HP StoreOnce Backup system conversion from G2 to G3 software release notes

Description

HP is offering existing StoreOnce D2D Single Node customers the ability to convert their appliance's existing software from 2.x.x to 3.4.x (or later) StoreOnce software for free. HP StoreOnce 3.4.x (or later) software offers several significant features, the most important being the introduction of HP StoreOnce Catalyst devices that allow low and high bandwidth backups and backup application controlled off-site copy between StoreOnce appliances for those customers using HP Data Protector or Symantec OST.

⚠ **CAUTION:** HP StoreOnce 3.4.x (or later) software is significantly different to 2.x.x software and, as such, the conversion process is data destructive. It is recommended that ONLY customers who need to take advantage of the new features convert their products. The conversion process is described in detail in *BB852-90926, Conversion from 2.x.x software to 3.4.x (or later) software guide*.

Update recommendation

ONLY customers who need to take advantage of the new features offered by v3.4.x or later software should convert their products.

Supersedes

None.

Product models

New appliances pre-installed with 3.4.x (or later) software have adopted a new set of names; this means that the name shown on your product GUI and CLI will not match the name printed on your existing learning products and hardware labels. When seeking support downloads for your product after the conversion you will need to use this new name to find the information that you require.

The following products are supported by this conversion process.

Table 1 Mapping existing and new products

Existing product (2.x.x software)	New product (3.x.x. software)
EJ001B and EJ001C — HP StoreOnce D2D2502i Backup System	(HP StoreOnce 2610 Backup system: This is not a shipping product. Please search for the HP StoreOnce 2620 Backup system for supporting documentation.)
EJ002B and EJ002C — HP StoreOnce D2D2504i Backup System	HP StoreOnce 2620 Backup system
EH996A and EH996B — HP StoreOnce D2D4106i Backup System	HP StoreOnce 4210 iSCSI Backup system
EH998B — HP StoreOnce D2D4106fc Backup System	HP StoreOnce 4210 FC Backup system
EH993C — HP StoreOnce D2D4112 Backup System	HP StoreOnce 4220 Backup system
EH983A and EH983B — HP StoreOnce D2D4312 Backup System	HP StoreOnce 4420 Backup system
EH985A — HP StoreOnce D2D4324 Backup System	HP StoreOnce 4430 Backup system

ⓘ **IMPORTANT:** The following older products running 2.x.x software are **not** supported for conversion

- EH998A: HP StoreOnce D2D4106fc
- EH993B: HP StoreOnce D2D4112

Warranty implications

Converting to 3.4.x (or later) software does not invalidate your current warranty, and the serial number of your appliance will not change. However if you need to contact the HP support organization you

will need to inform them that you have converted to 3.4.x (or later) software and provide them with your original product number in order that they can support you effectively.

Operating systems

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

Languages

English

Feature Differences between 3.x.x and 2.x.x Single Node Software

HP StoreOnce Catalyst

3.x.x StoreOnce software supports the creation of Catalyst stores for low bandwidth backup and application controlled copy. This allows single node appliances to work with the HP StoreOnce B6200 product which also supports Catalyst stores. Catalyst functionality requires a license for the backup application that you wish to use and also support in your backup software.

The following table shows the part numbers for the different combinations of product model families and backup applications. Symantec NetBackup users require a StoreOnce Catalyst O.S.T. license; Data Protector users require a StoreOnce Catalyst DP license.

NOTE: When using Symantec NetBackup, a plug-in application is also required on your Backup Application media server in order to use Catalyst functionality.

The software is available for download from the HP StoreOnce Software Depot Kiosk http://www.software.hp.com/kiosk for all StoreOnce customers who have purchased HP OST licenses in conjunction with their StoreOnce products.

User Name: STOREONCE_KIOSK
Password: STOREONCEAPPS

For operating system support, application support and installation instructions please read the information on the KIOSK download page. For complete instructions, see the appropriate HP OST Plug-in User Guide

Table 2 Part numbers for Catalyst licenses

Part number	Catalyst license
BB858AAE	HP StoreOnce Catalyst 2600 O.S.T. E-LTU
BB859AAE	HP StoreOnce Catalyst 2600 DP E-LTU
BB860AAE	HP StoreOnce Catalyst 4200 O.S.T. E-LTU
BB861AAE	HP StoreOnce Catalyst 4200 DP E-LTU
BB862AAE	HP StoreOnce Catalyst 4400 O.S.T. E-LTU
BB863AAE	HP StoreOnce Catalyst 4400 DP E-LTU

NAS and VTL backup targets

3.x.x StoreOnce software continues to support NAS (CIFS and NFS) and VTL (Virtual Tape Library) functionality that was previously available in products running 2.x.x software. There are small differences in the VTL emulation types available in 3.x.x software, so your backup application will need to be re-configured after the conversion. In addition previously configured WWNN and WWPN values will be different after the conversion, so Fibre Channel switch re-configuration will be required.

NAS and VTL Replication

Replication functionality for NAS and VTL devices is present in 3.x.x software and is compatible with both older single node appliance software and B6200 multi-node appliances. Replication offers a way that you can migrate previously backed up data onto your appliance after conversion to 3.x.x software completes.

License Compatibility

Licenses for Capacity upgrade and Replication that were purchased for use on your existing appliance are also valid after the conversion to 3.5.x (or later) software. Your appliance will retain its existing serial number so your node-locked licenses can continue to be used. In addition, after the conversion, you can purchase licenses to use the Catalyst functionality.

Please note that all licenses are applied via the StoreOnce CLI, not via the GUI.

Installation on disk

Existing single node products running 2.x.x software boot and run from a flash memory device located inside the appliance chassis. 3.5.x (or later) software, however, is installed on the appliance hard disks. The installation process is outlined below. Note also that the capacity available for backup is smaller after the installation of 3.5.x (or later) software due to installing the software on disk.

StoreOnce CLI

The Single Node appliances running 3.5.x (or later) software deliver a customer-accessible, enterprise class CLI interface as well as the GUI. This StoreOnce CLI is used for several configuration tasks and also for day to day administration of some features of the StoreOnce appliance.

Network Support

The 3.5.x (or later) software supports a similar set of configuration modes for both 1GbE and 10GbE networks, significant differences being:

- Configuration of networking is currently via the StoreOnce CLI interface only
- IPv6 support is not currently available
- A single failover and port aggregation port bonding mode is provided rather than the two discrete modes provided in previous software

GUI differences

The StoreOnce GUI with 3.4.x (or later) software adopts a cross-HP Storage design and structure, it is identical in layout to the HP StoreOnce B6200 Backup system and similar to other storage products from HP, enabling easy and familiar administration experience. There are some features that existed in the GUI with 2.x.x software that are now only present in the CLI with 3.4.x (or later) software, the main ones being:

- Disk storage configuration
- Network configuration
- SNMP trap configuration
- Date and Time, including NTP, configuration
- Software upgrade
- Localization (the 3.x.x GUI is currently only available in English)

Installation instructions

> ⓘ **IMPORTANT:** The conversion process may take several hours to complete and many more for storage rebuilding to completely finish. So make sure that alternative provision is made for your backups during the process.

To ensure the integrity of your download, HP recommends verifying your results with this MD5 Checksum value as defined in the release notes for the QR ISO image containing the latest HP StoreOnce software.

Before updating

Pre-requisites for conversion

Before starting the conversion process you will require the following:

- Physical access to your StoreOnce appliance. You will need to remove it from the rack so will need a screwdriver, and the provided hex key to open the lid. Remember that the appliance is heavy and it is a two person operation to safely remove it from the rack.

- A blank 4GB USB flash stick.

- Copies of your license keys for capacity expansion and replication, either in file format for upload or in text format to type in after the upgrade.

- A monitor and USB keyboard attached to the appliance.

- *BB852-90938, Conversion from 2.x.x software to 3.4.x (or later) software guide* and updated manuals for your StoreOnce appliance for use after converting to 3.x.x software, these can be downloaded by visiting: http://www.hp.com/support/manuals and entering the new product name, see Mapping existing and new products (page 2).

- A copy of the QR ISO image appropriate to your product and software version.

  Browse to the HP StoreOnce Backup System page on Software Depot at: http://www.hp.com/go/storeonceqr and select the appropriate QR ISO image. You will be required to sign in with HP Passport, which can be created when you first access the site. For further information read the release notes associated with the QR ISO image.

Before starting conversion you also need to ensure that:

- All system hardware components have up-to-date firmware, this is VERY important to ensure that the install process completes successfully. Go to www.hp.com/go/support and type the name of your existing HP StoreOnce D2D Backup System product into the search box to locate the component firmware bundle for your product and the system BIOS.

- The system hardware is healthy, otherwise the install will fail. There should be:
  1. No failed or predictive failure disks
  2. RAID controller capacitor or Battery connected and charged
  3. Power Supplies all plugged in and working
  4. All system fans working
  5. All memory modules in good state

- For D2D4312 and D2D4324 products, before powering down when running Gen 2 software check that there are no failed disks and that the RAID spare disk is located in the lower right-hand disk slot in the appliance. If that is the case, the LEDs will be "off" on this disk. If this disk is not the spare, this is a good indication that the Internal RAID SAS cables are incorrectly cabled and must be corrected before conversion. See *BB852-90938, Conversion from 2.x.x software to 3.4.x (or later) software guide* for more details.

- Your data replication to other appliances is up-to-date and not running.

- You have made provision for backups to continue, if required, during the conversion process.
- You have made provision to be able to restore any user data from an alternative location.

Retaining your data via StoreOnce Replication

If you are already using replication to provide an off-site copy of the data being backed up to the appliance that you are converting, this is the best way to migrate data back onto the appliance after conversion completes. If you are not currently using replication but have other HP StoreOnce appliances available, these could provide you with a way to retain your data over the conversion process. Some important points to note are:

1. Make sure that replication is complete.
2. Make sure that all data required is being replicated. Check your VTL cartridge mappings and share mappings to make sure that everything is replicated.
3. You should remove replication mappings from and to the appliance being converted before commencing the conversion process. This will ensure that the replication partner devices return to their non-replicating mode and are available for restore operations if required.
4. Remember that replication recovery to your converted appliance will take a very long time over a low bandwidth link. You may need to consider other "seeding" processes to speed up the recovery process, such as co-locating the appliances on a LAN.

Recording other settings

Before conversion also record any settings that might be required, such as:

- IP addresses and other network settings if using static addressing
- Email server and alert settings
- SNMP settings
- Replication partner appliance addresses
- Local settings for replication such as blackout windows
- Share Names and CIFS/NFS server settings
- Existing replication and storage capacity licenses
- Library configurations
- Replication and capacity storage license details

Hardware modification

The first step in the conversion process is to remove the internal flash memory module from your existing StoreOnce appliance.

For D2D4312 and D2D4324 systems you will also need to reconfigure the 1GbE network connections in order to be able to use the network after 3.x.x system software is installed.

Detailed instructions for both these tasks can be found in *BB852-90938, Conversion from 2.x.x software to 3.4.x (or later) software guide*.

Software update process

The steps in the software installation and configuration are as follows:

- Download the 3.5.x (or later) "Quick Restore" ISO image and copy to a USB Flash stick.
- Boot the appliance from the QR Flash Stick and perform the software install.
- Perform first boot appliance configuration.
- Configure Network Settings.
- Re-apply capacity licenses.

- Configure appliance storage.
- Configure other appliance settings and re-apply replication licenses.
- Create backup targets.

Please refer to *BB852-90938, Conversion from 2.x.x software to 3.4.x (or later) software guide* for detailed instructions on carrying out the software conversion and completing the network, storage and appliance configuration.

Effective date

May, 2013