StorNext Compatibility Guide

(applies to StorNext 5.3.0 through StorNext 7.1)
6-68801-01, Rev. N

Quantum.

Quantum 6-68801-01 Rev. N StorNext 7 Compatibility Guide, February 2023

Quantum Corporation provides this publication "as is" without warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability or fitness for a particular purpose. Quantum Corporation may revise this publication from time to time without notice.

COPYRIGHT STATEMENT

© 2023 Quantum Corporation. All rights reserved.

Your right to copy this manual is limited by copyright law. Making copies or adaptations without prior written authorization of Quantum Corporation is prohibited by law and constitutes a punishable violation of the law.

TRADEMARK STATEMENT

Artico, Be Certain (and the Q brackets design), DLT, DXi, DXi Accent, DXi V1000, DXi V2000, DXi V4000, FlexTier, GoVault, Lattus, NDX, the Q logo, the Q Quantum logo, Q-Cloud, Quantum (and the Q brackets design), the Quantum logo, Quantum Be Certain (and the Q brackets design), Quantum Vision, Scalar, StorageCare, StorNext, SuperLoader, Symform, the Symform logo (and design), vmPRO, and Xcellis are either registered trademarks or trademarks of Quantum Corporation and its affiliates in the United States and/or other countries. All other trademarks are the property of their respective owners.

Products mentioned herein are for identification purposes only and may be registered trademarks or trademarks of their respective companies. All other brand names or trademarks are the property of their respective owners.

Quantum specifications are subject to change.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 2 of 50

Contents

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 3 of 50

1. StorNext Requirements

The following requirements must be met before installing StorNext.

- ☐ Security-Enhanced Linux (SELinux) is disabled.
- ☐ Quantum requires that system clocks be synchronized for proper functionality and recommends that NTP be used to ensure clocks remain synchronized across all nodes.
- ☐ The following packages must be installed:
  - o gcc
  - o java-1.8.0-openjdk-1.8.0.121 or later (for the StorNext GUI)
  - o kernel-devel (for systems running Red Hat Linux)
  - o kernel-source (for systems running SUSE Linux)
  - o lz4 (compression algorithm library/tool)
  - o make
  - o python-requests, pyxattr, python-dateutil (for the StorNext Primary File System Tiering feature)

Note: The version of the kernel-source or kernel-devel package must correspond to the version of the booted kernel. In addition, the system must have basic utilities installed such as perl, bash, grep, etc. as well as basic libraries. In general, StorNext will not install on a stripped-down installation of Linux.

1.1. Terminology

Acronyms used within the document:

Acronym	Description
APFO	Advanced Path Failover
DDM	Distributed Data Mover
DLC [1]	Distributed LAN Client
DLS [2] [3]	Distributed LAN Server / Gateway
FX	StorNext FX Client
HA [4]	High Availability
LTFS	Linear Tape File System
LTS	Long Term Support (Ubuntu)
MDC	Meta-data Controller
RHEL	Red Hat Enterprise Linux
SLES	SuSE Linux Enterprise Server
SC	File System SAN Client
SN	StorNext
SNFS	StorNext File System
SNSM	StorNext Storage Manager
XWD	Xcellis Workflow Director
XWE	Xcellis Workflow Extender

---

[1] StorNext Distributed LAN clients can be connected to either Distributed LAN Servers or StorNext G3xx or Xcellis Workflow Extenders.
[2] Distributed LAN Server on Windows supports up to 128 Distributed LAN Clients.
[3] Gateway instrumentation is not available for Windows.
[4] HA is not supported on G300 and Xcellis Workflow Extender Gateway Appliances. HA is supported on all other StorNext Appliances and MDCs.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 4 of 50

2. System Requirements for Quantum StorNext Metadata Controllers

- ☐ StorNext shared file system requires 3 GB of memory.

- ☐ StorNext managed file systems require 7 GB of memory for each file system.

- ☐ StorNext MDC nodes require a minimum of 16 GB each.

- ☐ Running larger Storage Manager deployments requires additional memory for the Storage Manager database, growing up to 48 GB for systems as the number of managed files approaches 1 Billion.

- ☐ Additionally, Quantum recommends another 8 GB of RAM on the MDC node(s) for each file system to be used for buffer cache, to take advantage of the performance improvements in StorNext 6.

- ☐ For planning purposes, 10B unmanaged and 1.4B managed file counts are a guideline but are not an absolute or enforced limit. These values reflect our current guidelines for configuring a StorNext solution the number of files and the performance of your solution may vary.

- ☐ LTFS StorNext Support and Memory Requirements:

  - o StorNext Storage Manager support for LTO-8 tape devices with Linear Tape File System (LTFS) requires StorNext 6.0.6 or later.

  - o StorNext Storage Manager support for LTO-9 tape devices with Linear Tape File System (LTFS is not supported in StorNext 7.0.2).

  - o Using LTO-7 tape devices and LTO M8 media with Linear Tape File System is not supported.

  - o Support for LTO-7 M8 media with LTFS requires StorNext 6.2.0 (or later).

  - o Reading and writing LTFS tape is slower than ANTF.

    - ▪ Trade-off performance for vendor independence.

    - ▪ StorNext performance is on par with any other implementation of LTFS.

  - o For any MDC or any DDM client running movers and using LTFS there is extra memory needed.

  - o LTFS will utilize more memory than ANTF. Each time a tape is opened, the full directory structure is pulled into memory. Thus, a potentially significant amount of memory is required on top of the normal StorNext requirements.

  - o For StorNext, for each file on a tape, there is an associated Object file that contains specific path information. Thus the #'s listed need to be doubled. Running with StorNext, the formula from the site would actually be drives x million files x 2 +1.

  - o Example:

    - ▪ Customer has 2 million files written to an LTFS tape. Each time that tape is open the minimum amount of memory required is 2 * 2 + 1 = 5 GB of memory.

    - ▪ If on top of this one has 5 tape drives and the potential of 2 million files on each tape the minimum amount of memory required would be 5 * 2 * 2 + 1 = 21 GB.

- ☐ Tips for Memory Planning with **mdarchive**:

  You can use the **mdarchive** feature to allow fast metadata lookups. The **mdarchive** feature accomplishes fast metadata lookups by using a cache and well-organized files. To take advantage of the enhanced performance, the cache size is important and requires memory planning:

  - o Each file system requires three to seven gigabytes (3 GB to 7 GB) of memory, as mentioned above. At a minimum, each file system with **mdarchive** requires two gigabytes (2 GB) for an **mdarchive** cache.

  - o The larger the file system, the larger **mdarchive** becomes and the increased need for a larger **mdarchive** cache. For instance, a 200 gigabyte **mdarchive** with a 20 gigabyte **mdarchive** cache has a 10% cache hit rate if the whole file system is modified. If the same data is always changing,

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 5 of 50

then the hit rate increases. If you use the minimum 2 gigabytes, then it has a 1% cache hit rate which can deeply affect the potency of **mdarchive**.

o   If you have larger file systems or randomly changing data, and adding features such as **mdarchive** history and audit, then you should increase the cache size from its initial 2 gigabyte default value. Without the increase, the **mdarchive** could constantly retrieve data from disk because the cache is always missing, causing **mdarchive** to be handicapped from a misconfiguration.

o   On Quantum appliances, if your memory planning determines that the configured memory would be within a few gigabytes to full or exceeding past the configured amount, then order a memory expansion kit for your appliance. Your memory planning should precede ordering your appliance to ensure the configuration of your appliance is complete; if necessary, you should order additional memory during the appliance procurement.

- Additional Considerations with **mdarchive**:

o   Enabling **mdarchive** on an existing file system depends on the size of the file system and the metadata change rate; these are attributes that are difficult to determine. Quantum recommends you have more conservative estimates for CPU usage and disk space or have a more abundance of hardware to accommodate **mdarchive**. After you determine a baseline, then you can adjust these resources to properly fit the needs of **mdarchive** in your environment.

o   Resource considerations apply to both metadata controllers (MDCs) in a High Availability configuration. If a fail-over occurs, then the secondary MDC becomes the primary MDC and needs sufficient resources to accommodate **mdarchive**.

o   The **mdarchive** feature uses 800% CPU or 8 full cores if fully saturated with activity. The faster the storage, the more likely it reaches this mark when performing an **mdarchive** rebuild. For common activity, it is usually much less, unless the metadata change rate is very short and broad.

o   If you use audit and history features, your system requires more disk space. This is due to the nature of the features writing more content, such as logging each client operation. One way to anticipate the needed disk space is through determining the number of clients and their activity level. In some cases, you must have many terabytes of disk space.

o   An **mdarchive** rebuild operation discards the current **mdarchive** and a new build is processed from scratch. During the operation, Storage Manager backups fail, FlexSync does not replicate, some Storage Manager operations do not work, and History and Audit data is lost just prior to the rebuild beginning. The only time a rebuild is required is during some upgrades to update the schema of **mdarchive**.

o   When you interrupt an FSM process, whether from a fail-over or a service is stopped on the metadata controller, the system restarts an **mdarchive** build process after the FSM restarts.

Note: For specifics about an HA shared file system configuration, see Provision Metadata Space.

Note: Accounting for **mdarchive** is only one facet of the system. To ensure proper configuration, take account of all the other features and 3rd party programs that you would like to utilize on the metadata controller.

3. StorNext and StorNext FX Client RAM, Disk and CPU Requirements

To install and run the StorNext or StorNext FX client software, the system must meet the following minimum hardware requirements.

For SAN (FC-attached) clients or LAN clients:
- 1 GB RAM
- 500 MB available hard disk space

For SAN clients acting as a Gateway server:

- 2 GB RAM
- 500 MB available hard disk space

Note: Gateway servers may require additional RAM depending on the number of file systems, LAN clients, and NICs used. See "Gateway Server Memory Tuning" in the StorNext User's Guide for Gateway server memory tuning guidelines.

4. StorNext and StorNext FX Client File System Buffer Cache

See StorNext File System Buffer Cache.

5. StorNext Upgrade Matrix

Refer to the following upgrade table to determine what releases are supported for upgrades.

All other versions of StorNext require additional steps to upgrade to this release.

Note: For all upgrades on systems that are part of a NAS cluster, upgrade the Appliance Controller software prior to upgrading the StorNext software. See Upgrade the Appliance Controller on the Appliance Controller documentation center.

Supported StorNext Upgrades							
*Supported StorNext Appliances/ MDCs at StorNext Release…	StorNext 6.3.0	StorNext 6.3.1	StorNext 6.3.1.1	StorNext 6.4.x	StorNext 7.0.1	StorNext 7.0.2	StorNext 7.0.3
…Can upgrade to StorNext:							
StorNext 7.0.3	✓	✓	✓	✓	✓	✓	
StorNext 7.1.0				✓	✓	✓	✓

* See next section for supported StorNext Appliances.

6. StorNext Appliance Compatibility

Appliance	Xcellis Workflow Director Gen2	Xcellis Workflow Extender Gen2	Xcellis Workflow Director (R630)	Xcellis Workflow Extender (R630)	Xcellis Foundation (R630)	Artico (R630)
StorNext Release						
7.1.x	✓	✓	✓	✓	✓	✓
7.0.x	✓	✓	✓	✓	✓	✓
6.4.x	✓	✓	✓	✓	✓	✓
6.3.1.1	✓	✓	✓	✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 7 of 50

Appliance	Xcellis Workflow Director Gen2	Xcellis Workflow Extender Gen2	Xcellis Workflow Director (R630)	Xcellis Workflow Extender (R630)	Xcellis Foundation (R630)	Artico (R630)
StorNext Release						
6.2.x	✓	✓	✓	✓	✓	✓
6.1	✓	✓	✓	✓	✓	✓
6.0.6.1			✓	✓	✓	✓
6.0.6			✓	✓	✓	✓
6.0.5.1			✓	✓	✓	✓
6.0.5			✓	✓	✓	✓
6.0.1.1			✓	✓	✓	✓
6.0.1			✓	✓		✓
6.0			✓	✓		✓

Note: The following systems are no longer supported as of StorNext 7.0.1 and later, so they cannot be upgraded to StorNext 7.0.1 or later: aiWARE for Xcellis (includes Embedded DAE, Standard, and High Performance models), Xcellis Workflow Extender (R520), Artico (R520), Pro Foundation, G3xx, M66x, and M44x.

7. Supported Operating Systems and Platforms

☐ Windows Service Pack levels that are listed, indicate the supported versions. "Dot" releases, for example Windows 8.1, are distinct and not supported unless called out. RedHat Enterprise Linux is specified at the update level. Unless otherwise noted, kernel releases up to and including the release listed in this document is supported. Those beyond the kernel version listed are not supported. SuSE Enterprise Linux is specified at the Service Pack level. Unless otherwise noted, kernel releases up to and including the release listed in this document is supported. Those beyond the kernel version listed are not supported. Debian support is specified at the level of X.Y release levels. Ubuntu support is specified at the level of X.Y.Z release levels.

☐ HA and GUI are not supported on G300 and Xcellis Workflow Extender Gateway Appliances. HA and GUI are supported on all other StorNext Appliances and MDCs. Only 64-bit platforms are supported.

☐ StorNext does not install or start on a system today that has Red Hat Security-Linux (SELinux) enabled. There are checks in several configuration files and daemons that prevent the installation and use of StorNext with Red Hat Secure Linux (SELinux). There are no plans to add support for Red Hat Secure Linux (SELinux) currently.

☐ Windows 7 and Windows Server 2008 are not supported with StorNext as clients.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 8 of 50

Windows Clients

Windows 7	SP1 – Not supported with StorNext 7.0.3
Windows 8	Base
Windows 8.1	Base
Windows 10	Base – Windows 10 Creator's Update supported with StorNext 6.x (or later)

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*					✓	✓	✓
5.4.*					✓	✓	✓
6.*					✓	✓	✓
7.*					✓	✓	✓

Windows 11	Base

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.0.2					✓	✓	✓
7.0.3					✓	✓	✓
7.1.x					✓	✓	✓

Windows MDC Servers

Windows Server 2008	R2 SP1, R2 SP2 – Not supported with StorNext 7.0.3
Windows Server 2012	Base, R2 SP1 – Windows 2012 supported with StorNext 6.x (or later)

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*	✓			✓	✓	✓	✓
5.4.*	✓			✓	✓	✓	✓
6.*	✓			✓	✓	✓	✓
7.0.*					✓	✓	✓

Windows Server 2016	Base

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.0.x					✓	✓	✓
6.1.x					✓	✓	✓
6.2.x	✓				✓	✓	✓
6.3.x	✓				✓	✓	✓
6.4.x	✓				✓	✓	✓
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 9 of 50

Quantum StorNext

Windows Server 2019 | **Base**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.0.x							
6.1.x							
6.2.x							
6.3.x	✓			✓	✓	✓	✓
6.4.x	✓			✓	✓	✓	✓
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Windows Server 2022 | **Base**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x*					✓	✓	✓

Red Hat Servers & Clients

RedHat 6 | **Update 6 – Kernel 2.6.32-504.EL**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*	✓	✓	✓	✓	✓	✓	✓
5.4.*	✓	✓	✓	✓	✓	✓	✓
6.*	✓	✓	✓	✓	✓	✓	✓

Red Hat 6 | **Update 7 – Kernel 2.6.32-573.EL**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*							
5.4.*	✓	✓	✓	✓	✓	✓	✓
6.*	✓	✓	✓	✓	✓	✓	✓

Red Hat 6 | **Update 8 – Kernel 2.6.32-642.EL**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.*	✓	✓	✓	✓	✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 10 of 50

Red Hat 6
CentOS 6

Update 9 – Kernel 2.6.32-696.30.1

Note: StorNext 6.0.6.1 has been successfully tested with Red Hat EL and CentOS 6 update 9. Support for this distribution requires using an updated kernel which includes the fixes necessary to correct *Spectre* and *Meltdown* security vulnerabilities 1, 2 and 3.

StorNext 6.0.6.1 does not work with Red Hat EL and CentOS 7 update 5.

If you are an administrator of a non-StorNext Appliance system, then you must be careful when upgrading a Red Hat EL and CentOS operating system. You must only upgrade to levels supported in this document.

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.*	✓	✓	✓		✓	✓	✓

Red Hat 6
CentOS 6

Update 10 – Kernel 2.6.32-754.12.1

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.*	✓	✓	✓	✓	✓	✓	✓

Red Hat 7

Base – Kernel 3.10.0-123.EL
Update 1 – Kernel 3.10.0-229.EL

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*	✓	✓	✓		✓	✓	✓
5.4.*	✓	✓	✓		✓	✓	✓
6.*	✓	✓	✓	✓	✓	✓	✓

Red Hat 7

Update 2 – Kernel 3.10.0-327.EL

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*					✓	✓	✓
5.4.*	✓	✓	✓		✓	✓	✓
6.*	✓	✓	✓	✓	✓	✓	✓

Red Hat 7

Update 3 – Kernel 3.10.0-514.EL

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*					✓	✓	✓
5.4.*	✓	✓	✓		✓	✓	✓
6.*	✓	✓	✓	✓	✓	✓	✓
7.0.x					✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 11 of 50

Red Hat and CentOS 7	Update 4 – Kernel for 6.0.6.1 - 3.10.0-693.2.2

StorNext 6.0.6.1 has been successfully tested with Red Hat EL and CentOS 7 update 4. Support for this distribution requires using the updated kernel, which includes the fixes necessary to correct *Spectre* and *Meltdown* security vulnerabilities 1, 2 and 3.

StorNext 6.0.6.1 does not work with Red Hat EL and CentOS 7 update 5.

If you are an administrator of a non-StorNext Appliance system, then you must be careful when upgrading a Red Hat EL and CentOS operating system. You must only upgrade to levels supported in this document.

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.4.*	✓	✓	✓		✓	✓	✓
6.0.6.1	✓	✓	✓		✓	✓	✓
6.1.x	✓	✓	✓	✓	✓	✓	✓
6.2.x	✓	✓	✓	✓	✓	✓	✓
6.3.x	✓	✓	✓	✓	✓	✓	✓
6.4.x	✓	✓	✓	✓	✓	✓	✓
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Red Hat 7 CentOS 7	Update 5 – Kernel 3.10.0-862.11.6

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.4.1.1	✓	✓	✓		✓	✓	✓
6.1.x	✓	✓	✓	✓	✓	✓	✓
6.2.x	✓	✓	✓	✓	✓	✓	✓
6.3.x	✓	✓	✓	✓	✓	✓	✓
6.4.x	✓	✓	✓	✓	✓	✓	✓
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 12 of 50

**Red Hat 7
CentOS 7**

Update 6 – Kernel 3.10.0-957.21.2

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.1.x	✓	✓	✓	✓	✓	✓	✓
6.2.x	✓	✓	✓	✓	✓	✓	✓
6.3.x	✓	✓	✓	✓	✓	✓	✓
6.4.x	✓	✓	✓	✓	✓	✓	✓
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

**Red Hat 7
CentOS 7**

Update 7 – Kernel 3.10.0-1062.e17

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.3.x	✓	✓	✓	✓	✓	✓	✓
6.4.x	✓	✓	✓	✓	✓	✓	✓
7.0.1	✓	✓	✓	✓	✓	✓	✓
7.0.2					✓	✓	✓
7.0.3					✓	✓	✓
7.1.x					✓	✓	✓

**Red Hat 7
CentOS 7**

Update 8 – Kernel 3.10.0-1127.e17

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.4.1					✓	✓	✓
7.0.x				✓	✓	✓	✓
7.1.x				✓	✓	✓	✓

**Red Hat 7
CentOS 7**

Update 9 – Kernel 3.10.0-1160.e17

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.4.1					✓	✓	✓
7.0.1					✓	✓	✓
7.0.2	✓	✓	✓	✓	✓	✓	✓
7.0.3	✓	✓	✓	✓	✓	✓	✓
7.1.0	✓	✓	✓	✓	✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 13 of 50

Red Hat 8

Base – Kernel 4.18.0-80.e18

Note: CentOS 8.x is not supported; Red Hat ended CentOS support on January 1, 2022

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.4.1					✓	✓	✓
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Red Hat 8

Update 1 – Kernel 4.18.0-147.e18

Note: CentOS 8.x is not supported; Red Hat ended CentOS support on January 1, 2022

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
6.4.1					✓	✓	✓
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Red Hat 8

Update 2 – Kernel 4.18.0-193.el8.x86_64

Note: CentOS 8.x is not supported; Red Hat ended CentOS support on January 1, 2022

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Red Hat 8

Update 3 – Kernel 4.18.0-240.el8.x86_64

Note: CentOS 8.x is not supported; Red Hat ended CentOS support on January 1, 2022

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.0.x					✓	✓	✓
7.1.x					✓	✓	✓

Red Hat 8

Update 4 – Kernel 4.18.0-305.3.1.el8.x86_64

Note: CentOS 8.x is not supported; Red Hat ended CentOS support on January 1, 2022

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.0.x					✓	✓	✓
7.0.3	✓	✓	✓	✓	✓	✓	✓
7.1.0	✓	✓	✓	✓	✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 14 of 50

Red Hat 8 **Update 5– Kernel 4.18.0-348.el8.x86_64**

Note: CentOS 8.x is not supported; Red Hat ended CentOS support on January 1, 2022

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x	✓	✓	✓	✓	✓	✓	✓

Red Hat 8 **Update 6– Kernel 4.18.0-372.9.1.el8.x86_64**

Note: CentOS 8.x is not supported; Red Hat ended CentOS support on January 1, 2022

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x	✓	✓	✓	✓	✓	✓	✓

Red Hat 9 **Kernel 5.14.0-70.22.1.el9_0.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Red Hat 9.1 **Update 1 – Kernel 5.14.0-162.6.1.el9_1.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Alma 8 **Update 4 – Kernel 4.18.0-305.el8.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Alma 8 **Update 5 – Kernel 4.18.0-348.el8.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Alma 8 **Update 6 – Kernel 4.18.0-372.9.1.el8.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x	✓	✓	✓	✓	✓	✓	✓

Alma 9 **Kernel 5.14.0-70.13.1.el9_0.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Alma 9.1 **Update 1 Kernel 5.14.0-162.6.1.el9_1.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 15 of 50

Rocky 8.4 | **Update 4 – Kernel 4.18.0-305.3.1.el8_4.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Rocky 8.5 | **Update 5 – Kernel 4.18.0-348.el8.0.2.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Rocky 8.6 | **Update 6 – Kernel 4.18.0-372.9.1.el8.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x	✓	✓	✓	✓	✓	✓	✓

Rocky 9 | **Kernel 5.14.0-70.13.1.el9_0.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

Rocky 9.1 | **Update 1 Kernel 5.14.0-162.6.1.el9_1.x86_64**

StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
7.1.x					✓	✓	✓

SUSE SLES Servers & Clients							
SUSE SLES 11	**SP2 – Kernel 3.0.13-0.27** (not supported in StorNext 7.0.3 (or later) releases)						
	SP3 – Kernel 3.0.76-0.11 (not supported in StorNext 7.1.x (or later) releases)						
StorNext Releases	MDC	SNSM	DDM	DLS	SAN	DLC	FX
5.3.*	✓	✓	✓	✓	✓	✓	✓
5.4.*	✓	✓	✓	✓	✓	✓	✓
6.0.x	✓	✓	✓	✓	✓	✓	✓
6.1.x	✓	✓	✓	✓	✓	✓	✓
6.2.x					✓	✓	✓
6.3.x					✓	✓	✓
6.4.x					✓	✓	✓
7.0.x					✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 16 of 50

SUSE SLES 11	SP4 – Kernel 3.0.101-63 (not supported in StorNext 7.1.x (or later) releases)						
StorNext Releases	**MDC**	**SNSM**	**DDM**	**DLS**	**SAN**	**DLC**	**FX**
5.0							
5.3.0							
5.3.*	✓	✓	✓	✓	✓	✓	✓
5.4.0.*	✓	✓	✓	✓	✓	✓	✓
6.0.x	✓	✓	✓	✓	✓	✓	✓
6.1.x	✓	✓	✓	✓	✓	✓	✓
6.2.x					✓	✓	✓
6.3.x					✓	✓	✓
6.4.x					✓	✓	✓
7.0.x					✓	✓	✓

SUSE SLES 12	Base – Kernel 3.12.28-4						
StorNext Releases	**MDC**	**SNSM**	**DDM**	**DLS**	**SAN**	**DLC**	**FX**
5.3.0					✓	✓	✓
5.3.1.x					✓	✓	✓
5.3.2.x					✓	✓	✓
5.4.0.*	✓	✓	✓		✓	✓	✓
6.0.x	✓	✓	✓		✓	✓	✓
6.1.x	✓	✓	✓		✓	✓	✓
6.2.x					✓	✓	✓
6.3.x					✓	✓	✓
6.4.x					✓	✓	✓
7.0.x					✓	✓	✓

SUSE SLES 12	SP1 – Kernel 3.12.49.11						
StorNext Releases	**MDC**	**SNSM**	**DDM**	**DLS**	**SAN**	**DLC**	**FX**
5.4.0.*	✓	✓	✓		✓	✓	✓
6.0.x	✓	✓	✓		✓	✓	✓
6.1.x	✓	✓	✓		✓	✓	✓
6.2.x					✓	✓	✓
6.3.x					✓	✓	✓
6.4.x					✓	✓	✓
7.0.x					✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 17 of 50

SUSE SLES 12	SP5– Kernel 4.12.14-120						
StorNext Releases	**MDC**	**SNSM**	**DDM**	**DLS**	**SAN**	**DLC**	**FX**
7.1.*					✓	✓	✓

SUSE SLES 15	SP2– Kernel 5.3.18-22						
StorNext Releases	**MDC**	**SNSM**	**DDM**	**DLS**	**SAN**	**DLC**	**FX**
7.1.*					✓	✓	✓

Miscellaneous Clients Only

Debian	7.0, 7.1, 7.2 and 7.8 only – Kernel 3.16.0-4		
StorNext Releases	**SAN**	**DLC**	**FX**
5.3*	✓	✓	
5.4*	✓	✓	
6.3.x	✓	✓	
6.4.0	✓	✓	
6.4.1			
7.*	Not supported in StorNext 7.0.x releases.		

Debian	8.11 – Kernel 3.16.0-6		
StorNext Releases	**SAN**	**DLC**	**FX**
6.2.x	✓	✓	
6.3.x	✓	✓	
6.4.x	✓	✓	
7.0.x	✓	✓	
7.1.0	Not supported in StorNext 7.1.x (or later) releases.		

Debian	9.4 – Kernel 4.9.82-1+deb9u3		
StorNext Releases	**SAN**	**DLC**	**FX**
6.3.1	✓	✓	✓
6.4.x	✓	✓	✓
7.0.x	✓	✓	✓

Debian	10 – Kernel 4.19.171-2		
StorNext Releases	**SAN**	**DLC**	**FX**
7.0.x	✓	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 18 of 50

Debian	11 – Kernel 5.10.0-16		
StorNext Releases	SAN	DLC	FX
7.1.x	✓	✓	✓

Oracle Solaris	10, 11, 11.1, 11.2 and 11.3		
StorNext Releases	SAN	DLC	FX
6.0.x	5.4.0.1	5.4.0.1	
6.1.x and later	Not supported in StorNext 6.1.x (or later) releases.		

IBM AIX	7.1		
StorNext Releases	SAN	DLC	FX
6.0.x	5.4.0.1		
6.1.x and later	Not supported in StorNext 6.1.x (or later) releases.		

HPE HP-UX	11i version 3		
StorNext Releases	SAN	DLC	FX
6.0.x	5.4.0.1		
6.1.x and later	Not supported in StorNext 6.1.x (or later) releases.		

Scientific Linux	Red Hat 7 based versions		
StorNext Releases	SAN	DLC	FX
5.0			
5.3*	✓	✓	
5.4*	✓	✓	
6.*	✓	✓	
7.*	Not supported in StorNext 7.0.x releases.		

HPE HP-UX	11i version 3		
StorNext Releases	SAN	DLC	FX
6.0.x	5.4.0.1		
6.1.x and later	Not supported in StorNext 6.1.x (or later) releases.		

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 19 of 50

Oracle OEL	Red Hat 6 equivalent		
StorNext Releases	**SAN**	**DLC**	**FX**
5.0	✓	✓	
5.3*	✓	✓	
5.4*	✓	✓	
6.*	✓	✓	
7.*	Not supported in StorNext 7.0.x releases.		

Oracle OEL	Red Hat 7 equivalent		
StorNext Releases	**SAN**	**DLC**	**FX**
5.0			
5.3*	✓	✓	
5.4*	✓	✓	
6.*	✓	✓	
7.*	Not supported in StorNext 7.0.x releases.		

Ubuntu Linux	14.04.0, 14.04.1 LTS versions, 14.04.2 LTS versions		
StorNext Releases	**SAN**	**DLC**	**FX**
5.3*	✓	✓	
5.4*	✓	✓	
6.3	✓	✓	
7.*	Not supported in StorNext 7.0.x releases.		

Ubuntu Linux	16.04.0 LTS version - Kernel 4.4		
StorNext Releases	**SAN**	**DLC**	**FX**
6.*	✓	✓	
7.	Not supported in StorNext 7.0.x releases.		

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 20 of 50

Ubuntu Linux	16.04.2 LTS version – Kernel 4.8 16.04.3 LTS version – Kernel 4.10 16.04.4 LTS version – Kernel 4.13		
StorNext Releases	**SAN**	**DLC**	**FX**
6.2.x	✓	✓	
6.3.x	✓	✓	
6.4.x	✓	✓	
7.0.x	✓	✓	
7.1.0	Not supported in StorNext 7.1.x (or later) releases.		

Ubuntu Linux	18.04 LTS version – Kernel 4.15 18.04.2 LTS version – Kernel 4.18		
StorNext Releases	**SAN**	**DLC**	**FX**
6.2.x	✓	✓	
6.3.x	✓	✓	
6.4.x	✓	✓	
7.0.x	✓	✓	

Ubuntu Linux	20.04 LTS version – Kernel 5.4.0		
StorNext Releases	**SAN**	**DLC**	**FX**
7.0.2	✓	✓	✓
7.0.3	✓	✓	✓

Ubuntu Linux	22.04 LTS version – Kernel 5.4.0		
StorNext Releases	**SAN**	**DLC**	**FX**
7.1.0	✓	✓	✓

8. StorNext Client Interoperability

Quantum recommends that clients be upgraded along with the MDC per the instructions in the installation procedures on the StorNext Documentation Center.

However, back-revision clients are supported in Supported Operating Systems and Platforms. If this is desired, you must observe the following notes:

☐ If a StorNext version is not listed in Supported Operating Systems and Platforms, it is not supported as a back-revision client, even during the upgrade process.

☐ The StorNext SAN or Distributed LAN client's software installed into a client may be a supported earlier version or the same version as the MDC/appliance. For example, StorNext 6.4 SAN or DLC client can be used with a StorNext 7.0.1 MDC/appliance.

☐ The use of StorNext SAN or Distributed LAN client software that is newer than the version installed onto an MDC/appliance is not supported. For example, StorNext 6.1 SAN or DLC client cannot be used with a StorNext 6.0 MDC/appliance.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 21 of 50

□ Some StorNext features, such as file system auditing, can be used with StorNext 5 Linux or Windows clients. See the [StorNext Documentation Center](#) for additional details.

□ All core software components (file system and Storage Manager) installed on the same MDC/appliance must be the same version of StorNext.

9. StorNext Virtual Machine Support

StorNext supports SAN client and DLC clients running within VMware virtual machines where the operating system the client is running on is Linux or Windows. Only 64-bit platforms are supported. The following table shows general compatibility.

Operating System	Kernel or Release	File System SAN Client (*See Note A*)	File System LAN Client (*See Note B*)
Windows Server 2012 Windows Server 2016 Windows Server 2019 Windows Server 2022 Windows 8, 8.1 Windows 10 Windows 11	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
Alma 8.4 Alma 8.5 Alma 8.6 Alma 9.0 Alma 9.1	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
Debian 9.4 Debian 10.9 Debian 11.5	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
RHEL 6.x	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
RHEL 7.x	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
RHEL 8.x	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
RHEL 9.x	All SN supported service packs in the supported operating systems and platforms table.	✓	✓

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 22 of 50

Operating System	Kernel or Release	File System SAN Client (*See Note A*)	File System LAN Client (*See Note B*)
Rocky 8.4 Rocky 8.5 Rocky 8.6 Rocky 9.0 Rocky 9.1	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
SLES 11.x	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
SLES 12.x	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
SLES 15.x	All SN supported service packs in the supported operating systems and platforms table.	✓	✓
Ubuntu 18.04 Ubuntu 20.04 Ubuntu 22.04	All SN supported service packs in the supported operating systems and platforms table.	✓	✓

NOTE A: Setting up a SAN client within a virtual machine can be complicated and should be done with great care to avoid data loss.

Guests running StorNext SAN clients have limited cluster functionality due to the use of RDMs to access storage. Snapshots, vMotion, DRS, and fault tolerance are disabled. If these features are required, use DLC clients instead.

To configure StorNext SAN clients in VMware guests, be aware of the following considerations:

- ☐ StorNext Data LUNs must be assigned to each StorNext SAN client VM using Raw Device Maps (RDMs) in /Physical Mode/ on a Shared virtual SCSI adapter.
- ☐ Never use /Virtual Mode/ RDMs for StorNext LUNs.
- ☐ Consult your storage vendor for details on properly configuring the storage for use as VMware vSphere to use raw LUNs as RDMs.
- ☐ On each SAN client, generate a raid-strings file by running the command:
  - ☐ cvlabel -R > /usr/cvfs/config/raid-strings
  - ☐ Then open /usr/cvfs/config/raid-strings in a text editor and change the third column to JBOD for all storage types. This disables StorNext multi-path handling, which is not needed in a guest. The host will handle multi-pathing.

NOTE B: To configure StorNext Distributed LAN Clients in VMware guests, follow the same procedures you would for a physical system. There are no VMware-specific requirements or issues.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 23 of 50

10. General Compatibility with other Products

StorNext Partial File Retrieval (PFR)				
Partial File Retrieval Version	StorNext 5 Release 5.3.x, 5.4.x	StorNext 6 Release 6.0.x through 6.1.x	StorNext 6 Release 6.2.x, 6.3.x, 6.4.x	StorNext 7 Release
1.2	Yes	Yes	No	No
2.0.0.16	Yes	Yes	Yes	Yes
2.0.0.17	No	No	No	Yes*

* Supported on StorNext 7.0.3 and StorNext 7.1.0 only.

Note: For PFR 1.0.2 and earlier only, StorNext Partial File Retrieval utilizes the StorNext API (SNAPI) 2.0.x component. PFR 1.1 and above use Web Services which are included in StorNext 4.2 and above.

Note: For PFR 2.0.0.12 and later, PFR includes StorNext Web Services (V2) with the HTTPS protocol and user authentication.

Product	Reference
F-Series (F1000, F2000)	For compatibility between an F-Series appliance and StorNext, see the appropriate F-Series product page online at https://www.quantum.com/documentation.
H-Series (H2000, H4000)	For compatibility between an H-Series appliance and StorNext, see the appropriate H-Series product page online at https://www.quantum.com/documentation.
StorNext Connect	Beginning with StorNext 7.1.0, the StorNext Connect product is not supported; StorNext Connect is replaced by the StorNext Unified User Interface (UUI). If you upgrade your existing StorNext Appliance to StorNext 7.1.0 (or later), or purchase a new system, then the StorNext Connect product is no longer accessible. If you previously configured StorNext Connect on your system, you can log in to the StorNext UUI with your existing StorNext Connect credentials (see Access the StorNext User Interface).
Appliance Controller	For compatibility between Appliance Controller and StorNext, see Appliance Controller Compatibility.
Lattus	For compatibility between Lattus and StorNext, see the appropriate *Lattus Release Notes* document available online at Lattus PDF Downloads.
DXi	For compatibility between DXi and StorNext, see the appropriate DXi product page online at https://www.quantum.com/documentation.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 24 of 50

11. StorNext Appliance I/O Card Compatibility

This table includes appliance models supported as of StorNext 7.0.1 and later. It **DOES NOT** include appliance models supported **ONLY** on StorNext releases prior to 7.0.1.

Appliance	Xcellis Workflow Extender Gen2	Xcellis Workflow Director Gen2	Xcellis Workflow Director (R630)	Xcellis Workflow Extender (R630)	Xcellis Foundation (R630)	Artico (R630)
I/O Card Model						
QLogic QLE2694L Quad-Port 16G Fibre Channel HBA	✓	✓	✓	✓	✓	✓
[1]QLogic QLE2772 Dual-Port 32G Fibre Channel HBA	✓	✓	✓	✓	✓	✓
[1]QLogic QLE2742 Dual-Port 32G Fibre Channel HBA	✓	✓	✓	✓	✓	✓
QLogic QLE2662 Dual-Port 16G Fibre Channel HBA			✓	✓	✓	✓
Intel X710 Quad-Port 10G Base-T Eth Card	✓	✓				
[2]Mellanox CX-4 EN Dual-Port 100G Eth Card	✓	✓				
[2]Mellanox CX-5 EN Dual-Port 100G Eth Card	✓	✓				
Mellanox CX-4 LX Dual-Port 25G Eth Card	✓	✓	✓	✓	✓	✓
QLogic QLE2564 Quad-Port 8G FC HBA			✓	✓	✓	✓
Intel i350 Quad-Port 1G Base-T Eth Card **Note**: This card is not the standard Intel i350 I/O card installed on a PCIe riser card in the server (that card type is not Quantum-supported). It is directly attached and specific to the motherboard of these systems.			✓	✓	✓	✓
Mellanox CX-3 VPI Dual-Port 40G Infiniband/Eth Card			✓	✓	✓	✓
Intel X550T Dual-Port 10G Base-T Eth Card			✓	✓	✓	✓
Intel X520 Dual-Port 10Gb Eth Card			✓	✓	✓	✓
Dell BCM5720 motherboard daughter card	✓	✓				

[1] For systems with a failed QLE2742 FC card, note the following:

- Appliance models require StorNext 7 for support of the QLE2772 FC card if a QLE2742 FC card fails.

- StorNext 6 DOES NOT support replacing a failed QLE2742 FC card with a QLE2772 FC card. For systems that can be upgraded to StorNext 7, upgrade to StorNext **BEFORE** replacing a QLE2742 FC card with a QLE2772 FC card.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide
www.quantum.com
February 2023
Page 25 of 50

Quantum. StorNext.

- For dual-server node appliances running StorNext 7, a mix of one or more QLE2742 or QLE2772 FC cards **IS** supported.

- For appliance models **NOT** supported by StorNext 7, or for systems that cannot currently be upgraded to StorNext 7 because of StorNext requirements for your environment, you **MUST** replace a failed QLE2742 FC card with another QLE2742 FC card.

- For an R640 based appliance, a **TSB** is required for StorNext 6.4.1 and StorNext 7.0.1 releases, where a BCM5720 replacement daughter card is implemented.

[2] Mellanox CX-5 cards require StorNext 6.2.0 or later

12. StorNext Browser Support

StorNext user interfaces have been tested with the following browser versions.

Browser	Version
Google Chrome	108.0.5359.125 (Official Build) (64-bit)
Google Chrome (macOS)	108.0.5359.98 (Official Build) (x86_64)
Microsoft Edge	108.0.1462.46 (Official build) (64-bit)
Mozilla Firefox	108.0 (64-bit)
Firefox	108.0 (64-bit)
Safari (macOS)	15.6.1 (16613.3.9.1.16, 16613)

13. StorNext Unified User Interface (UUI) Support

The StorNext UUI is not supported on Red Hat Enterprise Linux (RHEL) 8.

14. Supported Quantum Library and Drive List

Note

- StorNext Storage Manager support for Linear Tape File System (LTFS) based on Open LTFS and is compatible with other vendor's implementations. LTFS tape format provides many of the same features as Quantum ANTF format, with the additional benefit of multi-vendor portability. LTFS is an ideal format for long-term archiving use, but it is slower than ANTF.

- The StorNext 6 implementation of LTFS is based on Open LTFS version 2.2.2.

- Support for LTO-8 with LTFS requires StorNext 6.0.6 (or later).

- Support for LTO-M8 with LTFS requires StorNext 6.2.0 (or later)

- Advanced Path Failover does not support Quantum LTFS.

- Starting with the StorNext 6.2.0 release, customers running with EDLM or ActiveVault in the library must update their Library Firmware to the version listed below and ensure that the library is configured to use the StorNext Web Services for communication (refer to the specific Quantum Library documentation for details on configuring the Web Services). The reason for this change is because SNAPI is no longer delivered in

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 26 of 50

StorNext 6.2.0 (or later) and EDLM and ActiveVault took advantage of SNAPI. Now the library has been updated to use StorNext WebServices instead.

- o Scalar i6000, the firmware version will need to be i13 or later.
- o Scalar i500, the firmware version will need to be 710G or later.

☐ StorNext does not support mixed generation of LTO drives in the same partition (assuming the library can have partitions) or library (if the library does not support partitioning). If you have mixed generation LTO drives in a library, then the drives must be in their own partition.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 27 of 50

			Supported Quantum Library and Drive List									
Vendor	Libraries	Drive Types [5]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.0.x, 6.1.x	StorNext 6.2.x, 6.3.x, 6.4.x	StorNext 7.0.1	StorNext 7.0.2, 7.0.3	StorNext 7.1.0	Notes
Quantum	Scalar i500	IBM LTO-2	✓									• LTFS is only available for LTO-5/6/7/8/9 drives which support partitioning. • Support for LTFS with LTO-7 drives requires StorNext 5.4.0 or later. • Support for LTFS with LTO-8 drives requires StorNext 6.0.6 or later. • LTO-8 support includes support for LTO-M8 formatted media. • Support for LTO-7 M8 media with LTFS requires StorNext 6.2.0 or later. • If using EDLM or ActiveVault, must be at version 710G or later.
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-6	✓	✓	✓[6]	✓[9]	✓[9]	✓[9]	✓[9]	✓[9]	✓[9]	
		IBM LTO-7	✓[7]	✓[10]	✓[9]	✓[9]	✓[9]	✓[9]	✓[9]	✓[9]	✓[9]	
		IBM LTO-8					✓	✓	✓	✓	✓	
		IBM LTO-9								✓	✓	
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Scalar i6000 / i2000	IBM LTO-1	✓									• LTFS is only available for LTO-5/6/7/8/9 drives which support partitioning. • Support for LTFS with LTO-7 drives requires StorNext 5.4.0 or later. • Support for LTFS with LTO-8 drives requires StorNext 6.0.6 or later. • LTO-8 support includes support for LTO-M8 formatted media. • Support for LTO-7 M8 media with LTFS requires StorNext 6.2.0 or later.
		IBM LTO-2	✓									
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-6	✓	✓	✓[8]	✓[8]	✓[8]	✓[8]	✓[8]	✓[8]	✓[8]	
		IBM LTO-7	✓[9]	✓	✓[9]	✓[9]	✓[9]	✓[9]	✓[9]	✓[9]	✓[8]	
		IBM LTO-8					✓	✓	✓	✓	✓	
		IBM LTO-9								✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	

[5] StorNext supports LTO WORM functionality where offered by the drive vendor. Please see the vendor website for more details.
[6] APFO (IBM) supported
[7] The i500 requires firmware version 8.4 or later to support LTO-7
[8] APFO supported i6k only with LTO-6 or LTO-7
[9] LTO-7 is not available in the Scalar i2000 library.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 28 of 50

			Supported Quantum Library and Drive List									
Vendor	Libraries	Drive Types [5]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.0.x, 6.1.x	StorNext 6.2.x, 6.3.x, 6.4.x	StorNext 7.0.1	StorNext 7.0.2, 7.0.3	StorNext 7.1.0	Notes
		Quantum DLT-S4	✓									• If using EDLM or ActiveVault with the i6000, must be at version i13 or later.
		Quantum SDLT 320 SCSI	✓									
		Quantum SDLT 600 FC	✓									
	Scalar i40 / i80	HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓		• LTFS is only available for LTO-5/6/7/8 drives which support partitioning. • Support for LTFS with LTO-7 drives requires StorNext 5.4.0 or later. • Support for LTO-7 M8 media with LTFS requires StorNext 6.2.0 or later.
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-7		✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-8					✓	✓	✓	✓	✓	
		IBM LTO-9								✓	✓	• LTFS is supported for LTO-9 drives in 7.0.3, 7.1.0
	Scalar i3	IBM LTO-6				✓	✓	✓	✓	✓	✓	• LTFS is only available for LTO-5/6/7/8 drives which support partitioning. • Support for LTFS with LTO-7 drives requires StorNext 5.4.0 or later. • Support for LTFS with LTO-8 drives requires StorNext 6.0.6 or later. • LTO-8 support includes support for LTO-M8 formatted media. • Support for LTO-7 M8 media with LTFS requires StorNext 6.2.0 or later.
		IBM LTO-7				✓	✓	✓	✓	✓	✓	
		IBM LTO-8					✓[10]	✓	✓	✓	✓	
		IBM LTO-9								✓	✓	• LTFS is supported for LTO-9 drives in SN 7.0.3, 7.1.0
	Scalar i6	IBM LTO-6				✓	✓	✓	✓	✓	✓	• LTFS is only available for LTO-5/6/7/8 drives which support partitioning.
		IBM LTO-7				✓	✓	✓	✓	✓	✓	
		IBM LTO-8					✓	✓	✓	✓	✓	

---

[10] Scalar i3 with LTO-8 is only supported starting at 6.0.5

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 29 of 50

		Supported Quantum Library and Drive List										
Vendor	Libraries	Drive Types [5]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.0.x, 6.1.x	StorNext 6.2.x, 6.3.x, 6.4.x	StorNext 7.0.1	StorNext 7.0.2, 7.0.3	StorNext 7.1.0	Notes
												• Support for LTFS with LTO-7 drives requires StorNext 5.4.0 or later. • Support for LTFS with LTO-8 drives requires StorNext 6.0.6 or later. • LTO-8 support includes support for LTO-M8 formatted media. • Support for LTO-7 M8 media with LTFS requires StorNext 6.2.0 or later.
		IBM LTO-9								✓	✓	• LTFS is supported for LTO-9 drives. In 7.0.3, 7.1.0
	Scalar 24	IBM LTO-1	✓									
		IBM LTO-2	✓									
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓			
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓			
	Scalar 50	HP LTO-4	✓	✓	✓	✓	✓	✓	✓			
	Scalar 100	IBM LTO-1	✓									• Do not use firmware version 2.10.0013.
		IBM LTO-2	✓									
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓			
	Scalar 1000	IBM LTO-2	✓									• You must use SDLC [11] - SCSI Target Mode or Native SCSI. • DAS/ACI is not supported.
		IBM 3590B1A	✓	✓	✓	✓	✓					
	Scalar 10000	IBM LTO-1	✓									• Must use SDLC [11] - SCSI Target Mode or Native SCSI. • DAS/ACI is not supported.
		IBM LTO-2	✓									
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓			
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓			
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓			
		IBM 3592	✓	✓	✓	✓	✓	✓	✓			
	PX500	HPE LTO-3	✓	✓	✓	✓	✓	✓	✓			
	PX720	HPE LTO-2	✓									
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓			

[11] Scalar Distributed Library Controller has been tested up to version 2.8

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 30 of 50

Supported Quantum Library and Drive List												
Vendor	**Libraries**	**Drive Types** [5]	**StorNext 5.3.0**	**StorNext 5.3.1.x**	**StorNext 5.3.2.x**	**StorNext 5.4.x**	**StorNext 6.0.x, 6.1.x**	**StorNext 6.2.x, 6.3.x, 6.4.x**	**StorNext 7.0.1**	**StorNext 7.0.2, 7.0.3**	**StorNext 7.1.0**	**Notes**
		DLT S4	✓									

15. Supported Non-Quantum Library and Drive List

Large, complex StorNext Storage Manager solutions support the use of non-Quantum software such as Oracle StorageTek Automated Cartridge System Library Software (ACSLS) for centralized, multi-platform tape library management. Additionally, Storage Manager supports physical library partitioning to improve the utilization and logical sharing of enterprise-level tape libraries.

StorNext does not support mixed generation of LTO drives in the same partition (assuming the library can have partitions) or library (if the library does not support partitioning). If you have mixed generation LTO drives in a library, then the drives must be in their own partition.

Note: Effective with the next StorNext feature release after StorNext 6.0.6, support for all versions of the T9840 drives will be dropped.

Note: The ACSLS library is not supported with Red Hat 8.

Non-Quantum Supported Libraries and Tape Drives												
Vendor	Libraries	Drive Types [8]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.x	StorNext 6.1.x	StorNext 6.2.x, 6.3.x	StorNext 6.4.x	StorNext 7.0.x	StorNext 7.1.x	Notes
Dell	PV136T	IBM LTO-2	✓										
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	PowerVault ML6000 6010 / 6020 / 6030	IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
HPE	ESL E Series	HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	MSL 6000	HPE LTO-2	✓										
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	MSL G3 Series 2024 / 4048 / 8096	HPE LTO-2	✓										
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	EML E Series	HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 32 of 50

			StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.x	StorNext 6.1.x	StorNext 6.2.x, 6.3.x	StorNext 6.4.x	StorNext 7.0.x	StorNext 7.1.x	Notes
Vendor	**Libraries**	**Drive Types** [8]											**Notes**
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	ESL G3	**HPE LTO-4**	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-7			✓	✓	✓	✓	✓	✓	✓	✓	
	MSL 6480	**HPE LTO-3**	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IBM	**TS3100**	**IBM LTO-7**		✓	✓	✓	✓	✓	✓	✓	✓	✓	
	TS3500	**IBM LTO-2**	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-7		✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM 3592 (J1A and E05)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM TS1120	✓	✓	✓	✓	✓	✓					
		IBM TS1130	✓	✓	✓	✓	✓	✓					
		IBM TS1140	✓	✓	✓	✓	✓	✓					
		IBM TS1150		✓	✓	✓	✓	✓					
	TS3310	**IBM LTO-3**	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-7		✓	✓	✓	✓	✓	✓	✓	✓	✓	
	TS4500	**TS1140**		12	12	12	12	12	12	12	12	12	
		TS1150		✓	✓	✓	✓	✓					
		TS1155									✓	✓	
		TS1160									✓	✓	

Non-Quantum Supported Libraries and Tape Drives

[12] The tape device and library have been tested individually, but this specific combination has not been tested. Although not formally tested, this drive and library pair is expected to work without any issues.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 33 of 50

Non-Quantum Supported Libraries and Tape Drives													
Vendor	Libraries	Drive Types [8]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.x	StorNext 6.1.x	StorNext 6.2.x, 6.3.x	StorNext 6.4.x	StorNext 7.0.x	StorNext 7.1.x	Notes
		IBM LTO-7		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Oracle SCSI / FC	L180 / L700 / L1400	T9840C	✓	✓	✓	✓	✓	✓					
		T9840D	✓	✓	✓	✓	✓	✓					
		T10000A [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000B [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	SL3000	T9840C	✓	✓	✓	✓	✓	✓					
		T9840D	✓	✓	✓	✓	✓	✓					
		T10000A [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000B [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000C [13 15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000D [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SL500	HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SL150	HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

[13] When using a T10000 Rev C drive with ACSLS 8.0.x, please assure that your cleaning cartridges are supported in that ACSLS release. Quantum has found a case where a cleaning cartridge isn't recognized by ACSLS 8.0.x and reports incorrect media type in the StorNext GUI. This report of incorrect media type does not prevent the cleaning cartridge from being successfully used, but can cause operator confusion. ACSLS 8.1.x corrects the issue.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 34 of 50

Vendor	Libraries	Drive Types [8]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.x	StorNext 6.1.x	StorNext 6.2.x, 6.3.x	StorNext 6.4.x	StorNext 7.0.x	StorNext 7.1.x	Notes
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	9740	**Sun/STK 9840**	✓	✓	✓	✓	✓	✓					
	L180 / L700 / L1400	**T9840C**	✓	✓	✓	✓	✓	✓					
		T9840D	✓	✓	✓	✓	✓	✓					
		T10000A [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000B [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	SL3000	**T9840C**	✓	✓	✓	✓	✓	✓					
		T9840D	✓	✓	✓	✓	✓	✓					
		T10000A [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000B [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000C [13] [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000D [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 7.3.1
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 8.2
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 7.3.1
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 8.2
		IBM LTO-7				✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 8.4
	SL500	**HPE LTO-3**	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 7.3.1

Table title: **Non-Quantum Supported Libraries and Tape Drives**

Vendor: Oracle — ACSLS 7.3 / 7.3.1 / 8.0.x / 8.1.x / 8.2.x / 8.3 / 8.4 [14]

[14] ACSLS versions are supported on Solaris and Linux installs, ACSLS 8.3 is the first version that supports Oracle Linux (6.5 or 6.7).
[15] When using T10000 drives, the STK library parameter "Fastload" must be set to "OFF".

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 35 of 50

Vendor	Libraries	Drive Types [8]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.x	StorNext 6.1.x	StorNext 6.2.x, 6.3.x	StorNext 6.4.x	StorNext 7.0.x	StorNext 7.1.x	Notes
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 7.3.1
	SL8500	T9840C	✓	✓	✓	✓	✓	✓					
		T9840D	✓	✓	✓	✓	✓	✓					
		T10000A [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000B [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000C [13] [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000D [15]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 7.3.1
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 8.2
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 7.3.1
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 8.2
		IBM LTO-7			✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 8.3
		IBM LTO-8								✓	✓	✓	Requires minimum of ACSLS 8.3
	SL150	HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 8.2
Qualstar	XLS	IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sony	Petasite CSM-200	IBM LTO-4 (T1600)	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Spectra Logic	T-Series T50e / T120 / T200 /	IBM TS1140	✓	✓	✓	✓	✓	✓					StorNext 6.0.5 and later support the use of LTO-8 tape devices in all Spectra libraries
		LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓		

The table title above reads: **Non-Quantum Supported Libraries and Tape Drives**

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 36 of 50

Vendor	Libraries	Drive Types [8]	StorNext 5.3.0	StorNext 5.3.1.x	StorNext 5.3.2.x	StorNext 5.4.x	StorNext 6.x	StorNext 6.1.x	StorNext 6.2.x, 6.3.x	StorNext 6.4.x	StorNext 7.0.x	StorNext 7.1.x	Notes
	T380 / T680 / T950 / T-Finity	LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		LTO-7				✓	✓	✓	✓	✓	✓	✓	
		LTO-8					✓	✓	✓	✓	✓	✓	

16. Advanced Path Failover Compatibility

Using the StorNext Distributed Data Mover (DDM) feature can boost overall data movement performance by distributing data movement across multiple systems. To ensure data integrity, StorNext software requires the use of SCSI Persistent Reservations on StorNext metadata controllers and DDM clients. As SCSI persistent reservations control access to shared devices, such as tape, Storage Manager retains control of the tape device paths, even if a failover were to occur.

StorNext Storage Manager supports IBM Advanced Path Failover (APFO) for redundant paths to IBM LTO-6, LTO-7, LTO-8 and LTO-9 tape devices. Using IBM APFO requires SCSI Persistent Reservations to be turned off, as device reservations are handled by IBM's software, not StorNext.

☐ StorNext 6.0.5 (or later) supports LTO-8 tape devices paired with Quantum Scalar i3, i6, i500 and i6000 libraries.

☐ StorNext 5 supports IBM Advanced Path Failover (APFO) with IBM LTO-6 and LTO-7 tape devices installed in Scalar i500 and i6k libraries.

Notes:

• IBM strongly recommends that tape and disk I/O use separate HBAs when used with the IBM Advanced Path Failover (**lin_tape**) driver.

• Advanced Path Failover does not support Quantum Linear Tape File System.

• IBM **lin_tape** driver versions 3.0.10 and 3.0.18 cannot be used with StorNext.

• Please refer to the IBM **lin_tap.ReadMe** the latest details about supported operating system versions and for a listing of supported/non supported versions of the Join Driver.

• SCSI-3 persistent reservations must be enabled in the **lin_tape.conf** file for IBM APFO if data path failover is not enabled. For additional information on how to configure **SCSI Persistent Reservations**, see the [Tape Devices and Persistent SCSI Reserve](#).

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 37 of 50

Minimum Tested Version of Firmware / Driver Version	
	StorNext 6.0 (or later)
IBM lin_tape driver version	3.0.23
Quantum Scalar i3 and i6	150G.GS080 – i2.1
Quantum Scalar i6k	760Q.GS25000 – i13
Quantum Scalar i500	700G.GS013 - i9
IBM LTO-6 Drive FH	H990
IBM LTO-7 Drive HH	HB81
IBM LTO-7 Drive FH	HB80
IBM LTO-8 Drive HH	HB83
IBM LTO-8 Drive FH	HB82

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 38 of 50

17. Xsan Compatibility

Apple Xsan Server with StorNext FX Clients													
Xsan Controller Version	**StorNext 7.1.x**	**StorNext 7.0.x**	**StorNext 6.4.x**	**StorNext 6.3.x**	**StorNext 6.2.x**	**StorNext 6.1.x**	**StorNext 6.0.x**	**StorNext 5.4.x**	**StorNext 5.3.2.x**	**StorNext 5.3.1**	**StorNext 5.3.0**	**StorNext 5.2.2**	**StorNext 5.2.x**
Xsan 7 macOS 13*	✓	✓	✓										
Xsan 7 macOS 12*	✓	✓	✓										
Xsan 7 macOS 11*	✓	✓	✓										
Xsan 5.0.1 macOS 10.15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Xsan 5.0.1 macOS 10.14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Xsan 5.0.1 macOS 10.13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Xsan 5 macOS 10.12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Xsan 4.1 macOS 10.11											✓	✓	
Xsan 4 macOS 10.10											✓	✓	✓

* Includes support for M1 based macOS hardware supported on macOS 11, macOS 12, and macOS 13.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 39 of 50

StorNext MDC with Apple Xsan Clients									
StorNext MDC Controller Version	Xsan 7 macOS 13*	Xsan 7 macOS 12*	Xsan 7 macOS 11*	Xsan 5.0.1 macOS 10.15	Xsan 5.0.1 macOS 10.14	Xsan 5.0.1 macOS 10.13	Xsan 5 macOS 10.12	Xsan 4.1 macOS 10.11	Xsan 4 macOS 10.11
StorNext 7.1.x	✓	✓	✓						
StorNext 7.0.x	✓	✓	✓	✓	✓	✓	✓		
StorNext 6.4.x	✓	✓	✓	✓	✓	✓	✓		
StorNext 6.3.x				✓	✓	✓	✓		
StorNext 6.2.x				✓	✓	✓	✓		
StorNext 6.1.x				✓	✓	✓	✓		
StorNext 6.0.5, 6.0.6.x				✓	✓	✓	✓		
StorNext 6.0, 6.0.1, 6.0.1.1				✓	✓	✓	✓	✓	✓
StorNext 5.4.x				✓	✓	✓	✓	✓	✓
StorNext 5.3.2.x				✓	✓	✓	✓	✓	✓
StorNext 5.3.1								✓	✓
StorNext 5.3.0								✓	✓
StorNext 5.2.2								✓	✓
StorNext 5.2.0, 5.2.1									✓

* Includes support for M1 based macOS hardware supported on macOS 12, and macOS 13.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide
www.quantum.com
February 2023
Page 40 of 50

18. StorNext Security

StorNext supports two security models:

- UNIX permission bits
- Access Control Lists (ACL)

Although StorNext supports both security models, the version used depends on the client platform and system configuration settings within StorNext.

Display and manipulation of ACLs for NFSv4 is only supported when the NFS server is a StorNext Appliance running StorNext 5.4.0.1 or later.

See the StorNext Documentation Center for complete details on StorNext security.

19. StorNext NAS and Appliance Controller Compatibility

StorNext NAS is covered under the Node license supported under the subscription licenses supported in StorNext 7.x, or as a separately-licensed feature under the perpetual licenses supported in StorNext 7.x and earlier. As of StorNext Appliance Controller 3.0.1, it must be manually-enabled on the system.

19.1. Upgrade Paths

For information about upgrading your version of Appliance Controller, see Supported Appliance Controller Upgrade Compatibility on the *Appliance Controller Documentation Center*.

19.2. Compatibility with Quantum Appliances

The Appliance Controller as of 3.0.1 and later is now supported on the same appliances as StorNext 7. See StorNext Appliance Compatibility.

19.3. Supported Quantum Storage Arrays

- o F2000 – `qstorage` and `iscsiadm` Appliance Controller commands run from a supported StorNext Appliance acting as the host for the F2000 storage array.

  Note: The F2000 1.1.2 software requires Appliance Controller 2.3.2 or later; F2000 1.0.1 software requires Appliance Controller 2.3.1; and F2000 1.0 software requires Appliance Controller 2.2.0.2 or later.

- o F1000 – `qstorage` and `iscsiadm` Appliance Controller commands run from a supported StorNext Appliance acting as the host for the F1000 storage array.

  Note: The F1000 requires Appliance Controller 2.3.3 or later.

- o QXS 12G – `qstorage` and `iscsiadm` Appliance Controller commands run from a supported StorNext Appliance acting as the host for the QXS 12G storage array.

- o QXS 6G (Hybrid Storage) – `qstorage` and `iscsiadm` Appliance Controller commands run from a supported StorNext Appliance acting as the host for the QXS Hybrid storage array.

19.4. NAS Protocol Support

The following file-sharing protocols are supported for StorNext NAS on Linux, macOS, and Windows operating systems:

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 41 of 50

Protocol	Supported Versions/Features
SMB	• SMB 3 • SMB 2 • SMB 1 (CIFS) – Quantum does not recommend • Protocol auto-negotiation with client • macOS Named Streams support for file systems using the SMB protocol, with or without Xsan Named Streams. Named Streams is not supported for NFS.
NFS	• NFSv4 • NFSv3

19.5. User Directory Support

Important:

You can use only one authentication scheme for NAS.

The Appliance Controller supports the following user directories:

Authentication Scheme	Supported Versions/Features
Microsoft Active Directory	• 2022 • 2019 • 2012 • 2008 • Unix extensions (RFC2307) • RID UID mapping
OpenLDAP	• Samba 3.2 schema extensions • OpenLDAP with Kerberos
Apple Open Directory	• macOS X 10.5 or higher • Uses CLI configuration procedure
Local Users	Local users can be created directly on the appliance

19.6. NAS Failover Support

Scale-out NAS clusters support NAS failover for NFSv3 and SMB protocols. For Xcellis Workflow Director, Xcellis Foundation, aiWARE for Xcellis, Pro Foundation, M660, and M440 StorNext Metadata Controller (MDC) appliances, when configured in a NAS cluster with Xcellis Workflow Extender and/or G300 systems, the server nodes for these system types **DO NOT** participate as targets for NAS fail-over or load-balancing. NFSv3 / NFSv4 do not support failover on Xcellis Workflow Extender, Artico, G300, Pro Foundation, M660 or M440 systems. For more information, see NAS Clusters.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 42 of 50

19.7. DNS Load Distribution

This is only supported in scale-out NAS cluster configuration. Evenly distributes client connections to nodes within a NAS cluster, facilitating greater network bandwidth and better redistribution results after a NAS failover occurs.

19.8. Feature Licenses and Configuration

The SNMP feature

- o This is installed by default with the Appliance Controller software.
- o This does not require a separate license.

The QXS Array feature

- o This is installed by default.
- o This does not require a separate license.

The QStorage feature

- o This is installed by default.
- o This does not require a separate license.
- o This feature supports F2000 storage arrays **ONLY**.

The iSCSI feature

- o This does not require a separate license.

19.9. NAS Multiple Protocol Access and File Locking

Multiple protocol access to NAS and file locking is supported when your system is running both StorNext 6.4.x and Appliance Controller 2.3.4 or later. See Multi-protocol File Locking for information about multi-protocol access and file locking support and compatibility.

19.10. Network File System (NFS) Support

NFSv3 and NFSv4 are supported. See NAS Cluster Configuration for additional information about NFS and NAS Cluster configuration.

Limitations (for StorNext NAS running on any version of StorNext and Appliance Controller):

- • NFSv4 HA lock recovery is only supported over NFS version 4.0.
- • NFSv4 failover is NOT supported with scale-out NAS clusters.
  - o See NAS Cluster Configuration for additional information about NFS and NAS Cluster configuration.
- • NFSv4 delegations are NOT supported.
- • ACLs are enforced for NFSv3, but CANNOT be displayed or manipulated.
- • Concurrently sharing the same StorNext file system from multiple NFSv4 servers is NOT supported.

Limitations (for NAS other than StorNext NAS running on any version of StorNext software):

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 43 of 50

- Due to issues with lock recovery that may occur after rebooting, file locking is NOT supported when concurrently sharing the same StorNext file system from multiple NFS servers.

- NFS is ONLY supported when using Linux NFS servers.

- The display and manipulation of ACLs is NOT supported for NFSv3. However, ACLs are still enforced.

- The display and manipulation of ACLs for NFSv4 is NOT supported.

- NFSv4 delegations are NOT supported.

- NAS (including the standalone NAS controller) is not supported with Red Hat 8.

20. Data snpolicy Replication Compatibility

The following table provides compatibility between StorNext releases when using the replication feature.

Note: snpolicy is no longer supported in StorNext 7.0.x releases

Source Release	Target Release									
	StorNext 5.0.x	StorNext 5.1.x	StorNext 5.2.x	StorNext 5.3.x	StorNext 5.4.x	StorNext 6.0.x	StorNext 6.1.x	StorNext 6.2.x	StorNext 6.3.x	StorNext 6.4.x
StorNext 5.0.x	✓	✓	✓	✓	✓	✓				
StorNext 5.1.x	✓	✓	✓	✓	✓	✓				
StorNext 5.2.x	✓	✓	✓	✓	✓	✓				
StorNext 5.3.x	✓	✓	✓	✓	✓	✓				
StorNext 5.4.x	✓	✓	✓	✓	✓	✓				
StorNext 6.0.x	✓	✓	✓	✓	✓	✓				
StorNext 6.1.x	✓	✓	✓	✓	✓	✓	✓			
StorNext 6.2.x			✓	✓	✓	✓	✓	✓		
StorNext 6.3.x			✓	✓	✓	✓	✓	✓	✓	
StorNext 6.4.x			✓	✓	✓	✓	✓	✓	✓	✓

21. FlexTier™ License Compatibility

StorNext's capability to tier to object storage systems and clouds has been tested with a wide range of disk-based object stores and cloud storage providers. The table below provides the current list of

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 44 of 50

compatible object stores and cloud services. You can request formal compatibility testing for devices and providers not listed below from Quantum Sales.

Vendor/ Provider	Feature/ Platform	StorNext 7.1.x	StorNext 7.0.x	StorNext 6.4.x	StorNext 6.3.x	StorNext 6.2.x	StorNext 6.1.1	StorNext 6.0.5.x	StorNext 6.0.x	License Type[16]
Amazon S3	Simple Storage Service	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Public Cloud
	Infrequent Access	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Public Cloud
	Glacier [17]	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Public Cloud
	Government Cloud	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Public Cloud
	Commercial Cloud Services	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Public Cloud
	Snowball	✓	✓	✓	✓	✓				FlexTier for Public Cloud
Microsoft	Azure AppendBlob	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Public Cloud
	Azure BlockBlob	✓	✓	✓	✓	✓				FlexTier for Public Cloud
	Azure Data Box	✓	✓	✓	✓					FlexTier for Public Cloud
Google	Cloud Platforms using S3	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Public Cloud
	Native Google	✓	✓	✓	✓	✓				FlexTier for Public Cloud
NetApp	Webscale StorageGRID	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
IBM	Cloud Object Storage (Cleversafe)	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
SCALITY	RING	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
HGST	ActiveScale	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud

[16] A FlexTier license is only required for any release prior to StorNext 7.x.
[17] AWS Glacier feature: Amazon AWS "native" Glacier bucket feature is not supported by StorNext.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 45 of 50

Vendor/ Provider	Feature/ Platform	StorNext 7.1.x	StorNext 7.0.x	StorNext 6.4.x	StorNext 6.3.x	StorNext 6.2.x	StorNext 6.1.1	StorNext 6.0.5.x	StorNext 6.0.x	License Type[16]
SwiftStack	Using S3	✓	✓	✓	✓	✓	✓			FlexTier for Private Cloud
Quantum	Lattus AXR	✓	✓	✓	✓	✓	✓	✓	✓	Object Storage
	Lattus S3	✓	✓	✓	✓	✓	✓	✓	✓	Object Storage
	P100/X100	✓	✓	✓	✓	✓	✓	✓		FlexTier for Private Cloud
Cloudian	HyperStore	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
StorExcel	ORockCloud	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
KeeperTech	KeeperSAFE	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
Object Matrix	MatrixStore	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
Wasabi	Hot Cloud Storage	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
Caringo	Swarm	✓	✓	✓	✓	✓	✓	✓	✓	FlexTier for Private Cloud
Hitachi Vantara	HCP	✓	✓	✓	✓	✓				FlexTier for Private Cloud

The following object stores and cloud services require that you use the **S3 Compatible** option in the **Provider** list in the StorNext GUI:

S3 Compatible	
Caringo	Swarm
Cloudian	HyperStore
HGST	ActiveScale
Hitachi Vantara	HCP
IBM	Cloud Object Storage (Cleversafe)
KeeperTech	KeeperSAFE

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 46 of 50

S3 Compatible	
NetApp	Webscale StorageGRID
Object Matrix	MatrixStore
Quantum	P100/X100
SCALITY	RING
StorExcel	ORockCloud
SwiftStack	Using S3
Wasabi	Hot Cloud Storage

Object stores and cloud services not listed have their own **Provider** option in the GUI.

See Configure Object Storage and Cloud Destinations for additional information.

22. FlexSync™ Compatibility

FlexSync with StorNext Software						
FlexSync Version	**StorNext 7.1.x**	**StorNext 7.0.3**	**StorNext 7.0.1, 7.0.2**	**StorNext 6.4.x**	**StorNext 6.3.x**	**StorNext 6.2.x**
2.3.x	✓	✓				
2.2.x			✓			
2.1.5				✓		
2.1.4				✓		
2.1.3				✓		
2.1.2				✓		
2.1.1				✓	✓	
2.1.0					✓	
1.3.0					✓	

Note: To upgrade to FlexSync 2.2.x (or later), you must be running FlexSync 1.3.0 (or later).
Note: As part of the StorNext 7.x appliance upgrade process, the version of FlexSync is also upgraded to FlexSync 2.2.x or FlexSync 2.3.x. Be aware, mixed versions of FlexSync daemons is not supported and results in a communication error. You must install the same version of FlexSync, or upgrade to the same version of FlexSync on all the hosts or systems using FlexSync. A newer version of the FlexSync daemon cannot communicate with an older version within a configuration, or on another host or system.

- Supported FlexSync data mover platforms include H-Series, Xcellis Workflow Directors, Xcellis Workflow Extenders and M4xx and M6xx series appliances.
- You can use FlexSync with StorNext Storage Manager managed file systems (source or destination), if the FlexSync version is 2.1.0 or greater and the StorNext version is 6.3.0 or greater. See FlexSync and Managed Files for additional information.
- FlexSync supports third party file systems.
- Data protection solutions based on FlexSync must have at least one (1) data mover; multiple data movers can be used to maximize performance.
- A single data mover configuration can be used to protect local or cross-mounted file systems.
- FlexSync configurations that transmit data across a WAN or LAN connection to a remote destination use delta block compression to transfer only new or changed blocks to maximize network bandwidth. FlexSync

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 47 of 50

software must be installed on all WAN or LAN connected destinations. At least two (2) FlexSync data movers must be licenses for WAN and LAN connected configurations. [18]

☐ The FlexSync license is installed on the Xcellis or M-Series system that is also used when configuring FlexSync. This license key will state the total number of licensed data movers. [18]

☐ If your system is running FlexSync 2.1.0 or later, and running RedHat Enterprise Linux version 7.7 or Red Hat Enterprise Linux 7.6.x, then you must upgrade your kernel as follows:

  o For RedHat Enterprise Linux version 7.7, upgrade to kernel-3.10.0-1062.el7 or later.
  o For RedHat Enterprise Linux version 7.6.x, upgrade to kernel-3.10.0-957.1.3.el7 or later.

See the FlexSync Documentation Center for additional details regarding prerequisites, system guidelines, and operating system compatibility.

23. Quantum Disk Storage Products Interoperability

23.1. H-Series Interoperability

All Quantum-branded H-Series Fibre Channel and iSCSI models can be used as primary storage in a StorNext environment. For multipath settings for the H-Series, see Update Multipath Settings for External Storage Arrays.

23.2. F-Series Interoperability

All Quantum-branded F-Series fibre channel and iSCSI models can be used as primary storage in a StorNext environment. For multipath settings for the F-Series, see Update Multipath Settings for External Storage Arrays.

23.3. QXS Interoperability and Certification

☐ All Quantum-branded fibre channel QXS models and iSCSI QXS models can be used as primary storage in a StorNext environment.

☐ QXS 12G chassis and components (not drives) cannot be interconnected with QXS 6G.

☐ Usage of virtual volumes is not recommended for StorNext file systems used for bandwidth intensive streaming workloads.

☐ Thin-provisioned and tiered storage devices should not be used if performance or consistency of performance is expected or desired.

☐ All Quantum-branded fibre channel QXS models and iSCSI QXS models can be used as primary storage in a StorNext environment.

☐ QXS 12G chassis and components (not drives) cannot be interconnected with QXS 6G.

☐ Usage of virtual volumes is not recommended for StorNext file systems used for bandwidth intensive streaming workloads.

☐ Thin-provisioned and tiered storage devices should not be used if performance or consistency of performance is expected or desired.

---

[18] A FlexSync license is only required for any release prior to StorNext 7.x.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 48 of 50

24. Offline File Manager (OFM) Compatibility

Offline File Manager (for Microsoft Windows)		
Supported Operating System	OFM 2.x	OFM 1.1
Windows 10	✓	
Windows 11	✓*	

✓* indicates the version is supported but it has not been tested.

Offline File Manager (for Apple macOS)			
Supported Operating System	OFM 2.x	OFM 1.1	OFM 1.0.x
macOS 13 *	✓[19]		
macOS 12 *	✓		
macOS 11 *	✓		
macOS 10.15	✓	✓	✓
macOS 10.14	✓	✓	✓
macOS 10.13	✓	✓	✓

* Includes support for M1 based macOS hardware supported on macOS 11, macOS 12, and macOS 13.

[19] This combination does not support connecting to a Server Message Block (SMB) share.

Quantum Corporation
© 2023 Quantum
6-68801-01 Rev. N StorNext 7 Compatibility Guide

www.quantum.com
February 2023
Page 49 of 50

Quantum.

Quantum technology, software, and services provide the solutions that today's organizations need to make video and other unstructured data smarter — so their data works for them and not the other way around. With over 40 years of innovation, Quantum's end-to-end platform is uniquely equipped to orchestrate, protect, and enrich data across its lifecycle, providing enhanced intelligence and actionable insights. Leading organizations in cloud services, entertainment, government, research, education, transportation, and enterprise IT trust Quantum to bring their data to life, because data makes life better, safer, and smarter. Quantum is listed on Nasdaq (QMCO) and the Russell 2000® Index. For more information visit www.quantum.com.

www.quantum.com I 800-677-6268