



# Appliance Controller Release Notes

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<b>Release</b>	2.0
<b>Supported Product</b>	Appliance Controller
<b>Date</b>	December 2017

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# Release Notes: Appliance Controller 2.0

The Appliance Controller 2.0 Release Notes provides the following:

- [New Features for Release 2.0 on page 4](#)
- [Change Requests: Notes and Fixed Issues on page 5](#)

For help with upgrading your Appliance Controller, see the [Upgrades](#) section in the *Appliance Controller Documentation Center*.

For help with troubleshooting Appliance Controller issues, see the [Troubleshooting Tips and FAQs](#) section in the *Appliance Controller Documentation Center*.

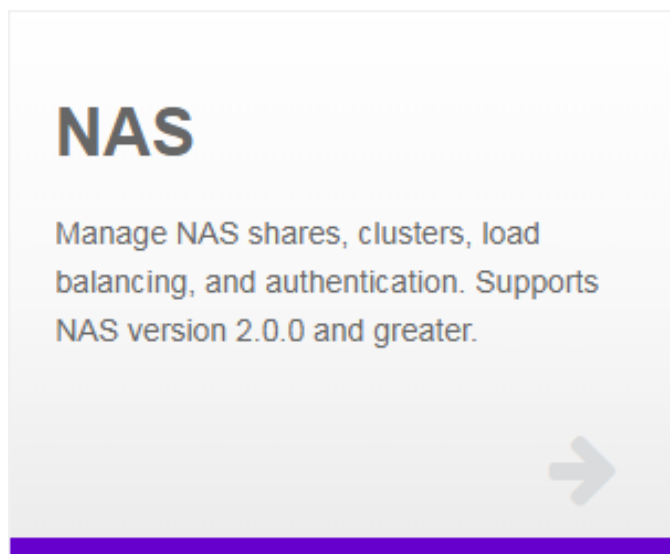
## StorNext Connect Compatibility

### NAS App vs. Appliance Controller

You can use StorNext Connect's new NAS App to configure supported NAS features, such as NAS share management and cluster creation. The NAS App provides a graphical user interface (GUI) as opposed to the command line interface (CLI) of the Appliance Controller.

See the [StorNext Connect Documentation Center](#).

The StorNext Connect Manage NAS App is not compatible with StorNext NAS 2.0. Instead use the new NAS App V1 with StorNext NAS 2.0. For more information, see the [StorNext Connect Documentation Center](#).



## Supported Software, Hardware, and Licensing Models

The following section provides information regarding supported platforms and licensing models.

### Appliance Controller Compatibility

Appliance Controller 2.0 is supported with StorNext 5.4.0 and later. We strongly recommend upgrading to Appliance Controller 2.0 before upgrading to StorNext 6.0. Refer to the appropriate appliance Release Notes for installing the latest StorNext release.

In addition, you must be running StorNext 6 to take advantage of the DNS load distribution feature in scale-out NAS clustering.

### Supported Quantum Hardware

Appliance Controller 2.0 is supported on the following Quantum appliances:

Appliance	CentOS Version
Xcellis Workflow Director	OS7 (R630 Server)
Artico	OS6 (R520 Server) OS7 (R630 Server)
Xcellis Foundation	OS7 (R630 Server)
Xcellis Workflow Extender	OS6 (R520 Server) OS7 (R630 Server)
G300	OS6 (R520 Server)
M-Series (M44x, M66x, and Pro Foundation)	OS6 (R520 Server)

**i Note:** If you want to run the StorNext NAS on Xcellis Workflow Director, Xcellis Workflow Extender, G300 Gateways, or M-Series MDCs, contact your Quantum Account Manager to ask about obtaining a StorNext NAS license.

### Licensing and Enablement

StorNext NAS 1.3.0 and later is a licensed feature. Use StorNext 5.3.0 or later to activate the license.

- For Artico and Xcellis Foundation, the appliances are shipped with StorNext NAS licenses pre-installed.
- For Xcellis Workflow Director, Xcellis Workflow Extender, G300 Gateways, and M-Series Metadata Controllers, you must purchase add-on StorNext NAS licenses, and then install these licenses on each node running NAS management services.
- You can install StorNext NAS licenses using the StorNext GUI's licensing feature. See the [License NAS in the StorNext GUI](#) topic of the *StorNext Connect Documentation Center*.

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# New Features for Release 2.0

The Appliance Controller 2.0 release includes the following new features.

## Scale-Out NAS Clustering

A scale-out NAS cluster provides clients direct access to both SMB and NFSv3 shares from any node within the cluster. In addition, a scale-out NAS cluster manages both health monitoring and failover for the NAS cluster nodes. Of the supported StorNext NAS cluster configurations, scale-out NAS clusters offer the best possible performance and reliability.

Scale-out NAS clusters can be made up of any combination of the following components:

- Xcellis Workflow Directors, G300s, and Xcellis Workflow Extenders
- Appliances supporting CentOS6 and CentOS7
- StorNext 5.4 and StorNext 6
- Up to 16 cluster nodes

In addition, scale-out NAS clusters support NAS failover for NFSv3 and SMB protocols. You also can take advantage of DNS load distribution to evenly distribute client connections to nodes within a NAS cluster, facilitating greater network bandwidth and better redistribution results after a NAS failover occurs.

## AD Authentication Improvements

You can now apply advanced options to your AD authentication configuration, such as configuring an AD machine organizational unit (OU) to which to limit authentication.

## Additional Supported SMB Options

With the is release, the following SMB share options and global share options have been added to the list of supported SMB share options:

New SMB Share Options	New SMB Global Share Options
hide dot files	client signing
hide unreadable	guest account
hide unwriteable files	ntlm auth
max connections	restrict anonymous
	server signing
	unix extensions
	windbind request timeout

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# Change Requests: Notes and Fixed Issues

The following table presents notes and fixed issues for Appliance Controller 2.0.

**Table 1:** Appliance Controller 2.0

Change Request	Description
	<p><b>KNOWN LIMITATION</b></p> <p>If you use DNS load distribution with NFSv3 clients, lock recovery during failover may not be honored.</p> <p><b>Workaround</b></p> <p>All NFSv3 clients <b>must</b> mount shares through the same predesignated VIP from the VIP pool to ensure safe lock recovery during failover. Do not use the Master VIP as the predesignated VIP.</p>
HYDRA-1343	<p><b>NOTE</b></p> <p>If you choose to manage user access to SMB shares with ACLs and OpenLDAP authentication — rather than using SMB options such as admin users, valid users, and invalid users — you must enable SID mapping.</p> <p>After enabling SID mapping, you can disable it if you no longer want to use ACLs with your OpenLDAP server. However, when you disable SID mapping under these circumstances, ACLs that have already been applied to folders and subfolders will remain, and in most cases, will be enforced.</p> <p>For more information about ACLs and OpenLDAP authentication, see <a href="#">Enable SID Mapping for Full ACL Support</a>.</p>
HYDRA-1565	<p><b>NOTE</b></p> <p>When you upgrade, you may see errors and warnings related to replacing or obsoleting some packages.</p> <p><b>Resolution</b></p> <p>As long as the upgrade is successful, you can ignore these errors and warnings. They are expected.</p>

**Table 1:** Appliance Controller 2.0

Change Request	Description
HYDRA-1622	<p><b>NOTE</b></p> <p>The Appliance Controller 2.0 release updates Samba packages to 4.6.8. This version of Samba includes security patches to disable non-secure clients. Some older Linux CIFS clients are affected by these security patches, and cannot mount SMB shares.</p> <p><b>Resolution</b></p> <p>To resolve this issue, we recommend obtaining a newer SMB client for your Linux machines. If that is not possible, then use the following workaround.</p> <p><b>Workaround</b></p> <ol style="list-style-type: none"> <li>1. Log in to the controller console from the NAS cluster's master node. See <a href="#">Access the Appliance Controller Console</a>.</li> <li>2. At the prompt, enter the following to update your SMB shares with the <code>smb global ntlm auth</code> option:  <b>share change smb global ntlm auth = yes</b></li> </ol> <div style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> <p><b>Example</b></p> <pre>&gt; share change smb global ntlm auth = yes Broadcasting share config-sync to NAS cluster ... Waiting for nascluster_share_config_sync to complete on node 10.42.xx.yy Share global successfully changed  &gt; share show SMB global options: ntlm auth = yes 2 shares: 1: tstsmbshare1   smb   /stornext/snfs1/smbshare   public = no,writable = yes 2: tstsmbshare2   smb   /stornext/snfs2/smbshare   public = no,writable = yes</pre> </div>
HYDRA-707	<p><b>FIXED</b></p> <p><b>Issue:</b> Need SMB share options to hide directory structures that users that do not have access to.</p> <p><b>Resolution:</b> Added support for <code>hide unreadable</code> and <code>hide unwriteable files</code> SMB share options.</p>

**Table 1:** Appliance Controller 2.0

Change Request	Description
HYDRA-981	<p><b>FIXED</b></p> <p><b>Issue:</b> SNMP community string character limitations were not being enforced.</p> <p><b>Resolution:</b> In Appliance Controller 1.4.1.2, SNMP community string values are limited to no less than 1 and no more than 255 of the following ASCII characters:</p> <ul style="list-style-type: none"> <li>• Lowercase characters (a-z)</li> <li>• Uppercase characters (A-Z)</li> <li>• Numbers (0-9)</li> <li>• Dash (-)</li> <li>• Underscore (_)</li> </ul>
HYDRA-1005	<p><b>FIXED</b></p> <p><b>Issue:</b> Need SMB share option to hide dot file attributes.</p> <p><b>Resolution:</b> Added support for <code>hide dot files</code> SMB share option.</p>
HYDRA-1191	<p><b>FIXED</b></p> <p><b>Issue:</b> Upgrades can take longer than anticipated because SMB <code>var/log/samba</code> is not ever cleaned.</p> <p><b>Resolution:</b> SMB <code>var/log/samba</code> is now cleaned daily to remove files that are older than 7 days.</p>
HYDRA-1396	<p><b>FIXED</b></p> <p><b>Issue:</b> A gap in HAProxy stats is occurring with the following error:  <b>2017-03-25-20:00:03.668130 marcom-nwk-snfs-gw08 Keepalived_vrrp8826: Process 6789 didn't respond to SIGTERM</b></p> <p><b>Resolution:</b> The Appliance Controller 2.0 contains an update from Keepalived 1.2.13 to Keepalived 1.3.5, which resolves this issue.</p>
HYDRA-1465	<p><b>FIXED</b></p> <p><b>Issue:</b> Need a way to refresh NAS authentication mappings on-demand to reflect the current status of the LDAP server.</p> <p><b>Resolution:</b> The new <code>auth refresh</code> command enables customers to refresh NAS authentication mappings on-demand to reflect the current state of their LDAP server.</p>
HYDRA-1468	<p><b>FIXED</b></p> <p><b>Issue:</b> Unable to gather specific SNFS file attributes without manually opening the file.</p> <p><b>Resolution:</b> Appliance Controller 2.0 updates enables the SNFS VFS plugin to use the new StorNext CvApis.</p>

**Table 1:** Appliance Controller 2.0

Change Request	Description
HYDRA-1578	<p><b>FIXED</b></p> <p><b>Issue:</b> ACL SID mapping may not work with LDAP authentication.</p> <p><b>Resolution:</b> Upgrade to Appliance Controller 2.0 to resolve this issue.</p>
HYDRA-1606	<p><b>FIXED</b></p> <p><b>Issue:</b> Appliance Controller does not support advanced options for AD authentication configurations.</p> <p><b>Resolution:</b> Appliance Controller 2.0 now supports advanced options for AD authentication configurations.</p>
HYDRA-1781	<p><b>FIXED</b></p> <p><b>Issue:</b> Need a way to activate or inactivate Unix extensions on SMB shares.</p> <p><b>Resolved:</b> Added support for unix extensions global SMB share option.</p>
HYDRA-1802	<p><b>FIXED</b></p> <p><b>Issue:</b> Need to provide a way to allow / disallow trusted AD domains from accessing the Appliance Controller.</p> <p><b>Resolution:</b> Appliance Controller 2.0 now supports an <b>Allow Trusted Domains</b> advanced option.</p>
HYDRA-1991	<p><b>FIXED</b></p> <p><b>Issue:</b> The Appliance Controller fails to start because postgres is still running.</p> <p><b>Resolution:</b> When the Appliance Controller is started, postgres is now restarted if it is already running, resolving this issue.</p>
HYDRA-1992	<p><b>FIXED</b></p> <p><b>Issue:</b> After NAS failover, the local LDAP configuration may no longer be valid.</p> <p><b>Resolution:</b> Upgrade to Appliance Controller 2.0 to resolve this issue.</p>
HYDRA-2113	<p><b>FIXED</b></p> <p><b>Issue:</b> A large amount of smbd processes may require too much available memory and cause the kernel to panic.</p> <p><b>Resolution:</b> The Appliance Controller now supports an upper-limit default of 1200 concurrent smbd processes to resolve this issue.</p>