



Release Notes

Release	1.2.3
Supported Product	StorNext NAS
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StorNext NAS 1.2.3 Release Notes

The StorNext NAS 1.2.3 Release Notes provides the following:

- New features
- Resolved issues and change requests
- Known limitations
- Installation and upgrade instructions

Supported Software, Hardware, and Licensing Models

Review the following information regarding supported platforms and licensing models.

StorNext NAS Compatibility

StorNext NAS 1.2.3 is supported only with StorNext 5 Release 5.3.1 and later.

Supported Quantum Hardware

StorNext NAS 1.2.3 is supported on the following Quantum appliances:

- Xcellis
- Artico
- G300.
- M-Series (M440, M445, M660, M665, and Pro Foundation)

i Note: If you want to run StorNext NAS on an M-Series MDC, contact your Quantum Account Manager to ask about obtaining a StorNext NAS license.

Licensing and Enablement

Beginning with StorNext 5.3.1, StorNext NAS is pre-enabled for Artico, Xcellis, and G300 Gateways.

- Artico appliances are also shipped with StorNext NAS licenses pre-installed.
- For Xcellis and G300 Gateways, StorNext NAS licenses must be installed for any and all nodes on which StorNext NAS runs. For Xcellis, these StorNext NAS licenses are sold in pairs for each node.

You can install StorNext NAS licenses using the StorNext GUI's licensing feature.

New Features for Release 1.2.3

The StorNext NAS 1.2.3 includes the following new features.

snnas_usage

The `snnas_usage` feature, introduced with StorNext 5.3.1, creates a report file of active and inactive tertiary storage usage per-share per-user for each file system. For more information about the `snnas-usage` feature, see the **snnas_usage(1)** section in the [StorNext Man Page Reference Guide](#).

Requirements

Review the following requirements before using the `snnas_usage` feature:

- For the `snnas_usage` report to generate correctly, share paths must be unique across share names and must not be nested.
- The `snnas_usage` feature is supported only on metadata controllers (MDCs) with high availability (HA).

Report Format

Each file system device has an output file in comma-separated-values (CSV) format with the following path name:

```
/var/shareUsageReports/<timestamp>/<mount name>/<mount name>_<timestamp>
```

The CSV output file is suitable for importing into a spreadsheet where a pivot-table function can be used to add the total space per user ID or per share. The columns of the CSV output file are as follows:

Path Name	Share Name	Numeric User ID	Size in Bytes
-----------	------------	-----------------	---------------

File space that is outside of a share is reported with the **Path Name** and **Share Name** both set to the string **non-share files**.

The digits of the timestamp are:

```
year(4), month(2), day(2), hour(2), minute(2), second(2).
```

Copied Files

The system records the location information for a copy when it is made. When a file's location is changed to a different share, the **snnas_usage** report will continue to report the file's usage in the original share until the file is changed and a new copy is made. This discrepancy can be viewed with the `fsfileinfo` command in its **Stored Name** field.

External YUM Repo Support for Upgrades

Starting with StorNext NAS 1.2.3, you can perform a one-step StorNext NAS software upgrade from your Xcellis, Artico, M-Series, and G300s. You must be on StorNext 5.3.1 and StorNext NAS 1.2.0 or later to use this feature.

For detailed steps, see [Performing System Installations and Upgrades on the next page](#).

Performing System Installations and Upgrades

Starting with StorNext NAS 1.2.3, you can upgrade your StorNext NAS software directly from an external YUM repository. Perform the following tasks to upgrade to StorNext NAS 1.2.3.

Important

Before you install StorNext NAS 1.2.3, you must first perform one last manual update using the SNFS NAS Repo Upgrade RPM. This manual update accomplishes the following:

- Properly configures your StorNext NAS software to access the external YUM repository in which the StorNext NAS 1.2.3 RPM is stored.
- Imports a public key required to install the latest StorNext NAS RPM.

Beginning with StorNext NAS 1.2.3, all upgrade packages are signed, meaning that the public key — imported to your system from the SNFS NAS Repo Upgrade RPM — is required to install the software upgrade. You need to import this public key regardless of whether the upgrade packages are installed directly from the external YUM repository or from a local `/var/upgrade` directory.

After running the SNFS NAS Repo Upgrade RPM, you will no longer need to manually download the latest StorNext NAS RPMs. Instead your StorNext NAS software will be able to directly pull the latest version at your command.

Additional Upgrade Considerations

- You must be on StorNext 5.3.1 and StorNext NAS 1.2.0 or later to upgrade to StorNext NAS 1.2.3.
- You can upgrade directly to 1.2.3 from versions 1.2.0, 1.2.1, or 1.2.2.
- You need to perform all upgrade steps on each StorNext NAS Gateway server.
- For customers upgrading StorNext NAS Gateway servers in a cluster, you should perform the upgrade on the master node **after** you have completed upgrading all other nodes in the cluster.
- If you do not have Internet access to perform an upgrade directly from the external YUM repository, see the [Upgrading without Internet Access on the next page](#) section below.
- We recommend performing an upgrade when file systems do not need to be accessed.

Step 1: Run the SNFS NAS Repo Upgrade

1. Download the applicable SNFS NAS Repo Upgrade RPM to the `/var/upgrade` directory.

CentOS6

```
quantum-snfs-nas-repo-upgrade-1.2.3-5181.e16.x86_64.rpm
```

CentOS7

quantum-snfs-nas-repo-upgrade-1.2.3-5181.e17.centos.x86_64.rpm

2. From the console command line, run the following command to point your StorNext NAS software to the external YUM repository and to import the public key required to install the StorNext NAS 1.2.3 RPM:

```
system upgrade local
```

Step 2: Upgrade to StorNext NAS 1.2.3

1. Complete [Step 1: Run the SNFS NAS Repo Upgrade on the previous page](#).
2. From the console command line, run the following command to upgrade your StorNext NAS software to version 1.2.3:

```
system upgrade
```

 **Note:** Access to NAS shares may be briefly interrupted during the upgrade process.

Upgrading without Internet Access

If you do not have Internet access to upgrade your StorNext NAS environment from an external YUM repository, you can run a local upgrade to install StorNext NAS 1.2.3. However, you must still download and run the SNFS NAS Repo Upgrade RPM first. Otherwise your StorNext NAS software will not be able to install the StorNext NAS 1.2.3 RPM.

Perform a Local Upgrade to StorNext NAS 1.2.3

1. Complete [Step 1: Run the SNFS NAS Repo Upgrade on the previous page](#).
2. Download the applicable StorNext NAS 1.2.3 RPM to the `/var/upgrade` directory.

CentOS6

quantum-snfs-nas-1.2.3-5165.e16.x86_64.rpm

CentOS7

quantum-snfs-nas-1.2.3-5165.e17.centos.x86_64.rpm

3. From the console command line, run the following command to upgrade your StorNext NAS software to version 1.2.3:

```
system upgrade local
```

Fixes and Notes for Release 1.2.3

Change Request	Description
62605	As of Samba 4.1.20, the <code>ac1 check permissions</code> option is not deprecated, and you can ignore the WARNING: The "ac1 check permissions" option is deprecated message in Samba logs.
62031	

Known Limitations

Change Request	Description
62319	When the <code>panshell system show version</code> command is issued, it may return the incorrect StorNext version.
62318	
61816	This issue is more apparent on physical platforms, especially after an upgrade. During an initial install, the platform information is gathered and stored. During subsequent upgrades of StorNext, this information is not updated, so the old version of StorNext is displayed. Workaround The version reported by the physical platform is correct.

Change Request	Description
61671	<p>StorNext NAS currently does not allow unbonded 10 GbE interfaces on Xcellis. Unbonded "pXpY" names are not recognized by the controller.</p> <p>Workaround</p> <p>For Xcellis systems with 10 GbE interfaces, bond the 10 GbE interfaces. Once this is done, the interface will display a name of "bondX:Y" under the Alias column in the Configuration section of the page, which is recognized by the StorNext NAS Gateway.</p> <p>Change the bonding options for the 10 GbE interfaces</p> <ol style="list-style-type: none"> a. Login to the StorNext GUI b. Navigate to Configuration > System. c. In the Bonding section of the page, make sure bonds are set for the 10 GbE interfaces: <ul style="list-style-type: none"> • Make sure both interfaces use a specific bond number and are Not configured with the "Not Bonded" option. • Make sure the bond you chose is not currently in use for other ports, and that you only bond each 10 GbE interface in its own bond (a bond of 1) or bond both 10 GbE interfaces used for NAS together. • Do not bond 1 GbE interfaces with 10 GbE interfaces. <ul style="list-style-type: none"> i Note: If you changed a 10 GbE port from a "Not Bonded" to a specific bond number, you will have to re-enter Primary IP, Secondary IP, Netmask and Gateway IP addresses for the bond. • Changing these settings will cause a reboot of both server nodes, so make sure you have applied the correct bonding settings for both 10 GbE ports used for NAS. d. Click Apply to save the settings, and wait for the system to reboot. The configuration changes are applied during the reboot.

Change Request	Description
60704	<p>The <code>system restart services</code> command reports <code>Job for smbd cancelled</code></p> <p>Under certain circumstances, when issuing the <code>system restart services all</code> command, you may see a <code>Job for smbd.service canceled</code> message.</p> <pre data-bbox="480 422 1456 1024"> CLI Example system restart services all Stopping all services . . . keepalived winbind smbd ctdb snnas_controller Restarting all services . . . snnas_controller ctdb smbd Job for smbd.service canceled. winbind keepalived </pre> <p>Workaround</p> <p>This is a false message that occurs when smbd is stopped. You can ignore it.</p>
59274	<p>Under certain circumstances, you may be unable to change UNIX permissions on a directory from OSX. This issue occurs when you attempt to mount an SMB share from an OSX terminal (i.e. using <code>mount -t smbfs</code> or <code>mount_smbfs</code>).</p> <p>Workaround</p> <p>If you do need to change permissions on a directory, do so from the StorNext NAS Gateway.</p> <p>Alternatively, you may connect to the share from a Linux client and change permissions.</p>
59102	<p>The <code>share export config</code> command does not export NFS shares. It can be used only to export SMB share configurations.</p> <p>Additionally, the <code>share import config</code> command imports only SMB share configurations.</p>

Change Request	Description
57288 57402	<p>Unmounting or stopping the StorNext file system (cvfs) from a G300 may cause SMB mount failures, such as SMB becoming unresponsive when attempting to connect to the G300.</p>
57248	<p>StorNext quotas <i>are not enforced</i> by SMB shares exported from StorNext NAS.</p> <p>Some client applications, such as Notepad, on Windows systems, may silently fail when exceeding directory quotas. In other words, when a quota value is exceeded, a file of 0 (zero) length is written, but no warning or error the quota has been exceeded.</p> <p>Workaround</p> <p>If you must have quotas enforced, we recommend using the StorNext Windows client to connect writing data to the StorNext file system. Users can connect to these files through the SMB protocol in a read-only mode. This mode ensures content is not rewritten and quotas are not exceeded.</p>
56890	<p>If you attempt to mount an NFS share on an OS X client, you may receive an Operation is not permitted ... error message. This message may occur when the NFS shares are exported in a secure manner.</p> <p>Workaround</p> <ol style="list-style-type: none"> Include the resvport option when mounting the NFS share. <div data-bbox="519 1024 1458 1144" style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> <p>CLI Example Command: Issued from OS X terminal</p> <pre>mount_nfs -o resvport server:/path directory</pre> </div> <ol style="list-style-type: none"> Include the insecure option when adding or changing options for an NFS share <div data-bbox="519 1270 1458 1390" style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> <p>CLI Example</p> <pre>share add nfs myshare /stornext/snfs/myshare ro,insecure</pre> </div>
56622 54444	<p>Running the df command from an OS X system could report invalid or misleading information for NAS shares (SMB or NFS).</p>

Change Request	Description
56126	<p>Under certain circumstances, an SMB client cannot delete a file, even though the file and its directory have full UNIX permissions (i.e. full RWX or 777).</p> <p>Workaround</p> <ul style="list-style-type: none"> Remove the file using either the original creator's credentials or the sysadmin credentials. <p>OR</p> <ul style="list-style-type: none"> Use the StorNext Windows client to remove files with full UNIX permissions.
55993	<p>Setting Unix permissions on an OS X Samba client can silently fail.</p> <p>This problem has occurred under the following conditions:</p> <ul style="list-style-type: none"> The Samba mount is performed with the sysadmin credentials. Active Directory is not used. Local Mac credential authentication is used when creating files. <p>Workaround</p> <p>To make sure the Mac Samba client does not fail, do the following:</p> <ol style="list-style-type: none"> Make sure that the Mac Samba client's user ID matches the StorNext NAS Gateway's user ID. Use Active Directory. <p>By following these steps, you can create files and change permissions, while ensuring that the OS X Samba client remains active and operational.</p>
55855	<p>Under certain circumstances, <i>moving</i> a file to an SMB mounted directory, where a file with the same name already exists, can succeed without a prompt or warning and overwrite the original file. This issue occurs with certain Windows clients, such as Unix-like environment and command-line interface tools.</p> <p>Workaround</p> <p>Use Windows Explorer or the Windows cmd prompt interface to move files.</p>