Global Leader in Software Defined Storage.

NexentaStor

Release Notes 3.1.6 FP2

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Subject: NexentaStor Release Notes

Software: NexentaStor

Software Version: 3.1.6 FP2

Part Number: 7000-nxs-3.1.6-000010-B

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What is New in this Release?

NexentaStor 3.1.6 FP2

NexentaStor 3.1.6 FP2 fixed issues clustered around Seamless Upgrade.

NexentaStor 3.1.6 FP1

NexentaStor 3.1.6 FP1 fixed the Shellshock Bash vulnerabilities that affects all software that uses the Bash shell and parses values of environment variables.

NexentaStor 3.1.6

The following new features and enhancements are included in the NexentaStor release 3.1.6:

- Improved handling of intermittently faulty devices
- Support for Microsoft Server 2012 Cluster™ and Cluster Shared Volumes (CSV)™
- Reduced HA failover times
- Changed the default settings for SCSI reservations

SCSI Reservation Changes

To ensure reliability of NexentaStor deployments, the default SCSI reservation setting for HA Cluster has been changed. In NexentaStor 3.1.6 the default setting is SCSI-2.

In NexentaStor 3.1.5 the default setting for SCSI reservation is PGR-3. After the upgrade to version 3.1.6, the setting will automatically change to SCSI-2 reservations.

For new deployments SCSI-2 reservation is assigned automatically.

System Requirements

For system requirements for each environment, refer to the “System Requirements” section in the *NexentaStor Installation Guide*.

Upgrading

Warning:	If you use Cisco UCS C240 M3 server with LSI-9271 RAID controller, we do not recommend that you upgrade to 3.1.6. The upgrade will result in storage devices going offline after the upgrade.

Upgrading with an Internet Connection

Applicable Versions: 3.1.0, 3.1.1, 3.1.2, 3.1.3, 3.1.3.5, 3.1.4, 3.1.4.1, 3.1.4.2, 3.1.5, 3.1.6 or 3.1.6 FP1

To upgrade from 3.1.0, 3.1.1, 3.1.2, 3.1.3, 3.1.3.5, 3.1.4, 3.1.4.1, 3.1.4.2, 3.1.5, or 3.1.6 FP1 use the NMC command `setup appliance upgrade`.

Note:	Upgrading from 3.1.3.5 may affect the IDMU capabilities. So Nexenta does not recommend an upgrade if you are utilizing IDMU.

Upgrading without an Internet connection

Applicable Versions: 3.0.5, 3.1.1, 3.1.2, 3.1.3 or 3.1.3.5, 3.1.4, 3.1.4.1, 3.1.4.2, 3.1.5, 3.1.6, 3.1.6 FP1

If you are unable to connect to the Internet to upgrade your system, contact support@nexenta.com.

Upgrading from 3.0.5 and earlier with an Internet Connection

❖ *To upgrade the appliance to 3.1.6 FP2 and ensure all updates are installed:*

1. Type:

```
nmc:/$ setup appliance upgrade
```

Note:	For HA Cluster configurations, it is vital to install the mapmgr patch prior to upgrading to NexentaStor 3.1.6.

For more information, refer to the 060711 Technical Bulletin and Field Information Notice 2011-02 available in the Self-Service Portal.

Resolved Issues

NexentaStor 3.1.6 FP2

Table 3-1: Resolved issues in NexentaStor 3.1.6 FP2

Key	Description	Component(s)
NEX-2202	Fixed the issue with the password in NMV in the SNMP AGENT: CONFIGURATION page.	Appliance Management
NEX-2764	Fixed NMS to not use `cfgadm unconfigure` on any controllers of type fc-fabric while rescanning HBAs which causes delay in setups with more than 1000 targets.	NMS
NEX-2203	Fixed the issue with the password in the NDMP SERVER CONFIGURATION page in NMV.	NMV
NEX-1492	Revolved a condition that may occur during seamless upgrade where default user passwords may revert back to the system defaults.	Seamless Upgrade
NEX-1493	Revolved condition where custom user information may not persist after seamless upgrade completes.	Seamless Upgrade
NEX-2638	Revolved conditions where checkpoints may not have persisted after seamless upgrade.	Seamless Upgrade
NEX-2805	Multi-NMS will be disabled automatically for seamless upgrade while running the nmc command `setup nexentastor upgrade`.	Seamless Upgrade
NEX-2822	Revolved issue where custom users created in NMV were unable to login after seamless upgrade.	Seamless Upgrade
NEX-2405	Fixed the NMS properties to 4x defaults before saving appliance configuration during seamless upgrade to prevent restoring 3x defaults in upgraded 4x version.	Seamless Upgrade

NexentaStor 3.1.6 FP1

Table 3-2: Resolved Issues in NexentaStor 3.1.6 FP1

Key	Description	Functional Area
NEX-2658 NEX-2635	Security Update to address vulnerability CVE-2014-6271. This vulnerability CVE-2014-6271 could allow for arbitrary code execution.	Packaging
NEX-2657 NEX-2642	Security Update to address vulnerability CVE-2014-7169. This vulnerability CVE-CVE-2014-7169 involved bash allowing code execution via specially-crafted environment.	Packaging

NexentaStor 3.1.6 Known Issues

Changes to Auto-Sync using NMV may not take effect

Description: 13278

In NMV, when attempting to change Auto-Sync options, the changes do not take effect.

In some conditions, HA systems failover does not occur when running Auto-Sync

Description: 13366, NEX-315

In some conditions, HA systems when running Auto-Sync, may not failover as expected.

Workaround:

Remove Auto-Sync from each node, and mark the pool as repaired.

In some conditions, the Confguard plugin does not send Email notifications for changes

Description: 13282

When using the NexentaStor Confguard plugin, which continuously monitors system configuration, in some conditions, it does not send email alerts.

Workaround:

◆In NMC, type:

```
nmc:/$ setup confguard report send
```

mptsas kstat namespace collision during Installer boot

Description: NEX-2276

Due to certain timing and specific sequence of operation in NexentaStor Installer, you may see kernel statistics warning messages when booting from the NexentaStor ISO.

Example:

```
WARNING: kstat_create('unix', 1, 'mpt_sas_nexus_enum_tq'): namespace
collision
```

```
WARNING: kstat_create('mpt_sas', 1, 'fm'): namespace collision
```

Workaround:

The kernel statistics error messages do not affect the installation and system operations. You

can safely ignore these messages.

Upgrades from 3.1.3 to 3.1.5 displays error "mandb: cannot open /usr/share/man/man8/pwconv.8"

Description: 11556

When upgrading from 3.1.3 to 3.1.6, errors occurs during the upgrade sequence referencing ‘`mandb: can't open /usr/share/man/man8/pwconv.8`’

The errors are benign and may be safely ignored. These errors are resolved later in the upgrade sequence..

Upgrade path: Unable to remove mapping entry from zvol 'tank1/zvol_1'

Description: NEX-2208, NEX-2270

This bug affects HA-Cluster deployments only.

You may have issues with `mapmgr` during the upgrade to 3.1.6:

- During the upgrade process symlink `/usr/bin/mapmgr -> /opt/HAC/RSF-1/bin/mapmgr` is replaced with the binary file `/usr/bin/mapmgr`. This results in `nms-comstar` and `rsfmon` using different version of mapmgr which causes RPC issues with block target operations
- During the upgrade the NexentaStor HA Cluster nodes from version 3.1.5 to 3.1.6, the shared volume gets exported. After the upgrade you may be unable to add the shared volume back under cluster control.

Workaround:

To fix this issue you must move mapmgr binary file to the old location and replace the binary file that the upgrade adds to /opt/HAC/RSF-1/bin/mapmgr with a symlink.

❖ *To fix the mapmgr issue:*

1. Log in to bash:

   ```
   nmc:/$ option expert_mode =1
   nmc:/$ !bash
   ```

2. Move the mapmgr file:

   ```
   # mv /usr/bin/mapmgr /usr/bin/mapmgr.old
   ```

3. Replace the binary file with symlink:

   ```
   # ln -s /opt/HAC/RSF-1/bin/mapmgr /usr/bin/mapmgr
   ```

sTec © ZeusRAM™ SAS SSD recommended upgrade of the Firmware to version C023

Description:

STEC ZeusRAM™ SAS SSD firmware version C023 has been certified by Nexenta on 3.1.6 and it is strongly recommended to upgrade to this firmware version.

Upgrade:

Contact sTec for details on how to obtain and upgrade this firmware.

Active Directory member IDs may persist when leaving a domain

Description: 13310

After leaving an Active Directory Domain NexentaStor may retain the ID's of members of the domain.

Workaround:

- *To remove the IDs:*

1. Open NMC. At the NMC prompt, type:

```
# option expert_mode=1
# !bash
```

2. List the local group members using the following command in bash, type:

```
# smbadm show -m
```

3. After identifying any group members associated with the removed domain, use the following command to remove them.

```
# smbadm remove-member -m MEMBER GROUP
```

The "setup configuration save" and "setup configuration restore" commands do not save and restore iSCSI settings

Description: NEX-1956

The `setup appliance configuration save` and `setup appliance configuration restore` commands do not save/restore iSCSI settings, such as targets, mappings, etc. Only iSCSI Target Portal Group settings are restored.

Workaround:

- *To restore iSCSI configuration, using NMC:*

1. Disable multi-NMS:

```
nmc:/$ setup appliance nms property srvpool_cnt_initial -p 0
```

2. Restart NMS:

```
nmc:/$ setup appliance nms restart
```

3. Restore appliance configuration:

```
nmc:/$ setup appliance configuration restore all
```

4. Restart NMS:

```
nmc:/$ setup appliance nms restart
```

NMV issue when trying to list iSCSI initiator with IQN containing non-ASCII characters

Description: 12866

NMV issue when trying to list iSCSI initiator groups immediately after successfully creating IQN with non-ASCII characters.

Workaround:

Use ASCII characters for the iSCSI initiator IQN.

Auto-tier Job stopped due to ACL callback error

Description: SUP-812

Auto-tier job fails with "ACL callback error" when "Copy ACL" is set to "Yes" and the "rsync+ssh" protocol selected. The auto-tier job completes successfully when "Copy ACL" is set to "No"

Microsoft Identity Management for UNIX (IDMU) authentication not supported

Description: 13535, SFR-56

If you have previously configured the idmap service to use "idmu" mapping strategy through NMC by typing:

```
nmc:/$ option expert_mode=1
nmc:/$ !bash
# svccfg -s svc:/system/idmap setprop \ config/
  directory_based_mapping = astring: idmu
```

You need to either:

(A) remove this configuration change (reverting to the default "name" based mapping strategy)

(B) delay your upgrade until enhancement #13535 (support idmap config/ directory_based_mapping = idmu) is implemented

❖ *To determine whether you have this idmap configuration setting, look for these results in NMC:*

```
nmc:/$ option expert_mode=1
nmc:/$ !bash
```

```
# svccfg -s svc:/system/idmap listprop config
```

If you see the below response IDMU is enabled:

```
config/directory_based_mapping astring idmu
```

While we believe this impacts a very small number of existing customers, we are currently working on a solution.

Multi-NMS prohibits use of proxies when upgrading

Description: SUP-542, SUP-561

When upgrading using the NMC command `setup appliance nms property upgrade_proxy` the proxy settings are not honored if Multi-NMS is enabled. Multi-NMS is enabled by default.

Workaround:

- *Disable Multi-NMS, using NMC:*

1. Decrease the size of NMS-pool

   ```
   nmc:/$ setup appliance nms property srvpool_cnt_max -p 0 -y
   ```

2. Restart NMS

   ```
   nmc:/$ setup appliance nms restart
   ```

Issues with SuperMicro® physical view in NMV

Description: 13297

When using SuperMicro hardware where the shared JBOD(s) have been manually setup using NMC, and in an HA configuration, it is possible the physical view of the JBOD within NMV is not correctly displayed on one of the nodes.

Workaround:

Manually configure the shared JBOD(s) using the NMC `setup jbod model` command on both nodes prior to failover. If the service has already been failed over, issue the NMC `setup jbod model` on the node missing the JBOD physical view.

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