



**Hewlett Packard
Enterprise**

HPE StoreOnce Software Version 4.2.1 Release Notes

Abstract

This document describes enhancements and fixes in HPE StoreOnce software version 4.2.1. This document applies to the StoreOnce software, VSA deployment package, and Quick Restore ISO image.

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Release notes

Description

This document outlines the functional changes and defect fixes for StoreOnce System software in the 4.2.1 software release.

.STAR file

The .STAR file is used to upgrade HPE StoreOnce 3620, 3640, 5200, 5250, and 5650 Systems and StoreOnce VSA deployments from earlier 4.x StoreOnce software versions to version 4.2.1.

There is not an upgrade path from StoreOnce software 3.x versions to StoreOnce version 4.2.1 software.

- File name: BC002-10508.star
- Software version: 4.2.1-1942.21
- MD5 checksum value: 5a8ea8c058b7dd8fdd778de76bf97756

Quick Restore (QR) ISO

The Quick Restore image is used to re-image the software on the StoreOnce system to a known good state. It is only used, under guidance by HPE Support, in the event of a server's root file system becoming corrupted or lost. The QR ISO image is downloaded to a blank 8 GB USB 2.0 stick.

File name: BC002-10509.iso



CAUTION: The Quick Restore image should only be used under the supervision of HPE support personnel.

Do **not** use this Quick Restore image with any HPE StoreOnce Systems other than those listed in the Product models section.

VSA packages

HPE StoreOnce VSA is a software-only version of the StoreOnce Backup system. The VSA package deploys the StoreOnce VSA or HPE StoreOnce High Availability Manager running StoreOnce version 4.2.1 software.

Table 1: StoreOnce VSA deployment packages

Deployment option	Package name
HPE StoreOnce VSA 4.2.1 VMware ESXi	BC002-10510.zip
HPE StoreOnce VSA 4.2.1 VMware vCenter	BC002-10511.zip
Hyper-V	Not supported for StoreOnce 4.2

There is not a StoreOnce VSA 4.2.1 package for Microsoft Hyper-V. There is not currently an upgrade to StoreOnce version 4.2.x software for Hyper-V systems running StoreOnce VSA 4.x. Hyper-V support is planned for a future StoreOnce software version. For hypervisor support details, see the *HPE StoreOnce Support Matrix* at <https://www.hpe.com/storage/StoreOnceSupportMatrix>

Update recommendation

Update recommendation: Recommended

Supersedes information

Supersedes: All earlier StoreOnce 4.x. versions.

 **IMPORTANT:** The upgrade process will prevent upgrading from other software versions.

Product models

This software is applicable to the following product models:

- HPE StoreOnce 3620 System
- HPE StoreOnce 3640 System
- HPE StoreOnce 5200 System
- HPE StoreOnce 5250 System
- HPE StoreOnce 5650 System
- HPE StoreOnce VSA
- HPE StoreOnce High Availability Manager

VSA support

Fibre Channel cards supported on VSA for software versions 4.2.x.

- HPE StoreFabric SN1100Q 16Gb Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Host Bus Adapter

Table 2: Hypervisor support

	VMware vSphere ESXi 6.7	VMware vSphere ESXi 6.5	VMware vSphere ESXi 6.0	Hyper-V 2016, 2012 R2
4.2.1	Yes	Yes		
4.1.3	Yes	Yes	Yes	Yes
4.1.0, 4.1.1, 4.1.2	Yes	Yes	Yes	Yes

For additional information, see the *HPE StoreOnce Support Matrix* at: <https://www.hpe.com/storage/StoreOnceSupportMatrix>

Operating systems

Cross operating system (BIOS, Firmware, Diagnostics, etc.)

Languages

Languages supported for this release:

- English
- Japanese
- Chinese
- French
- German
- Brazilian Portuguese
- Russian
- Spanish

New features and enhancements

StoreOnce software version 4.2.1 includes all features and enhancements included in software versions 4.1.2 and 4.1.3. For details about new features and enhancements in 4.1.3 and earlier releases, see the release notes in the [HPE Information Library](#).

- Initial release of the HPE StoreOnce High Availability Manager to enable automated host failover of Fibre Channel connected Storeonce VSAs in a VMware vSphere cluster.
- Federation member limit is increased to 40.
- iLO 5 firmware upgrade.
- User interface enhancements for VTL and federation.
- Improved remote support.
- Improved backup and copy performance when IPSEC is configured.
- General stability fixes and performance improvements throughout.

Firmware

The firmware has been updated for the storage controller , BIOS , and iLO 5 .

Guidelines for adding storage to a StoreOnce VSA after deployment

To add storage after a StoreOnce VSA has been in operation, add a new separate virtual disk.

Add storage in 1 TB increments within the limits of the capacity license.

 **IMPORTANT:** Extending or expanding storage by increasing the size of the vdisk/vmdk is not supported. If the vdisk is expanded, the additional space created will not be usable by the VSA.

Fixes

The following defects have been fixed in version 4.2.1. For information about defects fixed in earlier releases, see the applicable release notes in the [HPE Information Library](#).

Remote Support

- Fixed a case when the system was unable to enroll for Remote Support through the StoreOnce Management Console after the user entered an email address containing a dash character.
- Fixed an issue where the Remote Support process crashed when the StoreOnce System was not connected to the HPE Enterprise Server, triggering a log collection every 10 minutes.
- Fixed an issue where remote support call home would lose connection to the HPE Remote Support server when two networks were configured.
- Fixed an issue when remote connectivity was not working so payloads stuck in the transfer folder filled up the operating system file system. This issue was caused by a non-tunable 30-day purge period.
- Fixed a case where no Remote Support files were transferred to the HPE Remote Support servers when the pending jobs queue was large.
- Fixed an case when a data-only subnet was sending out management queries when it shouldn't.
- Fixed a case where the root partition became 100 percent full when the Remote Support data files remained in the root RDA partition after Remote Support data transfer failed.

NAS

- Fixed a case where replication remains in a pending state so errors are logged in the replication event log.
- Fixed a case where Windows File Explorer was showing the incorrect share size when a logical quota limit was set in the StoreOnce Management Console.
- Fixed a case when the CIFS process wouldn't start after performing a software upgrade.

Known Issues and customer advisories

Locating customer advisories

To find the most current product advisories and bulletins:

1. Browse to <https://support.hpe.com/hpesc/public/home>.
2. Enter a product name (for example, StoreOnce 5100 Backup System) in the text search field and then wait for a list of products to populate.
3. From the products displayed, identify the desired product and click one of the icons to the right of the product to locate either **Drivers & Software** or **Documents**.

HPE recommends that you register your product for Support Alerts at: www.hpe.com/support/e-updates. After registering, you will receive e-mail notification of product enhancements, new driver versions, firmware updates, and other product resources.

Known issues in StoreOnce version 4.2.1 software

- **Enabling DHCP for iLO networking with the StoreOnce Management Console makes the system unreachable for iLO from another subnet:**

Enabling DHCP for iLO networking from the StoreOnce Management Console incorrectly sets the default gateway to 0 . 0 . 0 . 0, making the system unreachable for iLO from another subnet. This issue does not apply to StoreOnce system networking or iLO configuration through the iLO console.

Because the systems are preconfigured with DHCP, this issue only occurs if the system is configured for static addressed networking and then is reconfigured to DHCP. If this issue occurs, use the iLO console to enable DHCP for iLO.

- **If a system is added into a federation during an upgrade, the system becomes unreachable:**

Do not add a system to or remove a system from a Federation while the remote system that is being added or removed from the system is being upgraded. If the system being added during upgrade shows as "unreachable", remove the system from the Federation and then add it to the Federation.

- **Unable to add a federation member or a federation member becomes unreachable using IPv6.**

If IPv6 stateless auto address configuration (SLAAC) is enabled on the network router and static IPv6 addresses are configured on the StoreOnce federation members in the same range as the SLAAC prefix, the StoreOnce federation lead system will sometimes pick the SLAAC-configured address instead of the statically assigned address.

To resolve this issue either:

- Disable SLAAC on the IPv6 router.
- Make sure that the statically assigned IPv6 addresses do not share the same prefix as the SLAAC addresses.

This will be fixed in a later software release.

- **SNMP configuration results in an error or the SNMP service becomes unavailable after configuring an invalid username:**

The Management Console allows the user to enter a username with more than 32 characters, which is invalid for the SNMP server. This invalid configuration results in an error and the SNMP service might become unavailable until the user is removed.

Workaround: Delete the user.

- **Unable to download large tickets with Internet Explorer:**

Downloading a large ticket when running the Management Console with Internet Explorer can fail without a message.

Workaround: Use Edge, Chrome, or Firefox.

- **Replication and Catalyst Data Services processes fail to start after a reboot when the password encryption key could not be retrieved following a withdrawal from an external key manager:**

The services failed to start after a reboot because Catalyst or Replication cannot retrieve the key that is used to encrypt the client passwords following a withdrawal from an external key manager.

Workaround: Restore the key store backup that was created during the enroll process and reboot.

- **Attempt to edit a NAS Replication mapping fails:**

An attempt to edit an existing NAS Replication mapping using the `Recover all data from Target Share` option results in the error: `The parameters which specify the Target Share and appliance don't match the Share Mapping partner details`

Workaround: Delete the existing Replication mapping and then recreate the mapping with the `Recover all data from Target Share` option enabled.

- **Unable to add ESXi host with lockdown mode enabled:**

This issue applies to VSAs on ESXi hosts being managed by the High Availability Manager. If the lockdown mode of ESXi hosts is Enabled (Strict) and there is a failover, the High Availability Manager removes the host from the cluster. When attempting to add the host back to the cluster, vCenter Server throws the error `Permission to perform this operation was denied. You do not hold privilege "System > View" on folder "urn:vmomi:Folder:ha-folder-root:"` This happens even for the Administrator user.

Workaround: Reinstall and reconfigure the ESXi server.

- **BIOS firmware update fails to complete when the iLO security state is set to High Security:**

An issue has been identified where the BIOS firmware update process may fail to complete if the iLO security state is set to "High Security".

Workaround: Before beginning the StoreOnce software upgrade and firmware update process, open the iLO web GUI and go to **Security > Encryption**. Set the **Security State** to **Production**.

Once the StoreOnce software has been updated and any firmware updates have been installed, return the **Security State** to **High Security**.

Known issues when using the quick restore image

If both operating system disks fail at the same time, the quick restore fails:

If both operating system disks fail, the system can be reinstalled using the quick restore process. When the quick restore process runs, the Pre Health Check fails.

Workaround: Delete the logical array and then attempt the quick restore again. For instructions, see [Re-imaging the system using the QR ISO](#).

Upgrading StoreOnce Systems

Prerequisites

- You have obtained the StoreOnce upgrade package (.star file). The upgrade package file is located where it can be accessed from the StoreOnce System.
- You are directly logged in to the StoreOnce System that you are upgrading. You cannot upgrade a federation member system from the federation lead system.
- You are logged in as Administrator.

 **IMPORTANT:** iLO must be configured to use the Production security state. Using the iLO High Security security state is not supported.

Procedure

1. On the StoreOnce Management Console main menu, select **Settings**.
2. On the **Settings** screen, expand the **Actions** menu and then select **Upgrade**.

The **Upgrade** screen guides you through steps for:

- Selecting and uploading an upgrade package.
- Validating the upgrade package.
- Upgrading the StoreOnce System.

Software for deploying StoreOnce VSA and StoreOnce High Availability Manager

The files required for deploying the StoreOnce VSA and StoreOnce High Availability Manager are included in a single package.

- StoreOnce VSA for vCenter deployment (StoreOnce VSA and StoreOnce High Availability Manager)
- StoreOnce VSA for direct ESXi server deployment (StoreOnce VSA only)

NOTE: For instructions on how to deploy the StoreOnce VSA, see the *HPE StoreOnce VSA Deployment and Configuration Guide*.

StoreOnce documentation is available in the [HPE Information Library](#).

Re-imaging the system using the QR ISO

CAUTION: If you want to upgrade an existing StoreOnce installation, use the latest StoreOnce software upgrade STAR file. Do not use the QR ISO image.

The StoreOnce Quick Restore process allows customers to recover their StoreOnce systems without losing backed up data and configuration settings, provided the storage is intact and operational.

The Quick Restore image should only be used under the supervision of HPE support personnel.

Do not use this Quick Restore image with any HPE StoreOnce Systems other than those listed in the Product models section.

NOTE: StoreOnce Gen4 Quick Restore is only supported using the same software version that is installed on the system being restored. Download the matching software version of StoreOnce Quick Restore image.

Prerequisites

If you want to delete all data and configuration settings, you must first unconfigure the storage from the StoreOnce Management Console and then run the Quick Restore process.

Procedure

1. Go to the HPE Support page at <http://www.hpe.com/support/hpesc>, search on your product (for example, HPE StoreOnce 5250 System) and select **HPE StoreOnce Systems**.
2. Under **Download Options** select the **Get drivers, software & firmware** link.
3. Select **OS Independent** under **Operating Systems**.
A list of available downloads is displayed. The QR ISO image is under **Software**.
4. Click **Obtain Software** and select the QR ISO image appropriate to your product. You will be required to sign in with HPE Passport to download the QR ISO image, and can create an HPE Passport account when you first access the site.
5. Use the MD5 checksum value to verify that the image downloaded correctly.

Checksum value	Filename
40f2911d4263122b6a917d2cf471eeeb	BC002-10509.iso

6. Create the physical QR media.
 - a. Create a bootable QR USB memory stick with the StoreOnce QR image with an ISO to USB utility.
The *HPE USB Key Utility for Windows* is not supported with StoreOnce Quick Restore ISO images.
 - b. Alternatively, use the Integrated Lights-Out ISO mounting utility to mount the virtual CD over iLO.



IMPORTANT: Hewlett Packard Enterprise recommends that you label the new media for ease of identification.

Related software

The following are available free of charge from the Software Depot:

- **HPE StoreOnce Catalyst OpenStorage Plug-ins (OST for NBU):**

The plug-in is required by Veritas NetBackup (NBU) applications when using StoreOnce Catalyst. The plug-in is installed on the host media servers.

- **HPE StoreOnce Catalyst Plug-in for Oracle recovery manager (RMAN):**

The plug-in is required by Oracle Recovery Manager when using StoreOnce Catalyst. It is installed on the host media servers.

- **HPE StoreOnce Catalyst Plug-in for Microsoft SQL Server (SQL):**

This plug-in provides functionality to back up and restore a database to different logical devices, such as DISK, TAPE, or URL when using StoreOnce Catalyst. This plug-in is installed on the Windows Server running Microsoft SQL server.

- **HPE StoreOnce Catalyst Plug-in for SAP HANA:**

The HPE StoreOnce Catalyst Plug-in for SAP HANA enables optimized protection for SAP HANA databases. It enables the Database Administrator to backup/restore directly to/from a Catalyst Store on a StoreOnce Backup appliance. The HPE StoreOnce Catalyst Plug-in for SAP HANA must be installed using the SAP HANA operating system user, not the root user. The plug-in includes guided installation and configuration for fast setup.

- **HPE StoreOnce Recovery Manager Central (RMC):**

HPE StoreOnce Recovery Manager Central facilitates automated, efficient, nonintrusive backup and disaster recovery and provides converged data protection by integrating 3PAR StoreServ primary storage and StoreOnce System storage directly, without the need for third-party ISVs. With Recovery Manager Central, you get the simplicity and performance of snapshot-based protection to generate application-consistent recovery points combined with the reliability and efficiency of deduplicated backups for guaranteed recovery. RMC 5.0.3 is the minimum release for supporting the direct datapath feature.

This software is available free with all StoreOnce Backup systems that have the corresponding Replication and StoreOnce Catalyst LTUs, as appropriate. The software, including release notes and documentation, can be downloaded from:

www.hpe.com/support/softwaredepot.

Search for **StoreOnce** in the **Search Software Depot** search box.

The search result includes the StoreOnce System Software for all products, VSA evaluation files, and QR images for all hardware platforms, plus a link to **StoreOnce Free Software**. Click **StoreOnce Free Software** to access SEM and the other listed software.

Finding StoreOnce documents in the HPE Information Library

The latest product documentation is available in the StoreOnce Backup section of the Hewlett Packard Enterprise Information Library.

Procedure

1. Navigate to <http://www.hpe.com/info/storeonce/docs>.
2. In **Models / Subcategories**, select your product.
3. To filter the entries, select the types of documents and your language.

StoreOnce websites

Hewlett Packard Enterprise Information Library for StoreOnce products

www.hpe.com/info/storeonce/docs

HPE StoreOnce Support Matrix

www.hpe.com/storage/StoreOnceSupportMatrix

HPE StoreOnce Systems QuickSpecs

www.hpe.com/support/StoreOnceQuickSpecs

HPE StoreOnce Data Protection Backup Appliances information page

www.hpe.com/storage/storeonce

General websites

Storage white papers and analyst reports

www.hpe.com/storage/whitepapers

Enter "StoreOnce" into the keyword search box.

Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
<https://www.hpe.com/info/assistance>
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:
<https://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

<https://www.hpe.com/support/hpesc>

Hewlett Packard Enterprise Support Center: Software downloads

<https://www.hpe.com/support/downloads>

Software Depot

<https://www.hpe.com/support/softwaredepot>

- To subscribe to eNewsletters and alerts:

<https://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:

<https://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.
-

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

<https://www.hpe.com/services/getconnected>

HPE Proactive Care services

<https://www.hpe.com/services/proactivecare>

HPE Datacenter Care services

<https://www.hpe.com/services/datacentercare>

HPE Proactive Care service: Supported products list

<https://www.hpe.com/services/proactivecaresupportedproducts>

HPE Proactive Care advanced service: Supported products list

<https://www.hpe.com/services/proactivecareadvancedsupportedproducts>

Proactive Care customer information

Proactive Care central

<https://www.hpe.com/services/proactivecarecentral>

Proactive Care service activation

<https://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

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*
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*
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```

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*
* This package is an SSL implementation written
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* The implementation was written so as to conform with Netscapes SSL.
*
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* [including the GNU Public Licence.]
*/

```

Open Source Code License

The KMIP library contains a number of third party components (components for which Cryptsoft is not the copyright holder).

These components are all under permissive licenses.

UUID generator: extracted out of e2fsprogs
<http://e2fsprogs.sourceforge.net/>
 generate a DCE-compatible uuid
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gen_uuid.c
 gen_uuid.h
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XML parser: extracted out of <http://ezxml.sourceforge.net/>
 [[Only required for KMIP XML format]]

kmip_xml.c
kmip_xml.h

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JSON parser: from <https://bitbucket.org/zserge/jsmn/wiki/Home>
[[Only required for KMIP JSON format]]

kmip_json.c
kmip_json.h

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DIFF library: extracted out of libmba
[[Only required if KMIP_dump_diff_fp() is used]]

<http://www.ioplex.com/~miallen/libmba/>
<MIT-license>

mbadiff.c

mbadiff.h

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syslog-win32.h

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syslog-win32.c

[[Only required on Win32 platforms]]

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ssl_proxy.c

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The implementation was written so as to conform with Netscapes SSL.

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