



# NexentaStor 5.0.3-FP1

## Release Notes

### In This Document

Resolved Issues.....	2
Known Issues .....	2
Installation Procedure .....	2
Upgrading to the Latest NexentaStor 5.0 Version .....	3
Upgrading Clustered Nodes.....	6
Where to Find More Information.....	10

### Release History

Date	Description
April, 2017	NexentaStor 5.0.3 GA version
May, 2017	NexentaStor 5.0.3-FP1 version

## Resolved Issues

This table lists the resolved issues as of NexentaStor 5.0.3-FP1.

Component	Key	Description
Chassis Management, NEF API	NEX-10295	Resolved issue where NexentaStor did not list InfiniFlash SSD devices.

## Known Issues

Known issues for 5.0.3-FP1 is identical to known issues in NexentaStor 5.0.3.

## Installation Procedure

Follow the instructions in the *NexentaStor 5.0 and NexentaFusion 1.0 Installation QuickStart Guide* for a fresh install.

# Upgrading to the Latest NexentaStor 5.0 Version

1. Check the current version of the NexentaStor by running the following command.

```
CLI@nexenta> software version
```

Note the current version number to validate later that the upgrade completed successfully.

## Setting Up Proxy

2. Configure the proxy server if you need to use one to access the repositories for upgrading NexentaStor software packages.

```
CLI@nexenta> config set system.webProxy = http://example.com:8080
```

To view the proxy server that you set up:

```
CLI@nexenta> config list system.webProxy
```

If you need to unset the proxy:

```
CLI@nexenta> config reset system.webProxy
```

## With Internet Connection

3. You can upgrade to the latest version from an earlier NexentaStor 5.0 version using the following command.

```
CLI@nexenta> software upgrade
```

Reboot once the upgrade completes.

**Note:** Upgrading from NexentaStor 4.0.x to NexentaStor 5.0 is not supported.

4. The upgrade process grabs the images from the following locations, bypassing the need to download images.

```
CLI@nexenta> publisher list
```

PUBLISHER	STATUS	LOCATION
nexenta	online	https://prodpkg.nexenta.com/nstor/pkg5/
HighAvailability	online	https://prodpkg.nexenta.com/thirdparty/HAC/rsf/pkg5/

5. Verify that you have successfully upgraded to the latest version. The system output shows the expected version number as in the following example.

```
CLI@nexenta> system status
Host name           ANS5QA40-1
Version             5.0.3-FP1
Cluster name        Not clustered
Management IP address 10.3.199.163:8443
```

6. Confirm that the upgrade version is activated and to see your boot environment list.

```
CLI@nexenta> software list
NAME                SPACE  ACTIVENOW  ACTIVEAFTERREBOOT  CREATIONTIME
NexentaStor-5.0.3   1021.1M  no         no                 May 16
NexentaStor-5.0.3-1 3.47G   yes        yes                 May 16
```

7. Reboot the appliance.

8. Validate the software version.

```
CLI@nexenta> software version

PUBLISHER  VERSION      PACKAGINGDATE

nexenta    5.0.3-FP1    Mon May 8 08:49:24 2017
```

## Without Internet Connection

If you do not have an internet connection and want to upgrade NexentaStor, contact [support@nexenta.com](mailto:support@nexenta.com) to obtain the media-ready image. Use this media-ready image to create a loadable DVD, which can be used to upgrade to the latest NexentaStor 5.0.

1. Log in to the NexentaStor node that does not have internet connection.
2. Load the DVD you created from the loadable image into the DVD Slot.

The ISO gets mounted automatically.

### To upgrade the NexentaStor ISO:

3. From the CLI, update the publisher origin.

Destroy the current publisher first.

```
CLI@nexenta> publisher destroy <publisher of the repository to remove>
```

Example:

```
CLI@nexenta> publisher destroy nexenta
```

```
CLI@nexenta> publisher destroy HighAvailability
```

4. Set the publisher to pick the ISO from the dark site DVD.

```
CLI@nexenta> publisher create nexenta /media/NS_UpgradeCD/nexenta
```

5. Set the publisher to pick the HighAvailability image from the dark site DVD.

```
CLI@nexenta> publisher create HighAvailability /media/NS_UpgradeCD/rsf
```

**6. Verify the publisher list.**

```
CLI@nexenta> publisher list
```

PUBLISHER	STATUS	LOCATION
nexenta	online	<a href="file:///media/NS_UpgradeCD/nexenta">file:///media/NS_UpgradeCD/nexenta</a>
HighAvailability	online	<a href="file:///media/NS_UpgradeCD/rsf">file:///media/NS_UpgradeCD/rsf</a>

**7. Now dry-run the upgrade.**

```
CLI@nexenta> software upgrade -n
```

```
Would perform upgrade from version 5.0.0.43.1 to 5.0.3.7
```

**8. Validate that the upgrade is in place.****9. Now run the upgrade.**

```
CLI@nexenta> software upgrade
```

**10. Reboot the appliance.****11. Validate the software version.**

```
CLI@nexenta> software version
```

PUBLISHER	VERSION	PACKAGINGDATE
nexenta	5.0.3-FP1	Mon May 8 08:49:24 2017

## Upgrading Clustered Nodes

This example shows two pools (PoolA and PoolB) with PoolA on NodeA and PoolB on NodeB and a HA service (PoolA) running on NodeA. The section covers the following steps:

1. Failover a HA service (PoolA) running on NodeA to NodeB.
2. Upgrade NodeA.
3. Failover the HA service (PoolA) back to NodeA after upgrading NodeA.
4. Now upgrade Node B.
5. Move the service back to its original configuration.

To upgrade the clustered nodes:

1. List the HA services running on the clustered nodes.

```
CLI@NodeA> haservice list
NAME      DESCRIPTION      NODES              RUNNING  STOPPED  BROKEN
poolA     myclusterservice NodeA,NodeB       NodeA    NodeB    -
```

2. Verify the existing pools on both the nodes.

```
CLI@NodeA> pool list
NAME      SIZE      ALLOC    FREE    AVAIL    DEDUP    EXPANDSZ    FRAG    HEALTH
poolA     9.63G     100.2M   9.53G   99%     1.00x    -           0%     ONLINE
rpool     12.47G    7.41G    5.06G   41%     1.00x    -           26%    ONLINE
```

```
CLI@NodeB> pool list
NAME      SIZE      ALLOC    FREE    AVAIL    DEDUP    EXPANDSZ    FRAG    HEALTH
poolB     9.63G     100.2M   9.53G   99%     1.00x    -           0%     ONLINE
rpool     12.47G    7.41G    5.06G   41%     1.00x    -           26%    ONLINE
```

3. Failover the HA service running on NodeA to the other node (NodeB) in the cluster.
4. The example here shows only one cluster service running on NodeA. If you have more than one service on the node, when failing over all the services will fail over to the other node in the cluster.

```
CLI@NodeA> haservice failover <from-node> <to-node>
```

Example:

```
CLI@NodeA> haservice failover NodeA NodeB
```

System response:

The following services can be moved:

PoolA

```
Move 1 service(s) from node 'NodeA' to node 'NodeB'? [y/N] y
```

```
Moving service 'PoolA' ... OK
```

All running services have been successfully moved.

Now the HA Service failed over to NodeB and the poolA imported to NodeB.

5. From NodeA or NodeB, verify that the HA Service failed over to NodeB.

```
CLI@NodeB> haservice status
```

6. System response:

```
service: PoolA
NODE      STATUS  MODE  UNBLOCKED
NodeA     stopped manual yes
NodeB     running manual yes
```

7. From NodeB, verify that the PoolA from NodeA imported to NodeB.

```
CLI@NodeB> pool list
NAME      SIZE      ALLOC    FREE    AVAIL  DEDUP  EXPANDSZ  FRAG  HEALTH
poolA     9.63G    100.2M   9.53G   99%    1.00x  -         0%   ONLINE
poolB     9.63G    100.2M   9.53G   99%    1.00x  -         0%   ONLINE
rpool    12.47G    7.41G    5.06G   41%    1.00x  -        26%   ONLINE
```

8. Now upgrade NodeA. Before the actual upgrade, do a dry run to ensure that you are upgrading to the intended version.

```
CLI@NodeA> software upgrade -n
```

System response:

Would perform upgrade from version 5.0.1.2 to 5.0.3.7

```
CLI@NodeA> software upgrade
```

Upgrading system software...

Upgrade done.

On the next boot the Boot Environment NexentaStor-5.0.3-1 will be mounted on /. Reboot when ready to switch to this updated BE.

Reboot now? [y/N]

9. Type "y" to reboot the appliance.  
10. Confirm that the upgrade version is activated and to see your boot environment list.

```
CLI@NodeA> software list
```

NAME	SPACE	ACTIVENOW	ACTIVEAFTERREBOOT	CREATIONTIME
NexentaStor-5.0.3	1021.1M	no	no	May 16
NexentaStor-5.0.3-1	3.47G	yes	yes	May 16

11. Validate the software version.

```
CLI@NodeB> software version
```

PUBLISHER	VERSION	PACKAGINGDATE
nexenta	5.0.3-FP1	Mon May 8 08:49:24 2017

12. From NodeB verify that the NodeA is listed in the cluster after upgrading NodeA.

```
CLI@NodeB> hacluster status

== Cluster status ==
NAME          STATUS  NODES  SERVICES  DESCRIPTION
GACluster    ok      2/2    1/1        5.0 HA Cluster

== Nodes ==
NODE          STATUS  SERVICES  ADDRESS    HostId      Release
NodeA        up      0/1        10.3.65.9  -           -
NodeB        up      1/1        10.3.65.8  808b556b   3.12.0
```

13. After NodeA is upgraded, failover the service back to NodeA from NodeB using the following command on NodeB:

```
CLI@NodeB> haservice failover NodeB NodeA
```

14. Now verify from NodeA that the HA Service (PoolA) is up and running on NodeA.

```
CLI@NodeA> haservice status

System response:
service: PoolA
NODE          STATUS  MODE      UNBLOCKED
NodeA        running manual    yes
NodeB        stopped manual    yes
```

15. Also verify that the pools moved from NodeB to NodeA.

```
CLI@NodeA> pool list
NAME  SIZE   ALLOC  FREE   AVAIL  DEDUP  EXPANDSZ  FRAG  HEALTH
poolA 9.63G 100.2M 9.53G 99%    1.00x  -         0%   ONLINE
poolB 9.63G 100.2M 9.53G 99%    1.00x  -         0%   ONLINE
rpool 12.47G 7.41G  5.06G 41%    1.00x  -         26%  ONLINE
```

16. Now upgrade NodeB.

```
CLI@NodeB> software upgrade
```

```
Upgrading system software...
```

```
Upgrade done.
```

```
On the next boot the Boot Environment NexentaStor-5.0.3-1 will be
mounted on /. Reboot when ready to switch to this updated BE.
```

```
Reboot now? [y/N]
```

17. Type "y" to reboot the appliance.

18. Confirm that the upgrade version is activated and to see your boot environment list.

```
CLI@NodeB> software list
```

NAME	SPACE	ACTIVENOW	ACTIVEAFTERREBOOT	CREATIONTIME
NexentaStor-5.0.3	1021.1M	no	no	May 16
NexentaStor-5.0.3-1	3.47G	yes	yes	May 16



19. From NodeA verify that the NodeB is back in the cluster after upgrading NodeB.

```
CLI@NodeA> hacluster status
== Nodes ==
NODE      STATUS  SERVICES  ADDRESS      HostId      Release
NodeA     up      1/1       10.3.65.9    -           -
NodeB     up      0/1       10.3.65.8    808b556b   3.12.0
```

20. From NodeB move PoolB back to NodeB so the cluster is back in its original configuration with PoolA on NodeA and PoolB on NodeB.

```
CLI@NodeB> haservice move <service> NodeA
```

Example:

```
CLI@NodeB> haservice move PoolA NodeA
```

21. Now verify from both the nodes that the HA service is up and running from their original configuration. Run the following commands from both the nodes.

```
CLI@NodeA> haservice status
CLI@NodeB> haservice status
```

```
CLI@NodeA> haservice list
NAME  GUID                VIPs  NODES                RUNNING  STOP
poolA 14089758145006079395 Avip  NodeA,NodeB        NodeA    NodeB
```

```
CLI@NodeB> haservice list
NAME  GUID                VIPs  NODES                RUNNING  STOP
poolB 14089758145006079395 Avip  NodeA,NodeB        NodeA    NodeB
```

---

## Where to Find More Information

For more information on NexentaStor 5.0 and NexentaFusion 1.0, use the following documents in conjunction with this release notes. To access the following documents, please visit:

<https://nexenta.com/products/documentation>

### ***NexentaStor 5.0 Product Guide***

This document includes an overview of NexentaStor and its core components, describes key features, and provides relevant CLI commands. This manual is intended as a guide to NexentaStor concepts and not as a configuration guide.

### ***NexentaStor 5.0 and NexentaFusion 1.0 Installation QuickStart***

This document includes the instructions to install and upgrade NexentaStor and NexentaFusion.

### ***NexentaFusion 1.0 User Guide***

This documentation provides easy to follow step-by-step instructions for common configuration and monitoring tasks.

### ***NexentaStor 5.0 CLI Configuration QuickStart***

This guide demonstrates the basic steps and commands to configure and manage NexentaStor 5.0 appliances. Use this document in conjunction with the *NexentaStor 5.0 CLI Reference Guide*, and the *NexentaStor 5.0 HA CLI Admin Guide*.

### ***NexentaStor 5.0 CLI Reference Guide***

This reference guide provides a summary of the CLI commands. Use it in conjunction with the *NexentaStor 5.0 CLI Configuration Guide*.

### ***NexentaStor 5.0 HA QuickStart***

This guide demonstrates the basic steps and commands to configure and manage the NexentaStor 5.0 High Availability (HA) cluster using the NexentaStor 5.0 Command Line Interface (CLI).

### ***NexentaStor 5.0 vCenter QuickStart***

This guide includes instructions to install NexentaStor 5.0 vCenter Web Client Plugin (vCenter Plugin), which enables VMware customers to configure and manage storage and virtualization through a single interface. You can use this plugin to access summary and detailed analytics and real time status monitoring of single and clustered NexentaStor appliances.

### ***NexentaStor 5.0 VVOL Admin Guide***

This guide describes the NexentaStor Virtual Volume (VVOL) solution. It provides instructions on how to deploy VVOL, integrate it with VMware vSphere, and enumerates storage operations it supports.

### ***NexentaStor 5.0 High Performance Replication (HPR) User Guide***

This document demonstrates how to configure High Performance Replication (HPR) to replicate datasets using the NexentaStor Command Line Interface (CLI) and using the NexentaFusion GUI.

For details on the list, see [portal.nexenta.com](http://portal.nexenta.com).

### ***Hardware Certification List (HCL) for NexentaStor 5.0***

This document provides a list of certified hardware for NexentaStor 5.0 and is intended for Nexenta Partners and Nexenta customer-facing organizations. The latest version of Nexenta Hardware Certification List (HCL) is posted on Partner Portal. For information on the NexentaStor Openstack Cinder drivers (NFS/ iSCSI), see

[docs.openstack.org](https://docs.openstack.org) and search for 'NexentaStor 5.0'.