NexentaFusion 1.2.1
Release Notes

Date: November, 2018
Part Number: nf-1.2.1-releasenotes-RevA
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Revision History

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<th>Revision</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>nf-1.2.1-releasenotes-RevA</td>
<td>November, 2018</td>
<td>NexentaFusion 1.2.1 GA version.</td>
</tr>
</tbody>
</table>
Product Overview

This document provides the release notes for NexentaFusion version 1.2.1.

The NexentaFusion 1.2.1 graphical user interface (GUI) enables you to intuitively manage NexentaStor and NexentaCloud appliances. You can create and configure pools, create and share file systems, as well as access appliance-level summaries of hardware, pools, NICs, file systems, shares, volumes, LUNs, and services. NexentaFusion uses drill-down menus, action cogs, and expand-contract arrows, to provide a full range of administrative functionality for provisioning, monitoring, and optimizing storage appliances. You access NexentaFusion online help through a Web browser. NexentaFusion 1.2.1 supports the latest version of Chrome, and Firefox v47 or later.

Note:
- NexentaFusion 1.2.1 supports NexentaStor 5.1.1, 5.1.2, 5.2.0 and NexentaCloud 5.1.2, 5.2.0
- Self-signed certificates are not recommended for production environments. A certificate signed by trusted Certificate Authority (CA) is more secure and is considered best practice.

NexentaFusion Deliverables

- NexentaFusion continues to be delivered as an OVA file to be used on VMware based hypervisors.
- Additionally, NexentaFusion can be deployed as a docker container and is available via a script from nexenta.github.io.
- NexentaFusion is also available as an instance in the public cloud through the AWS marketplace (https://aws.amazon.com/marketplace/pp/B07B5DMXX2?qid=1530072691678&sr=0-1&ref_=srh_res_product_title)

Licensing

NexentaStor 5 Enterprise Edition license and NexentaCloud hourly and annual licenses include the right to use NexentaFusion to manage the licensed systems at no extra charge. If running NexentaFusion in AWS, the user is responsible for AWS infrastructure costs.
What’s New in NexentaFusion 1.2.1

NexentaFusion 1.2.1 delivers features and fixes to improve stability, scalability, and performance. This release builds on the fixes and enhancements previously released in 1.2; addresses customer-reported issues, and addresses issues found internally by Nexenta engineering.

This section provides an overview of the changes and feature enhancements in this release.

**S3 Support Bundles**

Beginning with NexentaFusion 1.2.1 support bundles are uploaded by default via S3 protocol to Nexenta servers. By default, S3 uploads use parallel upload for maximum throughput performance, and faster uploads. Using the new Call Home feature, Bundles can be periodically created and automatically sent to the Nexenta Support server.


**Support for Encrypted Storage**

Beginning with NexentaFusion 1.2.1, NexentaCloud One-Click Deployment allows for the use of AWS encryption for NexentaCloud storage. This can be done during initial deployment of a NexentaCloud instance, not at later point. When this storage encryption feature is used, all volumes created at deployment will be encrypted, and any future volumes will also be encrypted. NexentaFusion does not support an environment with a mix of encrypted and unencrypted volumes. This requires the configuration of the Master key for your AWS account.


**Chassis Management Enhancements**

NexentaFusion 1.2.1 adds chassis management for the following storage enclosures:

- HPE D3610,
- HPE D3710,
- HPE D6020,
- HGST ScaleApex 4U60-G3 JBOD,
- AMAX StorMAX NX225.
### Known Issues

**Table 1: NexentaFusion 1.2.1 Known Issues**

<table>
<thead>
<tr>
<th>Component</th>
<th>Key</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>NexentaFusion</td>
<td>NEX-7434</td>
<td>NexentaFusion can continue to display an appliance as a cluster even after the cluster has been destroyed.</td>
<td>Unregister the cluster, and then re-register the individual nodes as separate appliances.</td>
</tr>
<tr>
<td>HA</td>
<td>NEX-7663</td>
<td>The NexentaFusion UI allows users to attempt to import a pool even when it is unavailable for any reason. Until the import attempt is made, the user cannot tell the status of the pool.</td>
<td>If a pool import fails, resolve the condition making the pool unavailable and attempt again.</td>
</tr>
<tr>
<td>Pool Management</td>
<td>NEX-8125</td>
<td>Creating a cluster between two nodes already registered in the NexentaFusion UI will not be reflected in the NexentaFusion UI; UI will continue to recognize the nodes as separate, un-clustered nodes.</td>
<td>Either establish the cluster and then register, or un-register and re-register the cluster nodes.</td>
</tr>
<tr>
<td>UI Initial Login</td>
<td>NEX-8417</td>
<td>When starting up NexentaFusion using the Firefox browser, there may be some error messages the first time NexentaFusion is started after install. (occurs only with self-signed certificate).</td>
<td>Acknowledge the errors and continue. Refresh the webpage if additional issues are encountered.</td>
</tr>
<tr>
<td>FS Snapshot</td>
<td>NEX-8426</td>
<td>The NexentaFusion UI does not allow a filesystem containing snapshots with clones to be destroyed. The error is: Failed to destroy snapshot: pool/filesystem@snapshot. Status code: EEXIST</td>
<td>Destroy filesystem from NEF CLI: filesystem destroy -R pool/filesystem</td>
</tr>
<tr>
<td>FMA alert</td>
<td>NEX-14950</td>
<td>A heavily-loaded appliance with a large FMA alert database may result in NexentaFusion displaying an &quot;unknown&quot; icon in the health widget for CPU and Network utilization.</td>
<td>Use the CLI or the NexentaFusion Management/Case Monitoring view to check for alerts on CPU or NW utilization.</td>
</tr>
<tr>
<td>NFS</td>
<td>NEX-15388</td>
<td>If a Hosts Access entry for Read/Write exists for &quot;***&quot; and an additional entry for any single host is added with Read/Write checked, NFS mounts break.</td>
<td>Remove the additional single host entry to repair the NFS mounts.</td>
</tr>
<tr>
<td>iSCSI Target</td>
<td>NEX-15867</td>
<td>NexentaFusion fails to remove the iSCSI Target from the target group when the iSCSI Target state is unknown.</td>
<td>Enable/Resolve the iSCSI target service state. Delete the target or group from the CLI.</td>
</tr>
<tr>
<td>SMB shares</td>
<td>NEX-15887</td>
<td>NexentaFusion and the NEF CLI do not support adding SMB shares with spaces for the share name.</td>
<td><em>Nexenta recommends avoiding using share names with spaces in them. If avoiding spaces is impossible, contact Nexenta Support for assistance with adding shares with spaces in the name.</em></td>
</tr>
<tr>
<td>Upgrade</td>
<td>NEX-17506</td>
<td>The error &quot;invalid value ... for instance type&quot; occurs rarely during the license upgrade process for a NexentaCloud instance.</td>
<td>Click &quot;Continue&quot; in the COG, and the upgrade should complete successfully.</td>
</tr>
</tbody>
</table>
Currently there is no option to upload/download a bundle for a NexentaCloud appliance.

The NexentaFusion UI incorrectly allows the use of special characters when creating a network name, when the CLI does not.

In situations where an appliance is heavily loaded, or the user is "fast clicking" between screens it is possible to see timeout errors displayed on the NexentaFusion UI.

Occasionally when logging in again after a session has expired, the NexentaFusion orange menu bar will appear to hang with a spinner.

Resolved Issues

Table 2: NexentaFusion 1.2.1 Resolved Issues

<table>
<thead>
<tr>
<th>Component</th>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytics</td>
<td>NEX-17673</td>
<td>Resolved an issue where the &quot;Data Reduction Ratio by Pool&quot; widget would intermittently malfunction.</td>
</tr>
<tr>
<td>Appliance Registration</td>
<td>NEX-18862</td>
<td>Resolved an issue where NexentaFusion can fail to register an appliance after an upgrade.</td>
</tr>
<tr>
<td>Chassis Mgmt</td>
<td>NEX-18196</td>
<td>Corrected the image displayed for the HDS8000_SSU0111 JBOD so that the same image is displayed regardless of what drives are installed in the chassis.</td>
</tr>
<tr>
<td>ElasticSearch Logs</td>
<td>NEX-18826</td>
<td>Configured log rotation for ElasticSearch logs such that /var/lib/elasticsearch/logs does not grow continuously.</td>
</tr>
<tr>
<td>HA</td>
<td>NEX-15110</td>
<td>Resolved an issue where the NexentaFusion UI could intermittently display a status of &quot;Unknown&quot; for an HA service.</td>
</tr>
<tr>
<td>HA</td>
<td>NEX-16018</td>
<td>Resolved an issue where the 'service state' of an HA service would intermittently not update properly after a failover.</td>
</tr>
<tr>
<td>NexentaCloud</td>
<td>NEX-17309</td>
<td>Resolved an issue where the NexentaCloud deployment status would occasionally not update to &quot;Connected&quot;, but instead remained stuck at &quot;Cleanup&quot; on the Appliance List view.</td>
</tr>
<tr>
<td>NexentaCloud</td>
<td>NEX-17422</td>
<td>Resolved an issue where changing the password for a NexentaCloud appliance via the CLI would require the appliance to be unregistered and then re-registered from NexentaFusion.</td>
</tr>
<tr>
<td>NexentaCloud</td>
<td>NEX-17642</td>
<td>Removed invalid cases from being reported in the NexentaFusion Management/All Cases view after deploying a NexentaCloud instance.</td>
</tr>
<tr>
<td>NexentaCloud</td>
<td>NEX-17244</td>
<td>Resolved an issue where a NexentaFusion support bundle larger than 512 MB would fail to upload using https, and a bundle larger than 256 MB would fail to upload using ftp.</td>
</tr>
<tr>
<td>Widget Units</td>
<td>NEX-17481</td>
<td>Changed the IP Link Performance widget units so that all units are converted to bits prior to being reported as bps, Mbps, Gpbs, etc.</td>
</tr>
<tr>
<td>Widget Units</td>
<td>NEX-17482</td>
<td>Changed the FC Ports Performance widget units so that all units are converted to bits prior to being reported as bps, Mbps, Gpbs, etc.</td>
</tr>
</tbody>
</table>
## Minor Enhancements

Table 3: NexentaFusion 1.2.1 Notable Minor Enhancements

<table>
<thead>
<tr>
<th>Component</th>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Login</td>
<td>NEX-17814</td>
<td>Changed the default password for a newly deployed NexentaFusion instance from 'nexenta' to 'fusion'. This still must be changed upon initial login.</td>
</tr>
<tr>
<td>NexentaFusion Support Bundle</td>
<td>NEX-15514</td>
<td>Added the ability to create/upload/download a support bundle to the NexentaFusion UI.</td>
</tr>
<tr>
<td>NexentaFusion Software Updates</td>
<td>NEX-18286</td>
<td>The NexentaFusion UI will now find and display available software updates.</td>
</tr>
<tr>
<td>NexentaStor Updates</td>
<td>NEX-17750</td>
<td>Added a mechanism to the NexentaFusion UI to show updates available for NexentaStor.</td>
</tr>
<tr>
<td>Pool Management</td>
<td>NEX-8179</td>
<td>Added the &quot;force&quot; option for creating a pool form the NexentaFusion UI.</td>
</tr>
</tbody>
</table>


Installation and Upgrade Procedures

NexentaFusion Deliverables

- NexentaFusion continues to be delivered as an OVA file to be used on VMware based hypervisors. Download the OVA from the URL in the fulfillment email.

- Additionally, NexentaFusion can be deployed as a docker container and is available via a script from nexenta.github.io.

- NexentaFusion is also available as an instance in the public cloud through the AWS marketplace (https://aws.amazon.com/marketplace/pp/B07B5DMXX2?qid=1530072691678&sr=0-1&ref_=srh_res_product_title)

To Subscribe to NexentaFusion:

- Go to the AWS Marketplace home page, and type Nexenta into the search box.
- Review the NexentaFusion listings.
- Click “NexentaFusion in AWS” listing to subscribe to NexentaFusion.

Follow the instructions in **NexentaFusion 1.2 Installation Guide – RevB** to install and upgrade the above listed NexentaFusion deliverables.

NexentaFusion must be upgraded prior to upgrading NexentaStor.

**Note:**

- NexentaFusion 1.2.1 supports NexentaStor 5.1.1, 5.1.2, 5.2 and NexentaCloud 5.1.2, 5.2.
- NexentaFusion 1.2.1 can be upgraded from 1.0.3, 1.1.0, 1.1.1, 1.1.1 FB1 and 1.2.0.
- NexentaStor 5.2 requires NexentaFusion 1.2.1 or higher.
Where to Find More Information

For additional information, refer to the documents listed here that are posted at https://nexenta.com/products/documentation.

**NexentaStor & NexentaFusion Unified Block & File Software-Defined Storage Product Guide**
This document includes an overview of NexentaStor and its core components, describes key features. This manual is intended as a guide to NexentaStor concepts and not as a configuration guide.

**NexentaStor 5.x Hardware Certification List (HCL)**
This document provides a list of certified hardware for NexentaStor 5.x and is intended for Nexenta Partners and Nexenta customer-facing organizations.

**NexentaStor 5.2 Installation Guide - RevA**
This document includes the instructions to install and upgrade NexentaStor.

**NexentaFusion 1.2 Installation Guide - RevB**
This document includes the instructions to install and upgrade NexentaFusion.

**NexentaStor 5.2 Data-At-Rest Encryption Configuration QuickStart - RevA**
This guide covers the details to protect the data at rest.

**NexentaFusion 1.2 User Guide and Online Help - RevB**
This user guide provides easy to follow step-by-step instructions for common configuration and monitoring tasks.

**NexentaStor 5.2 CLI Configuration Guide - RevA**
This configuration guide demonstrates the basic steps and commands to configure and manage NexentaStor 5.2 appliances.

**NexentaStor 5.2 CLI Reference Guide - RevA**
This reference guide provides a summary of the CLI commands. Use it in conjunction with the *NexentaStor 5.2 CLI Configuration Guide*.

**NexentaStor 5.2 HA CLI Configuration Guide - RevA**
This quickstart demonstrates the basic steps and commands to configure and manage the NexentaStor 5.2 High Availability (HA) cluster using the NexentaStor 5.2 Command Line Interface (CLI).

**NexentaStor 5.2 vCenter Plugin QuickStart - RevA**
This quickstart includes instructions to install NexentaStor 5.2 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 5.2 VVOL Admin Guide - RevA**
This admin 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 5.2 High Performance Replication (HPR) User Guide - RevA**
This user guide demonstrates how to configure High Performance Replication (HPR) to replicate datasets using the NexentaStor Command Line Interface (CLI).