.

- Provides the option to enable or disable Automatic Software Download when the SP is configured using RDA.

Modifications to the Service Processor

This product includes code licensed under the GNU General Public License, the GNU Lesser General Public License, and/or certain other open source licenses. A complete machine-readable copy of the source code corresponding to such code is available upon request. This offer is valid to anyone in receipt of this information and shall expire three years following the date of the final distribution of this product version by Hewlett Packard Enterprise Company.

To obtain such source code, send a check or money order in the amount of US $10.00 to:

Hewlett Packard Enterprise Company

Attn: General Counsel

3000 Hanover Street

Palo Alto, CA 94304

USA

Please specify the product and the version for which you are requesting source code. You may also request a copy of this source code free of charge at:

http://hpe.com/software/opensource

This patch provides the following modification:

Issue ID	Description
207570	Resolved an issue to enable all 6 CPU cores on a HPE ProLiant DL120 Service Processor. Additionally, compression ratio for crash dump collection is improved.
209049	Resolved an issue where an alert file transfer is missed due to a CLI timeout during additional data collection.
216346	Provides support for the RDA agent in the Service Processor.
218681	Resolved an issue with the CSR generation so that the CSR is generated with empty Attribute set when `SubjectAltName` attribute is not used.

Known Issues with the Service Processor

Issue ID	Description
193737	Policy Server is not supported if the SP is configured with the RDA agent.

Service Processor Software SP-4.4.0.GA-86 (MU5) Release

The following release notes are for the HPE 3PAR Service Processor (SP) Software 4.4.0 MU5 release.

The software build number of the SP-4.4.0 MU5 release is SP-4.4.0.GA-86.

> **NOTE:**
>
> HPE 3PAR Service Processor 4.4.0.GA-86 (MU5) provides support for HPE 3PAR OS 3.2.2 MU6 only.

If you are upgrading to SP 4.4 MU5 from SP 4.4 MU1 or earlier, ensure that there are no customer firewall restrictions to the existing HP servers and new HPE servers on port 443. Firewall and proxy server configuration must be updated to allow outbound connections from the Service Processor to the existing HP servers and new HPE servers.

The following are the details of the HP and HPE server host names and IP addresses:

- Collector Server:

  - **https://storage-support.glb.itcs.hpe.com** (16.248.72.63)
  - **https://storage-support1.itcs.hpe.com** (16.248.72.63)
  - **https://storage-support2.itcs.hpe.com** (16.250.72.82)
  - **https://s54t0109g.sdc.ext.hpe.com** (15.203.174.94)
  - **https://s54t0108g.sdc.ext.hpe.com** (15.203.174.95)
  - **https://s54t0107g.sdc.ext.hpe.com** (15.203.174.96)
  - **https://g4t8660g.houston.hpe.com** (15.241.136.80)
  - **https://s79t0166g.sgp.ext.hpe.com** (15.211.158.65)
  - **https://s79t0165g.sgp.ext.hpe.com** (15.211.158.66)
  - **https://g9t6659g.houston.hpe.com** (15.241.48.100)

- HPE Remote Support Connectivity Global Access Servers (GAS):

  - **https://c4t18808.itcs.hpe.com** (16.249.3.18)
  - **https://c4t18809.itcs.hpe.com** (16.249.3.14)
  - **https://c9t18806.itcs.hpe.com** (16.251.3.82)
  - **https://c9t18807.itcs.hpe.com** (16.251.4.224)

- HP Remote Support Connectivity Global Access Servers (GAS):

  - **https://g4t2481g.houston.hp.com** (15.201.200.205)
  - **https://g4t2482g.houston.hp.com** (15.201.200.206)

- ◦ **https://g9t1615g.houston.hp.com** (15.240.0.73)
- ◦ **https://g9t1616g.houston.hp.com** (15.240.0.74)

After the upgrade, Service Processors configured in Secure Network Mode are automatically reconfigured to connect to the new HPE servers.

What's New in the Service Processor

This release includes the following enhancements:

- When Service Processor is configured in Secure Network Mode, the new transport agent, Remote Device Access (RDA), is supported.

- When Service Processor is configured in Secure Network Mode, RDA is set as the default Secure Collection Server.

- Real Time Scrubbing (RTS) is supported.

- The Enable scrubber option is available starting with this release instead of the scrub weekly files option available in earlier releases.

- Policy Manager is termed as Policy Server starting with this release.

    NOTE:

    When an SP configured as a secure site and RAP forwarding enabled is upgraded to SP 4.4 MU5, the RAP forwards are not scrubbed even if scrubbing option is enabled.

Modifications to the Service Processor

This product includes code licensed under the GNU General Public License, the GNU Lesser General Public License, and/or certain other open source licenses. A complete machine-readable copy of the source code corresponding to such code is available upon request. This offer is valid to anyone in receipt of this information and shall expire three years following the date of the final distribution of this product version by Hewlett Packard Enterprise Company.

To obtain such source code, send a check or money order in the amount of US $10.00 to:

Hewlett Packard Enterprise Company

Attn: General Counsel

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Palo Alto, CA 94304

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http://hpe.com/software/opensource

This Major Update (MU) addresses the following issues:

Issue ID	Description
109123	Resolved an issue of archiving tar file in PerfAnalysis when file name length is greater than 99 characters.
184044	The local alerts are suppressed after exiting the maintenance mode.
186637	Resolved an issue where nemoe files are lost when InSplore collection becomes unresponsive or is canceled.
192173	Allows InSplore collection during certain state change phases of normal operations such as net and netcc restarts.
193958	For Hyper-V 2012 R2 platform, SP is configured with nonlegacy network adapters by default during SP initialization. For Hyper-V 2008 R2 and Hyper-V 2012 platform, SP is configured with legacy network adapter during initialization.
195025	Resolved an issue with the CSR generation so that the CSR is generated with empty Attribute set when no SubjectAltName is used.
197194	The dump collection is prioritized by identifying node failure and queuing it to last.
197233	The **CPMAINT** menu option to switch transport mode to SP mode is blocked.
199092	Resolved an issue where an alert file transfer is missed due to a CLI timeout during additional data collection.
199934	Enable scrubber option is available with this release instead of weekly file scrubbing option. If the Service Processor using Secure network transport mode is configured with weekly scrubber option enabled, after upgrade to SP 4.4 MU5 Real Time Scrubbing (RTS) option is enabled by default.
200939	If Service Processor is configured with SP transport mode, Real Time Scrubbing option is unavailable. If SP is configured in SP transport mode with weekly scrubbing option enabled, upgrade to SP 4.4 MU5 is not supported. To proceed with the upgrade to SP-4.4 MU5, change the transport mode to Secure Network mode or disable weekly scrubber.
202018	The output of the `showrcopy -qw` command is included in InSplore collection.
205807	When RTS is enabled, the time taken for transferring InSplore file to HPE is more than the time taken for InSplore transfers when RTS is not enabled. This time depends on the size of InSplore file generated.
207902	If SP is configured in Secure Site, then to send data to HPE after the SP upgrade, login to **CPMAINT** and choose option **1** to switch to SNM Mode.
210418	If Real Time Scrubbing option is enabled, then in InSplore the files larger than 120 mBytes in size are truncated.

Table Continued

Issue ID	Description
210555	Resolved an issue to enable all 6 CPU cores on an HPE ProLiant DL120 Service Processor. Additionally, compression ratio for crash dump collection is improved.
213871	Only 3parcust user can edit the real-time scrubber settings. **NOTE:** Selecting this option might lead to an extended support issue resolution time.
212487	The SP sends notification to HPE when SP is shut down or rebooted using **Reboot SP** option of **SPOCC** or **SPMaint**.
214790	Following operations can be performed on the `setupusr` user: • Change the password for the `setupusr` user from either **SPOCC** or **SPMaint** menu option. • Delete the `setupusr` user from either **SPOCC** or **SPMaint** menu option.
220075	When Service Processor is configured in Secure Network Mode, RDA is set as the default Secure Collection Server.

Known Issues with the Service Processor

Please provide details if we need to add any issue here.

Issue ID	Description
193737	Policy Server is not supported if the SP is configured with the RDA agent.
221002	When SP is configured with RDA as a default agent and invalid DNS is provided, the following Warning message is displayed: `Remote Support Configuration failed` **Workaround**: Complete the SP initialization. Login to SPOCC with **3parcust** user and provide valid DNS using **SPOCC** > **SPMAINT** > **Network Configuration** > **DNS Configuration** menu.

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 HP 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, see the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products* document, available at the Hewlett Packard Enterprise Support Center:

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**

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.