

Dell FluidFS Version 6.0

FS8600 Appliance

Firmware Update Guide



Notes, Cautions, and Warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

About This Guide.....4
 Revision History..... 4

Chapter 1: Updating FluidFS Software on FS8600 Appliances.....5
 Supported Update Paths..... 5
 Update Considerations..... 5
 Performing Pre-Update Tasks.....5
 Pre-Update Checks.....6
 Updating From FluidFS Version 5.0 to 6.0.....6
 Performing Post-Update Tasks..... 7

Chapter 2: Related Documentation.....8
 Documents Intended for Dell Customers.....8
 Documents Intended for Dell Installers and Certified Business Partners..... 8

The *Dell FluidFS Version 6.0 FS8600 Appliance Firmware Update Guide* provides information about updating the software on a Dell FS8600 FluidFS cluster. The document describes how to update the FluidFS software from version 5.0 to version 6.0 and also includes a list of related documentation.

Revision History

Document number: 680-112-002

Table 1. Revision History

Revision	Date	Description
A	July 2017	Initial release of FluidFS version 6.0
B	June 2021	Update for FluidFS version 6.0.500135

Updating FluidFS Software on FS8600 Appliances

This section provides information that you need to update the FluidFS software on your FS8600 cluster.

Topics:

- [Supported Update Paths](#)
- [Update Considerations](#)
- [Performing Pre-Update Tasks](#)
- [Pre-Update Checks](#)
- [Updating From FluidFS Version 5.0 to 6.0](#)
- [Performing Post-Update Tasks](#)

Supported Update Paths

For the supported update paths to FluidFS version 6.0, see the *Dell Fluid File System Version 6 Support Matrix*. This matrix is available from dell.com/support.

Update Considerations

The internal storage reservation for the cluster-wide data reduction dictionary was increased to 20 GB for the entire cluster.

Performing Pre-Update Tasks

Complete the tasks in the following list before updating to the latest version of FluidFS version 6.0.

- Change the FluidFS cluster name and NetBIOS name to match.
Make sure the cluster name contains 15 or fewer characters and does not begin with a number.
- Delete local user names that have a period as the last character. Recreate these accounts with different names.
- Stop all NDMP backup sessions.
If an NDMP backup session is in progress during the update, the temporary NDMP snapshot is left in place.
- Open additional ports on your firewall to allow replication between replication partners.
- Make sure SMB shares and NFS exports have only alphanumeric characters in the **Comment** field.
- Make sure all the defined DNS servers are accessible using ping and dig (DNS lookup utility).
- Make sure the Active Directory domain controller is accessible using ping, and that the FluidFS cluster system time is in sync with the Active Directory time.
- Make sure the NAS controllers are running, attached, and accessible using ping, SSH, and rsync.

Although only one NAS controller is required to be running in each NAS appliance, Dell recommends that all NAS controllers be running.

Pre-Update Checks

The following pre-update checks occur when updating to FluidFS v6 or later.

Table 2. Pre-Update Checks

Description	v5 to v6	v6 to later v6	Notes
Check that DataReduction ArchiveMode is not enabled.	X	N/A	Data Reduction Archive mode is deprecated in v6, the pre-update check will not allow updating to v6 if NAS volumes have Data Reduction Archive mode set. Instead, use 1-day filter for data reduction setting.
Check that all attached controllers are up and running.	X	X	-
Check that File System is in optimal state.	X	X	-
Check that all LUNS are accessible from FluidFS.	X	X	-
Check that all configuration objects are valid.	X	X	-
Check that the mount table (mtab) is not locked on all controllers.	X	X	-
Check that the File System is not in no-service mode.	X	X	Update is not allowed in No-Service Mode.
Check that there are no more than 400 public ips defined in all subnets.	X	N/A	-
SMB Message Encryption should be set for SMB 3.0 and above.	X	N/A	The maximum SMB version cannot be set to SMB 1 or SMB 2 if message encryption is required.
Check the validity of an NFS Export ACE regarding the Subnet netmask: <ul style="list-style-type: none">• Netmask is not set to a Broadcast• Netmask is not set to a Multicast• Netmask is not set to a LinkLocal• Netmask is not set to a LoopBack	X	N/A	-
Check that there is no NAS Volume access restriction to the Admin subnet.	X	N/A	-
Check that there are no invalid Administrators .	X	N/A	-

Updating From FluidFS Version 5.0 to 6.0

Use the procedure in this section to update a Dell FS8600 FluidFS cluster from FluidFS version 5.0 to 6.0.

NOTE:

- Some FluidFS version 5.0 maintenance releases cannot be updated directly to FluidFS version 6.0. See the *FluidFS v6 Support Matrix* for a listing of the supported update paths.
- When a service pack is installed, the NAS controllers reboot during the installation process. Rebooting might cause interruptions in SMB, NFS, and FTP client connections. Therefore, Dell recommends installing service packs during a maintenance window.


Prerequisites


- Update to Dell Storage Manager 2016 R3 or later. Dell recommends using the latest Dell Storage Manager version. For more information about updating Dell Storage Manager, see the *Dell Storage Manager Release Notes*.

- The Storage Center OS must be at version 6.5.10 or later. For more information about updating the Storage Center OS, see the *Storage Center Software Update Guide*.
- Perform the pre-update tasks as described in [Performing Pre-Update Tasks](#) on page 5.
- Contact Dell Technical Support to obtain the latest FluidFS version 6.0 service pack. Do not modify the file name of the service pack.

Download and Install the Service Pack

1. Download the service pack using one of the following methods:
 - Make sure that Dell Storage Manager and SCOS are both running supported versions, and then contact Dell Technical Support to enable the upgrade rule in SupportAssist for your FS8600 cluster. After the rule is enabled, right-click the cluster name in Dell Storage Manager, then select **Actions > Check for Upgrade** to download the service pack automatically.
 - Request an FTP link from Dell Technical Support, manually download the service pack, and use FTP to upload the service pack to the FS8600 cluster.

 **NOTE:** When you upload a FluidFS ISO file to the FTP folder, it disappears from the FTP folder after a few minutes. The file is being extracted and moved to a different location prior to applying the update.
2. Install the FluidFS version 6.0 service pack.

 **CAUTION:** The installation process for the service pack cannot be reversed. After the service pack is installed, the system cannot revert to the previous version.

 - a. After the service pack is uploaded to the system, it is displayed in Dell Storage Manager as available, but not installed.
 - b. Right-click the service pack and choose **upgrade** to install it.

Performing Post-Update Tasks

After you update FluidFS, complete the tasks in the following list.

- If you disabled secured management before the update, reenable this feature.
- If you plan to enable data reduction, make sure that you allocate sufficient space for the NAS pool.
- If antivirus scanning is enabled, configure the file-size threshold and whether to allow or deny access to files that are larger than this threshold.
- Restart Dell Storage Manager.

Related Documentation

The following documents comprise the core Dell FluidFS for FS8600 Appliance documentation set. The documents are sorted by intended audience.

Topics:

- [Documents Intended for Dell Customers](#)
- [Documents Intended for Dell Installers and Certified Business Partners](#)

Documents Intended for Dell Customers

- *Dell FluidFS Version 6.0 FS8600 Appliance CLI Reference Guide* – Provides information about the FS8600 appliance command-line interface.
- *Dell FluidFS Version 6.0 Release Notes* – Provide information about FluidFS releases, including new features and enhancements, open issues, and resolved issues.
- *Dell FluidFS Version 6.0 Support Matrix* – Provides information about supported software and hardware configurations as well as usage requirements and recommendations for Dell FluidFS v6.x products.
- *Dell Storage Manager Installation Guide* – Provides information about installing and configuring the Dell Storage Manager Data Collector and Dell Storage Manager Client.
- *Dell Storage Manager Administrator's Guide* – Provides information about using the Dell Storage Manager software to manage Storage Center and FS8600 appliances.
- *Dell Storage Manager Release Notes* – Provides information about Dell Storage Manager releases, including new features and enhancements, open issues, and resolved issues.

Documents Intended for Dell Installers and Certified Business Partners

- *Dell FluidFS Version 6.0 FS8600 Appliance Pre-Deployment Requirements* – Provides a checklist that assists in preparing to deploy an FS8600 appliance before a Dell installer or certified business partner arrives onsite to perform an FS8600 appliance installation.
- *Dell FluidFS Version 6.0 FS8600 Appliance Deployment Guide* – Provides information about deploying an FS8600 appliance, including cabling the appliance to one or more Storage Centers and the network, and deploying the appliance using the Dell Storage Manager software.
- *Dell FS8600 Appliance Service Guide* – Provides information about FS8600 appliance hardware, system component replacement, and system troubleshooting.
- *Dell NAS Appliance SFP+ Replacement Procedure* – Provides information about replacing SFP+ transceivers on an inactive system.
- *Dell FluidFS FS8600 Appliance 1Gb to 10Gb Upgrade Procedure* – Provides information about upgrading a Fibre Channel FS8600 appliance from 1Gb Ethernet client connectivity to 10Gb Ethernet client connectivity.