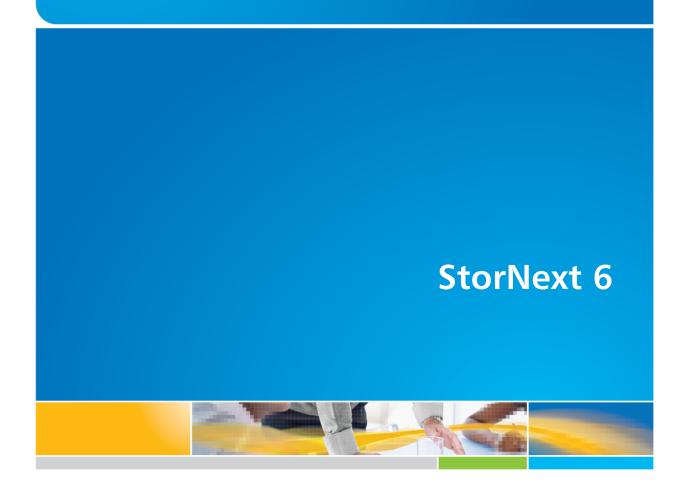
# Quantum.

# **Compatibility Guide**



Quantum 6-68043-02 Rev. A StorNext 6 Compatibility Guide, July 2017

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**

© 2017 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.

#### Contents

1.0	StorNext Requirements	4
2.0	System Requirements for Quantum StorNext Metadata Controllers	5
3.0	StorNext and StorNext FX Client RAM, Disk and CPU Requirements	5
4.0	StorNext and StorNext FX Client File System Buffer Cache	6
5.0	StorNext Software Upgrade Matrix	6
6.0	StorNext Appliance Upgrade Matrix	8
7.0	Supported Operating Systems and Platforms	.11
8.0	StorNext Client Interoperability	.49
9.0	StorNext Virtual Machine Support	.50
10.0	General Compatibility with other Products	.51
11.0	Quantum Appliance Compatibility	.52
12.0	StorNext Browser Support	.53
13.0	Supported Quantum Library and Drive List	.54
14.0	Supported Non-Quantum Library and Drive List	.57
15.0	Advanced Path Failover Compatibility	.62
16.0	Xsan Compatibility	.64
17.0	StorNext Security	.65
18.0	Network File System Support	.66
19.0	Data Replication Compatibility	.67
20.0	FlexTier License Compatibility	.68
21.0	FlexSync™ Compatibility	.68
22.0	QXS Interoperability and Certification	.68

#### 1.0 StorNext Requirements

The following requirements must be met before installing StorNext.

- 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 make
- kernel-source (for systems running SUSE Linux)
- kernel-devel (for systems running Red Hat Linux)

**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 <sup>1</sup>	Distributed LAN Client
DLS <sup>23</sup>	Distributed LAN Server / Gateway
FX	StorNext FX Client
HA <sup>4</sup>	High Availability
LTFS	Linear Tape File System
LTS	Long Term Support (Ubuntu)
MDC <sup>5</sup>	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

<sup>&</sup>lt;sup>1</sup> StorNext Distributed LAN clients can be connected to either Distributed LAN Servers or StorNext G300 appliances.

<sup>&</sup>lt;sup>2</sup> Distributed LAN Server on Windows supports up to 128 Distributed LAN Clients.

<sup>&</sup>lt;sup>3</sup> Gateway instrumentation is not available for Windows.

<sup>&</sup>lt;sup>4</sup> HA and GUI are supported on StorNext M Series Appliances and supported MDCs.

#### 2.0 System Requirements for Quantum StorNext Metadata Controllers

- StorNext 6 shared file system requires 3GB of memory.
- StorNext 6 managed file systems require 7GB of memory for each file system.
- StorNext requires a minimum of 16 GB on the MDC node(s).
- 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 5.
- 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
  - 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.
  - For any MDC or any DDM client running movers and using LTFS there is extra memory needed.
  - LTFS will utilize more memory than ANTF. Each time a tape is opened, the full directory structure is pulled into memory. Thus a potential significant amount of memory is required on top of the normal StorNext requirements.
  - 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.
  - 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 = 21GB.

#### 3.0 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.

#### 4.0 StorNext and StorNext FX Client File System Buffer Cache

Multiple mounted file systems typically share a single buffer cache. A StorNext and StorNext FX client buffer cache is created for each different cachebufsize. By default, all file systems have the same cachebufsize of 64K, so they all share the same buffer cache.

These settings do not apply to Apple Xsan Clients, which do not use the StorNext buffer cache.

The amount of memory consumed by default for each cachebufsize depends on the platform type and the amount of memory in the system. The table below shows the default amount of memory consumed by cachebufsize.

A platform with more than 2 GB of memory will use a cachebufsize of 256MB, otherwise 64MB will be used.

To see information about the buffer cache after mounting file systems, use the **cvdb(1)** command with the **-b** option. To change the amount of memory used by the buffer cache at mount time, use the **buffercachecap** parameter.

On Windows, the non-paged pool is used for buffer cache memory until it consumes up to 64 megabytes (32-bit systems) or 64 gigabytes (64-bit systems). Any additional buffer cache memory comes from the paged pool.

#### 5.0 StorNext Software Upgrade Matrix

Sites running the following StorNext versions may upgrade directly to this release assuming the platform, service pack, architecture (x86 and compatible and Intel 64 and compatible), and StorNext component(s) are supported in this release.

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

Customers who remain current can generally upgrade to the latest release in a single update or upgrade. Customers who fall behind on updates or upgrades require more complex procedures and should contact Quantum Professional Services.

#### Important Notes

- StorNext 4.7.1 **cannot** be upgraded to StorNext 5.0.0. This upgrade **is not** supported.
- StorNext 4.7.1 can be upgraded to StorNext 5.0.1 (or later). This upgrade is supported.
- Releases prior to StorNext 4.3.2 must upgrade to StorNext 4.3.2; StorNext 4.3.2 can be upgraded to StorNext 5.4.0.2 (or later).
- Releases of StorNext 4.3.2 through StorNext 4.7.3 must upgrade to StorNext 5.4.0.2 (or later) before upgrading to StorNext 6.0.
- If your system is running StorNext 5.4.0.3 with Storage Manager, read and execute the instructions in <u>Product</u> <u>Alert Number 48</u> when upgrading to later versions of StorNext.
- Any release of StorNext 5.x can upgrade directly to StorNext 6.0.

	StorNext Software Supported Upgrades / Updates																					
MDCs at StorNext Release	StorNext 4.3.2	StorNext 4.3.3	StorNext 4.7	StorNext 4.7.0.1	StorNext 4.7.1	StorNext 4.7.2	StorNext 4.7.3	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 Release 5.1.1	StorNext 5 Release 5.2.0	StorNext 5 Release 5.2.0.1	StorNext 5 Release 5.2.1	StorNext 5 Release 5.2.2	StorNext 5 Release 5.3.0	StorNext 5 Release 5.3.1	StorNext 5 Release 5.3.2	StorNext 5 Release 5.4.0.1	StorNext 5 Release 5.4.0.2	StorNext 5 Release 5.4.0.3	StorNext 5 Release 5.4.0.4
Can upgrade / update to StorNext Release																						
StorNext 5	✓	✓	✓	✓																		
StorNext 5 Release 5.0.1	$\checkmark$	✓	✓	✓	✓			✓														
StorNext 5 Release 5.1.0	✓	✓	~	✓	~			~	~													
StorNext 5 Release 5.1.1	✓	✓	✓	✓	✓			✓	✓	✓												
StorNext 5 Release 5.2.0	~	✓	✓	✓	✓	✓		✓	✓	~	✓											
StorNext 5 Release 5.2.0.1	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓										
StorNext 5 Release 5.2.1	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	$\checkmark$	✓									
StorNext 5 Release 5.2.2	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓								
StorNext 5 Release 5.3.0	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓							
StorNext 5 Release 5.3.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
StorNext 5 Release 5.3.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
StorNext 5 Release 5.4.0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
StorNext 5 Release 5.4.0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓				
Upgrades to 5.4.0.3 are not supported			1	1	1			1	1		1		1									
StorNext 5 Release 5.4.0.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
StorNext 6.0								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

#### 6.0 StorNext Appliance Upgrade Matrix

#### Important Notes

- Appliances running StorNext 4.7.0 must update to release 4.7.0.1 before updating to later StorNext versions.
- The M330 Metadata Appliance upgrade to StorNext 5 release 5.2.0 or StorNext 5 release 5.2.1 is only permitted from StorNext 5 release 5.1.0.
- The M330 Metadata Appliance upgrade to StorNext 5 Release 5.3.1 is only permitted from StorNext 5 Release 5.1, 5.2 or 5.2.1.
- The M330 Metadata Appliance cannot be upgraded to StorNext 5 Release 5.3.2. This upgrade is not supported.
- Appliances must be running StorNext 5 Release 5.3.1.x in order to update to StorNext 5 Release 5.3.2.1.
- Appliances must be running StorNext 5.4.0.x in order to upgrade to StorNext 5.4.0.4.
- Appliance upgrades to StorNext 5.4.0.1 are not supported; however, if your system is already running StorNext 5.4.0.1, then you can upgrade to StorNext 5.4.0.4.
- If your system is running StorNext 5.4.0.3 with Storage Manager, then you must read and execute the instructions in <u>Product Alert Number 48</u> when upgrading to later versions of StorNext.
- Appliances running StorNext versions 4.3.2 through StorNext 4.7.3 must upgrade to StorNext 5.4.0.2 before upgrading to StorNext 6.0.

Quantum Appliance Supported Upgrades / Updates												
	MDCs at StorNext Release	StorNext 4.3.2	StorNext 4.3.3	StorNext 4.7	StorNext 4.7.0.1	StorNext 4.7.1	StorNext 4.7.2	StorNext 4.7.3				
Can upgrade / update to StorNext Release	t											
StorNext 5												
StorNext 5 Release 5.0.1												
StorNext 5 Release 5.1.0		~	~		~	~						
StorNext 5 Release 5.1.1		✓	~		✓	✓						
StorNext 5 Release 5.2.0		✓	$\checkmark$		>	~						
StorNext 5 Release 5.2.0.1		✓	✓		✓	✓						
StorNext 5 Release 5.2.0.2		✓	✓		✓	✓						
StorNext 5 Release 5.2.1					✓	✓						
StorNext 5 Release 5.2.2					✓	✓						
StorNext 5 Release 5.3.0					✓	✓						
StorNext 5 Release 5.3.1					✓	~						
StorNext 5 Release 5.3.1.1 <sup>6</sup>												
StorNext 5 Release 5.3.2.1												

Quantum Appliance Supported Upgrades / Updates												
	MDCs at StorNext Release	StorNext 4.3.2	StorNext 4.3.3	StorNext 4.7	StorNext 4.7.0.1	StorNext 4.7.1	StorNext 4.7.2	StorNext 4.7.3				
StorNext 5 Release 5.4.0.1												
StorNext 5 Release 5.4.0.2		~	~	✓	✓	✓	~	✓				
Upgrades to StorNext 5.4.0.3 are no supported	ot											
StorNext 5 Release 5.4.0.4												
StorNext 6.0												

Quantum Appliance Supported Upgrades / Updates (continued)																		
MDCs at StorNext Release	StorNext 5		Leiease	StorNext 5 Release 5.1.0	StorNext 5 Release 5.1.1	StorNext 5 Release 5.2.0	StorNext 5 Release 5.2.0.1	StorNext 5 Release 5.2.0.2	StorNext 5 Release 5.2.1	StorNext 5 Release 5.2.2	StorNext 5 Release 5.3.0	StorNext 5 Release 5.3.1	StorNext 5 Release 5.3.1.1	StorNext 5 Release 5.3.2.1	StorNext 5 Release 5.4.0.1	StorNext 5 Release 5.4.0.2	StorNext 5 Release 5.4.0.3	StorNext 5 Release 5.4.0.4
Can upgrade / update to StorNext Release																		
StorNext 5																		
StorNext 5 Release 5.0.1	~	·																
StorNext 5 Release 5.1.0	~	´ <b>v</b>	/															
StorNext 5 Release 5.1.1	~	´ <b>v</b>	1	✓														
StorNext 5 Release 5.2.0	~	´ <b>v</b>	1	✓	✓													
StorNext 5 Release 5.2.0.1	~	´ <b>v</b>	1	✓	✓	✓												
StorNext 5 Release 5.2.0.2	~	Í V	1	✓	~	✓	✓											
StorNext 5 Release 5.2.1	~	í v	/	✓	$\checkmark$	✓	✓	✓										
StorNext 5 Release 5.2.2	~	í v	/	✓	~	✓	✓	✓	✓									
StorNext 5 Release 5.3.0	~	í v	/	✓	✓	✓	✓	~	✓	✓								
StorNext 5 Release 5.3.1	~	Í V	/	✓	✓	~	✓	✓	✓	✓	✓							

Quantum Appliance S	Supp	orte	d U	pgra	ade	s/l	Jpda	ates	5 (CC	onti	nue	d)					
MDCs at StorNext Release	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 Release 5.1.1	StorNext 5 Release 5.2.0	StorNext 5 Release 5.2.0.1	StorNext 5 Release 5.2.0.2	StorNext 5 Release 5.2.1	StorNext 5 Release 5.2.2	StorNext 5 Release 5.3.0	StorNext 5 Release 5.3.1	StorNext 5 Release 5.3.1.1	StorNext 5 Release 5.3.2.1	StorNext 5 Release 5.4.0.1	StorNext 5 Release 5.4.0.2	StorNext 5 Release 5.4.0.3	StorNext 5 Release 5.4.0.4
StorNext 5 Release 5.3.1.1 <sup>6</sup>										✓	✓						
StorNext 5 Release 5.3.2.1											$\checkmark$	~					
StorNext 5 Release 5.4.0.1																	
StorNext 5 Release 5.4.0.2	✓	~	~	~	✓	~	✓	✓	~	~	~	✓	✓	~			
Upgrades to StorNext 5.4.0.3 are not supported																	
StorNext 5 Release 5.4.0.4														✓	✓	✓	
StorNext 6.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	~	✓	✓	✓	✓	✓	✓

<sup>&</sup>lt;sup>6</sup> 5.3.1.1 is only available for Xcellis Workflow Directors

#### 7.0 Supported Operating Systems and Platforms

**Note:** HA and GUI are only supported on StorNext M Series Appliances and supported MDCs. Only 64-bit platforms are supported.

**Note**: 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 Security-Linux (SELinux). There are no plans to add support for Red Hat Security-Linux (SELinux) at this time.

Windows Vista	SP1 and S	P2					
See Footnotes:							
Kernel:	n/a						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5					$\checkmark$	✓	
5.0.1					✓	✓	✓
5.1.0					✓	✓	✓
5.1.1					√	~	✓
5.2.0.x					✓	~	✓
5.2.1					✓	~	✓
5.2.2					✓	~	✓
5.3.0					✓	✓	$\checkmark$
5.3.1.x							
5.3.2.x							
5.4.0.1							

-

Windows Server 2008	SP1 and S	P2					
See Footnotes:	7						
Kernel:	n/a						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5				✓	$\checkmark$	✓	
5.0.1				✓	✓	✓	✓
5.1.0	✓			✓	$\checkmark$	✓	✓
5.1.1				✓	$\checkmark$	✓	✓
5.2.0.x	✓			✓	$\checkmark$	✓	✓
5.2.1	✓			✓	$\checkmark$	✓	✓
5.2.2	✓			✓	$\checkmark$	✓	✓
5.3.0	✓			✓	$\checkmark$	✓	✓
5.3.1.x	✓			~	✓	✓	✓
5.3.2.x							
5.4.0.1							

<sup>&</sup>lt;sup>7</sup>Windows service pack levels listed indicate the supported versions. "Dot" releases, like 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.

Windows Server 2008	R2 and R2	SP1					
See Footnotes:	7						
Kernel:	n/a						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5				✓	✓	✓	
5.0.1				~	$\checkmark$	✓	$\checkmark$
5.1.0	✓			✓	✓	✓	✓
5.1.1				✓	✓	✓	✓
5.2.0.x	✓			✓	✓	✓	✓
5.2.1	✓			✓	$\checkmark$	✓	✓
5.2.2	✓			✓	$\checkmark$	✓	✓
5.3.0	✓			✓	$\checkmark$	✓	✓
5.3.1.x	✓			✓	$\checkmark$	✓	✓
5.3.2.x	✓			✓	$\checkmark$	✓	✓
5.4.0.1	✓			✓	$\checkmark$	✓	✓
5.4.0.2	$\checkmark$			✓	$\checkmark$	✓	✓
5.4.0.3	$\checkmark$			$\checkmark$	$\checkmark$	✓	✓
5.4.0.4	✓			✓	~	✓	✓
StorNext 6.0	$\checkmark$			~	$\checkmark$	$\checkmark$	$\checkmark$

Windows 7	Base and	SP1					
See Footnotes:	7						
Kernel:	n/a						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5					$\checkmark$	$\checkmark$	
5.0.1					✓	✓	✓
5.1.0					✓	✓	✓
5.1.1					✓	✓	✓
5.2.0.x					✓	✓	✓
5.2.1					✓	✓	✓
5.2.2					✓	✓	✓
5.3.0					✓	✓	✓
5.3.1.x					✓	✓	✓
5.3.2.x					✓	✓	✓
5.4.0.1					✓	✓	✓
5.4.0.2					$\checkmark$	~	✓
5.4.0.3					$\checkmark$	~	✓
5.4.0.4					✓	~	✓

Windows 8	Base						
See Footnotes:	7						
Kernel:	n/a						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5					✓	$\checkmark$	
5.0.1					✓	$\checkmark$	✓
5.1.0					✓	✓	✓
5.1.1					✓	✓	✓
5.2.0.x					✓	✓	✓
5.2.1					✓	$\checkmark$	✓
5.2.2					✓	$\checkmark$	✓
5.3.0					✓	$\checkmark$	✓
5.3.1.x					✓	$\checkmark$	✓
5.3.2.x					✓	$\checkmark$	✓
5.4.0.1					✓	$\checkmark$	✓
5.4.0.2					✓	$\checkmark$	✓
5.4.0.3					✓	$\checkmark$	$\checkmark$
5.4.0.4					✓	$\checkmark$	✓
StorNext 6.0					$\checkmark$	$\checkmark$	$\checkmark$

Windows 8.1	Base						
See Footnotes:	7						
Kernel:	n/a						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1					$\checkmark$	$\checkmark$	✓
5.1.0					$\checkmark$	$\checkmark$	✓
5.1.1					$\checkmark$	✓	✓
5.2.0.x					$\checkmark$	$\checkmark$	✓
5.2.1					$\checkmark$	✓	✓
5.2.2					$\checkmark$	✓	✓
5.3.0					$\checkmark$	$\checkmark$	✓
5.3.1.x					$\checkmark$	$\checkmark$	✓
5.3.2.x					$\checkmark$	$\checkmark$	✓
5.4.0.1					$\checkmark$	$\checkmark$	✓
5.4.0.2					$\checkmark$	$\checkmark$	✓
5.4.0.3					$\checkmark$	$\checkmark$	$\checkmark$
5.4.0.4					$\checkmark$	$\checkmark$	$\checkmark$
StorNext 6.0					$\checkmark$	$\checkmark$	$\checkmark$

Windows 10	Base						
See Footnotes:	7						
Kernel:	n/a						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1							
5.2.2							
5.3.0					✓	$\checkmark$	✓
5.3.1.x					✓	$\checkmark$	✓
5.3.2.x					✓	$\checkmark$	✓
5.4.0.1					✓	$\checkmark$	✓
5.4.0.2					✓	$\checkmark$	✓
5.4.0.3					✓	$\checkmark$	✓
5.4.0.4					✓	$\checkmark$	✓
StorNext 6.0					$\checkmark$	$\checkmark$	$\checkmark$

Windows Server	
2012	

See Footnotes:

Kernel: n/a

Base

	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5				$\checkmark$	$\checkmark$	$\checkmark$	
5.0.1				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
5.1.0	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
5.1.1				✓	$\checkmark$	✓	✓
5.2.0.x	$\checkmark$			✓	$\checkmark$	✓	✓
5.2.1	$\checkmark$			✓	$\checkmark$	✓	✓
5.2.2	$\checkmark$			✓	$\checkmark$	✓	✓
5.3.0	$\checkmark$			✓	$\checkmark$	✓	✓
5.3.1.x	$\checkmark$			✓	$\checkmark$	✓	✓
5.3.2.x	$\checkmark$			✓	$\checkmark$	✓	✓
5.4.0.1	$\checkmark$			✓	$\checkmark$	✓	✓
5.4.0.2	$\checkmark$			✓	$\checkmark$	✓	✓
5.4.0.3	$\checkmark$			✓	$\checkmark$	✓	✓
5.4.0.4	$\checkmark$			✓	$\checkmark$	✓	✓
StorNext 6.0	$\checkmark$			✓	✓	~	✓

Windows Server R2 2012

See Footnotes:

Kernel: n/a

	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1				✓	✓	✓	$\checkmark$
5.1.0	$\checkmark$			✓	✓	✓	$\checkmark$
5.1.1				✓	$\checkmark$	$\checkmark$	$\checkmark$
5.2.0.x	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
5.2.1	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
5.2.2	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
5.3.0	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
5.3.1.x	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
5.3.2.x	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
5.4.0.1	$\checkmark$			✓	✓	✓	$\checkmark$
5.4.0.2	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
5.4.0.3	$\checkmark$			✓	$\checkmark$	✓	$\checkmark$
5.4.0.4	$\checkmark$			✓	$\checkmark$	$\checkmark$	$\checkmark$
StorNext 6.0	$\checkmark$			✓	$\checkmark$	✓	$\checkmark$

Windows Server 2016

See Footnotes:

Kernel: n/a

	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 6.0					✓	$\checkmark$	

Red Hat 5	Update 4						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.18-164	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			$\checkmark$	✓	$\checkmark$	✓	
5.0.1			✓	✓	✓	✓	✓
5.1.0	✓	✓	$\checkmark$	✓	✓	✓	✓
5.1.1			✓	✓	✓	✓	✓
5.2.0.x	✓	✓	$\checkmark$	✓	✓	✓	✓
5.2.1	✓	✓	✓	✓	✓	✓	✓
5.2.2	✓	✓	✓	~	✓	✓	✓
5.3.0							
5.3.1.x							
5.3.2.x							
5.4.0.1							

Red Hat 5	Update 5						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.18-194	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			✓	✓	✓	✓	
5.0.1			✓	✓	✓	✓	$\checkmark$
5.1.0	✓	✓	✓	✓	✓	✓	$\checkmark$
5.1.1			✓	✓	✓	✓	$\checkmark$
5.2.0.x	✓	✓	✓	✓	✓	✓	$\checkmark$
5.2.1	✓	✓	✓	✓	✓	✓	$\checkmark$
5.2.2	✓	✓	✓	✓	✓	✓	$\checkmark$
5.3.0							
5.3.1.x							
5.3.2.x							
5.4.0.1							

<sup>10</sup> RHEL developer packs are not part of the standard distribution and are not supported.

 <sup>&</sup>lt;sup>8</sup> The "Xen" virtualization software is not supported.
 <sup>9</sup> HBA multipath customers: please verify with your HBA vendor that your current multipath driver is supported for any planned Linux OS version/update/service pack level. If your driver is not supported for your planned Linux OS version/update/service pack, the StorNext client or server may not be functional after your Linux upgrade.

Red Hat 5	Update 6						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.18-238	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			$\checkmark$	✓	$\checkmark$	✓	
5.0.1			✓	✓	✓	✓	✓
5.1.0	✓	✓	$\checkmark$	✓	✓	✓	✓
5.1.1			$\checkmark$	✓	✓	✓	✓
5.2.0.x	✓	✓	$\checkmark$	✓	✓	✓	✓
5.2.1	✓	✓	$\checkmark$	✓	✓	✓	✓
5.2.2	✓	✓	$\checkmark$	✓	✓	✓	✓
5.3.0							
5.3.1.x							
5.3.2.x							
5.4.0.1							

Red Hat 5	Update 7										
See Footnotes:	7, 8, 9, 10										
Kernel:	2.6.18-274.EL										
	MDC	SNSM	DDM	DLS	SAN	DLC	FX				
StorNext 5			$\checkmark$	✓	$\checkmark$	$\checkmark$					
5.0.1			$\checkmark$	✓	✓	✓	$\checkmark$				
5.1.0	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$				
5.1.1			$\checkmark$	✓	✓	✓	$\checkmark$				
5.2.0.x	✓	✓	$\checkmark$	✓	✓	✓	✓				
5.2.1	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$				
5.2.2	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$				
5.3.0											
5.3.1.x											
5.3.2.x											
5.4.0.1											

Red Hat 5	Update 8						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.18-308	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			$\checkmark$	$\checkmark$	✓	✓	
5.0.1			✓	✓	✓	✓	✓
5.1.0	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$
5.1.1			✓	✓	✓	✓	✓
5.2.0.x	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$
5.2.1	✓	✓	✓	✓	✓	✓	✓
5.2.2	✓	✓	$\checkmark$	✓	✓	✓	✓
5.3.0							
5.3.1.x							
5.3.2.x							
5.4.0.1							

Red Hat 5	Update 9										
See Footnotes:	7, 8, 9, 10										
Kernel:	2.6.18-348	2.6.18-348.EL									
	MDC	SNSM	DDM	DLS	SAN	DLC	FX				
StorNext 5			$\checkmark$	✓	$\checkmark$	$\checkmark$					
5.0.1			$\checkmark$	✓	✓	✓	$\checkmark$				
5.1.0	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$				
5.1.1			$\checkmark$	✓	✓	✓	$\checkmark$				
5.2.0.x	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$				
5.2.1	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$				
5.2.2	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$				
5.3.0											
5.3.1.x											
5.3.2.x											
5.4.0.1											

Red Hat 5	Update 10						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.18-371	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1			✓	✓	✓	✓	✓
5.1.0	✓	✓	✓	✓	✓	✓	✓
5.1.1			✓	✓	✓	✓	✓
5.2.0.x	✓	✓	✓	✓	✓	✓	$\checkmark$
5.2.1	✓	✓	✓	✓	✓	✓	$\checkmark$
5.2.2	✓	✓	✓	✓	✓	✓	$\checkmark$
5.3.0							
5.3.1.x							
5.3.2.x							
5.4.0.1							

Red Hat 6BaseSee Footnotes:7, 8, 9, 10

Kernel: 2.6.32-71.EL

	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			$\checkmark$	✓	$\checkmark$	$\checkmark$	
5.0.1			✓	✓	~	✓	✓
5.1.0	$\checkmark$	✓	~	✓	~	✓	✓
5.1.1			~	✓	~	✓	✓
5.2.0.x	$\checkmark$	✓	~	✓	$\checkmark$	✓	✓
5.2.1	$\checkmark$	✓	~	✓	$\checkmark$	✓	✓
5.2.2	$\checkmark$	✓	✓	✓	$\checkmark$	✓	$\checkmark$
5.3.0	$\checkmark$	✓	~	✓	✓	✓	✓
5.3.1.x							
5.3.2.x							
5.4.0.1							

Red Hat 6	Update 1						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.32-131	.0.15.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			$\checkmark$	✓	$\checkmark$	$\checkmark$	
5.0.1			✓	✓	$\checkmark$	✓	✓
5.1.0	✓	✓	✓	✓	$\checkmark$	✓	✓
5.1.1			✓	✓	$\checkmark$	✓	✓
5.2.0.x	✓	✓	✓	✓	$\checkmark$	✓	✓
5.2.1	✓	✓	✓	✓	$\checkmark$	✓	✓
5.2.2	✓	✓	✓	✓	✓	✓	✓
5.3.0	✓	✓	✓	✓	$\checkmark$	✓	✓
5.3.1.x	✓	✓	✓	✓	$\checkmark$	✓	✓
5.3.2.x	✓	✓	✓	✓	$\checkmark$	✓	✓
5.4.0.1	✓	✓	✓	✓	$\checkmark$	✓	✓
5.4.0.2	~	✓	✓	✓	~	~	✓
5.4.0.3	~	✓	✓	✓	~	~	✓
5.4.0.4	~	✓	$\checkmark$	✓	$\checkmark$	✓	✓

Red Hat 6	Update 2						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.32-220	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			✓	✓	$\checkmark$	✓	
5.0.1			✓	✓	✓	✓	✓
5.1.0	✓	✓	✓	✓	~	✓	✓
5.1.1			✓	✓	✓	✓	✓
5.2.0.x	✓	✓	✓	✓	✓	✓	✓
5.2.1	✓	✓	✓	✓	✓	✓	✓
5.2.2	✓	✓	✓	✓	✓	✓	✓
5.3.0	✓	✓	✓	✓	~	✓	✓
5.3.1.x	✓	✓	✓	✓	✓	✓	✓
5.3.2.x	✓	✓	✓	✓	✓	✓	✓
5.4.0.1	✓	✓	✓	✓	✓	✓	✓
5.4.0.2	✓	✓	✓	✓	~	~	✓
5.4.0.3	✓	✓	✓	✓	~	~	✓
5.4.0.4	✓	~	~	✓	$\checkmark$	~	✓

Red Hat 6	Update 3						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.32-279	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			✓	✓	$\checkmark$	$\checkmark$	
5.0.1			✓	✓	✓	✓	✓
5.1.0	✓	✓	✓	✓	~	✓	✓
5.1.1			✓	✓	✓	✓	✓
5.2.0.x	✓	✓	✓	✓	✓	✓	✓
5.2.1	✓	✓	✓	✓	✓	✓	✓
5.2.2	✓	✓	✓	✓	✓	✓	✓
5.3.0	✓	✓	✓	✓	~	✓	✓
5.3.1.x	✓	✓	✓	✓	✓	✓	✓
5.3.2.x	✓	✓	✓	✓	✓	✓	✓
5.4.0.1	✓	✓	✓	✓	✓	✓	✓
5.4.0.2	✓	✓	✓	✓	~	~	✓
5.4.0.3	✓	✓	✓	✓	~	~	✓
5.4.0.4	✓	~	~	✓	$\checkmark$	~	✓

Red Hat 6	Update 4						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.32-358	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			$\checkmark$	✓	✓	✓	
5.0.1			$\checkmark$	✓	$\checkmark$	✓	$\checkmark$
5.1.0	✓	✓	$\checkmark$	✓	$\checkmark$	✓	✓
5.1.1			$\checkmark$	✓	$\checkmark$	✓	✓
5.2.0.x	✓	✓	$\checkmark$	✓	$\checkmark$	✓	✓
5.2.1	✓	✓	$\checkmark$	✓	$\checkmark$	✓	✓
5.2.2	✓	✓	$\checkmark$	✓	$\checkmark$	✓	✓
5.3.0	✓	✓	$\checkmark$	✓	$\checkmark$	✓	✓
5.3.1.x	✓	✓	✓	✓	✓	✓	✓
5.3.2.x	✓	✓	✓	✓	✓	✓	✓
5.4.0.1	✓	✓	$\checkmark$	✓	~	~	✓
5.4.0.2	✓	✓	$\checkmark$	✓	~	~	✓
5.4.0.3	✓	✓	$\checkmark$	✓	~	~	✓
5.4.0.4	✓	✓	✓	✓	$\checkmark$	✓	✓

Red Hat 6	Update 5						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.32-431	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1			✓	✓	$\checkmark$	✓	✓
5.1.0	✓	✓	✓	✓	✓	~	✓
5.1.1			✓	✓	$\checkmark$	✓	✓
5.2.0.x	✓	✓	✓	✓	$\checkmark$	✓	✓
5.2.1	✓	✓	✓	✓	$\checkmark$	✓	✓
5.2.2	✓	✓	✓	✓	$\checkmark$	✓	✓
5.3.0	✓	✓	✓	✓	$\checkmark$	✓	✓
5.3.1.x	✓	✓	✓	✓	✓	✓	✓
5.3.2.x	✓	✓	✓	✓	$\checkmark$	✓	✓
5.4.0.1	✓	✓	✓	✓	$\checkmark$	✓	✓
5.4.0.2	✓	✓	✓	✓	✓	✓	✓
5.4.0.3	✓	✓	✓	✓	✓	~	✓
5.4.0.4	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$

Red Hat 6	Update 6						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.32-504	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1	✓	✓	$\checkmark$	✓	✓	✓	✓
5.2.2	✓	✓	$\checkmark$	✓	✓	✓	✓
5.3.0	✓	✓	$\checkmark$	✓	✓	✓	✓
5.3.1.x	✓	✓	$\checkmark$	✓	✓	✓	✓
5.3.2.x	✓	✓	$\checkmark$	✓	✓	✓	✓
5.4.0.1	✓	✓	$\checkmark$	✓	✓	✓	✓
5.4.0.2	✓	✓	$\checkmark$	✓	✓	✓	✓
5.4.0.3	~	✓	$\checkmark$	✓	✓	✓	✓
5.4.0.4	~	✓	$\checkmark$	✓	✓	✓	✓

Red Hat 6	Update 7						
See Footnotes:	7, 8, 9, 10						
Kernel:	2.6.32-573	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1							
5.2.2							
5.3.0							
5.3.1.x	✓	~	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$
5.3.2.x	✓	~	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$
5.4.0.1	✓	~	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$
5.4.0.2	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓
5.4.0.3	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓
5.4.0.4	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓
StorNext 6.0	$\checkmark$	$\checkmark$	~	✓	$\checkmark$	$\checkmark$	$\checkmark$
Red Hat 6	Update 8						
See Footnotes:							
Kernel:	2.6.32-642	EL					

	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 6.0	✓	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓

Red Hat 7	Base						
See Footnotes:	7, 8, 9, 10						
Kernel:	3.10.0-123	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1					✓	✓	
5.2.2					✓	✓	✓
5.3.0	✓	✓	$\checkmark$		✓	✓	✓
5.3.1.x	✓	✓	$\checkmark$		✓	✓	✓
5.3.2.x	✓	✓	$\checkmark$		✓	✓	✓
5.4.0.1	✓	✓	$\checkmark$		✓	✓	✓
5.4.0.2	✓	✓	$\checkmark$		✓	✓	✓
5.4.0.3	✓	✓	$\checkmark$		✓	✓	✓
5.4.0.4	✓	✓	$\checkmark$		✓	✓	✓
StorNext 6.0	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

Red Hat 7	Update 1						
See Footnotes:	7, 8, 9, 10						
Kernel:	3.10.0-229	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1					$\checkmark$	$\checkmark$	
5.2.2					$\checkmark$	$\checkmark$	$\checkmark$
5.3.0	✓	✓	✓		$\checkmark$	$\checkmark$	$\checkmark$
5.3.1.x	✓	✓	✓		$\checkmark$	$\checkmark$	$\checkmark$
5.3.2.x	✓	✓	✓		$\checkmark$	$\checkmark$	$\checkmark$
5.4.0.1	✓	✓	✓		$\checkmark$	$\checkmark$	$\checkmark$
5.4.0.2	✓	✓	~		✓	✓	$\checkmark$
5.4.0.3	✓	✓	~		✓	✓	$\checkmark$
5.4.0.4	✓	✓	~		✓	✓	$\checkmark$
StorNext 6.0	$\checkmark$						

Red Hat 7	Update 2						
See Footnotes:	7, 8, 9, 10						
Kernel:	3.10.0-327.	.EL					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1							
5.2.2							
5.3.0							
5.3.1.x					$\checkmark$	✓	✓
5.3.2.x					$\checkmark$	✓	✓
5.4.0.1	✓	✓	✓		$\checkmark$	✓	✓
5.4.0.2	✓	✓	✓		$\checkmark$	✓	✓
5.4.0.3	✓	✓	✓		$\checkmark$	✓	✓
5.4.0.4	✓	✓	✓		✓	✓	✓
StorNext 6.0	✓	✓	~	~	$\checkmark$	✓	✓
Red Hat 7	Update 3						
See Footnotes:	7, 8, 9, 10						

Kernel: 3.10.0-514.EL

	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 6.0	$\checkmark$						

SUSE SLES 11	Base						
See Footnotes:	7, 8, 9, 11						
Kernel:	2.6.27.19-5	5					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5					✓	✓	
5.0.1					✓	✓	$\checkmark$
5.1.0	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$
5.1.1			$\checkmark$	✓	✓	✓	$\checkmark$
5.2.0.x	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$
5.2.1	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$
5.2.2	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$
5.3.0	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$
5.3.1.x							
5.3.2.x							
5.4.0.1							

SUSE SLES 11

See Footnotes: 7, 8, 9, 11

Kernel: 2.6.32.12-0

SP1

	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			$\checkmark$	✓	$\checkmark$	✓	
5.0.1			✓	✓	~	✓	✓
5.1.0	$\checkmark$	✓	✓	✓	✓	✓	✓
5.1.1			✓	✓	✓	✓	✓
5.2.0.x	$\checkmark$	✓	✓	✓	✓	✓	✓
5.2.1	$\checkmark$	✓	✓	✓	$\checkmark$	✓	✓
5.2.2	$\checkmark$	✓	✓	✓	$\checkmark$	✓	✓
5.3.0	$\checkmark$	✓	✓	✓	✓	✓	✓
5.3.1.x							
5.3.2.x							
5.4.0.1							

<sup>&</sup>lt;sup>11</sup> A change to any digit within a release number does not indicate that a new service pack has been released by Novell.

SUSE SLES 11	SP2						
See Footnotes:	7, 8, 9, 11						
Kernel:	3.0.13-0.27	,					
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5			✓	✓	$\checkmark$	✓	
5.0.1			✓	✓	✓	✓	$\checkmark$
5.1.0	✓	✓	✓	✓	✓	✓	✓
5.1.1			✓	✓	✓	✓	✓
5.2.0.x	✓	✓	✓	✓	✓	✓	✓
5.2.1	✓	✓	✓	✓	✓	✓	✓
5.2.2	✓	✓	✓	✓	✓	✓	✓
5.3.0	✓	✓	✓	✓	✓	✓	✓
5.3.1.x	✓	✓	✓	✓	✓	✓	✓
5.3.2.x	✓	✓	✓	✓	✓	✓	✓
5.4.0.1	✓	✓	✓	✓	✓	✓	✓
5.4.0.2	✓	$\checkmark$	✓	✓	$\checkmark$	~	✓
5.4.0.3	✓	$\checkmark$	✓	✓	$\checkmark$	~	✓
5.4.0.4	✓	$\checkmark$	✓	✓	$\checkmark$	~	✓
StorNext 6.0	$\checkmark$	$\checkmark$	~	$\checkmark$	$\checkmark$	$\checkmark$	✓

SUSE SLES 11	SP3						
See Footnotes:	7, 8, 9, 11						
Kernel:	3.0.76-0.11						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1			✓	✓	$\checkmark$	✓	✓
5.1.0	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓
5.1.1			$\checkmark$	✓	$\checkmark$	$\checkmark$	✓
5.2.0.x	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	✓
5.2.1	✓	$\checkmark$	✓	✓	✓	✓	✓
5.2.2	✓	$\checkmark$	✓	✓	✓	✓	✓
5.3.0	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓
5.3.1.x	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓
5.3.2.x	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓
5.4.0.1	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓
5.4.0.2	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓
5.4.0.3	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	✓
5.4.0.4	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	✓
StorNext 6.0	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$

SUSE SLES 11	SP4						
See Footnotes:	7, 8, 9, 11						
Kernel:	3.0.101-63						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1							
5.2.2							
5.3.0							
5.3.1.x	✓	✓	✓	✓	✓	✓	✓
5.3.2.x	✓	✓	✓	✓	✓	✓	✓
5.4.0.1	✓	$\checkmark$	✓	✓	✓	$\checkmark$	✓
5.4.0.2	✓	$\checkmark$	✓	✓	✓	$\checkmark$	✓
5.4.0.3	✓	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$
5.4.0.4	✓	$\checkmark$	$\checkmark$	✓	✓	$\checkmark$	✓
StorNext 6.0	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$

SUSE SLES 12	Base						
See Footnotes:	7, 8, 9, 11						
Kernel:	3.12.28-4						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1					✓	✓	
5.2.2					✓	✓	
5.3.0					✓	✓	
5.3.1.x					✓	✓	
5.3.2.x					✓	✓	
5.4.0.1	✓	$\checkmark$	✓		✓	✓	
5.4.0.2	✓	$\checkmark$	✓		✓	✓	
5.4.0.3	✓	$\checkmark$	$\checkmark$		✓	✓	
5.4.0.4	✓	$\checkmark$	$\checkmark$		✓	✓	
StorNext 6.0	✓	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	

SUSE SLES 12	SP1						
See Footnotes:	7, 8, 9, 11						
Kernel:	3.12.49.11						
	MDC	SNSM	DDM	DLS	SAN	DLC	FX
StorNext 5							
5.0.1							
5.1.0							
5.1.1							
5.2.0.x							
5.2.1							
5.2.2							
5.3.0							
5.3.1.x							
5.3.2.x							
5.4.0.1	$\checkmark$	$\checkmark$	✓		$\checkmark$	✓	
5.4.0.2	✓	$\checkmark$	✓		$\checkmark$	$\checkmark$	
5.4.0.3	✓	$\checkmark$	✓		✓	✓	
5.4.0.4	✓	$\checkmark$	✓		✓	✓	
StorNext 6.0	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	

Supported as Clients Only

Debian	6.0.5		
See Footnotes:	7		
Kernel:	n/a		
	SAN	DLC	FX
StorNext 5	$\checkmark$	✓	
5.0.1	$\checkmark$	~	
5.1.0	$\checkmark$	$\checkmark$	
5.1.1	✓	✓	
5.2.0.x	✓	✓	
5.2.1	✓	✓	
5.2.2	✓	✓	
5.3.0	✓	✓	
5.3.1.x	✓	✓	
5.3.2.x	✓	✓	
5.4.0.1	✓	✓	
5.4.0.2	$\checkmark$	✓	
5.4.0.3	✓	✓	
5.4.0.4	$\checkmark$	✓	

Debian	7.0, 7.1 and 7.2 only			
See Footnotes:	7			
Kernel:	n/a			
	SAN	DLC	FX	
StorNext 5				
5.0.1	√	✓		
5.1.0	$\checkmark$	✓		
5.1.1	$\checkmark$	✓		
5.2.0.x	$\checkmark$	✓		
5.2.1	$\checkmark$	✓		
5.2.2	$\checkmark$	✓		
5.3.0	$\checkmark$	✓		
5.3.1.x	$\checkmark$	✓		
5.3.2.x	$\checkmark$	✓		
5.4.0.1	$\checkmark$	✓		
5.4.0.2	$\checkmark$	✓		
5.4.0.3	$\checkmark$	✓		
5.4.0.4	$\checkmark$	✓		
StorNext 6.0	$\checkmark$	✓		

Debian	7.8			Debian	8.x	
See Footnotes:	7			See Footnotes:	7	
Kernel:	n/a			Kernel:	n/a	
	SAN	DLC	FX		SAN	DLC
StorNext 5				StorNext 5		
5.0.1				5.0.1		
5.1.0				5.1.0		
5.1.1				5.1.1		
5.2.0.x				5.2.0.x		
5.2.1				5.2.1		
5.2.2				5.2.2		
5.3.0	$\checkmark$	✓		5.3.0	✓	✓
5.3.1.x	$\checkmark$	✓		5.3.1.x	✓	✓
5.3.2.x	$\checkmark$	✓		5.3.2.x	✓	~
5.4.0.1	$\checkmark$	✓		5.4.0.1	✓	~
5.4.0.2	$\checkmark$	✓		5.4.0.2	✓	~
5.4.0.3	$\checkmark$	$\checkmark$		5.4.0.3	$\checkmark$	~
5.4.0.4	$\checkmark$	✓		5.4.0.4	$\checkmark$	√
StorNext 6.0	$\checkmark$	$\checkmark$		StorNext 6.0	$\checkmark$	$\checkmark$

FX

**IMPORTANT NOTE**: Effective with the next major release of StorNext software after 6.0, UNIX clients will no longer be available. The 5.4.0.1 versions of AIX, HP-UX and SOLARIS clients will be included with 5.4.0.2, 5.4.0.3, 5.4.0.4, and 6.0. **Oracle Solaris 10**, **11**, **11**, **11**, **11**, **2** 

10, 11, 11.1, 11.2 and 11.3				
n/a				
SAN	DLC	FX		
$\checkmark$	✓			
$\checkmark$	$\checkmark$			
5.4.0.1	5.4.0.1			
5.4.0.1	5.4.0.1			
5.4.0.1	5.4.0.1			
5.4.0.1	5.4.0.1			
	and 11.3 n/a SAN ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	and 11.3         n/a         SAN       DLC $\checkmark$ $5.4.0.1$		

**IMPORTANT NOTE**: Effective with the next major release of StorNext software after 6.0, UNIX clients will no longer be available. The 5.4.0.1 versions of AIX, HP-UX and SOLARIS clients will be included with 5.4.0.2, 5.4.0.3, 5.4.0.4, and 6.0.

IBM AIX	7.1		
See Footnotes:			
Kernel:	n/a		
	SAN	DLC	FX
StorNext 5	~		
5.0.1	✓		
5.1.0	✓		
5.1.1	✓		
5.2.0.x	$\checkmark$		
5.2.1	$\checkmark$		
5.2.2	$\checkmark$		
5.3.0	$\checkmark$		
5.3.1.x	$\checkmark$		
5.3.2.x	$\checkmark$		
5.4.0.1	✓		
5.4.0.2	5.4.0.1		
5.4.0.3	5.4.0.1		
5.4.0.4	5.4.0.1		
StorNext 6.0	5.4.0.1		

HPF HP-IIX

**IMPORTANT NOTE:** Effective with the next major release of StorNext software after 6.0, UNIX clients will no longer be available. The 5.4.0.1 versions of AIX, HP-UX and SOLARIS clients will be included with 5.4.0.2, 5.4.0.3, 5.4.0.4, and 6.0

11i version 3

HPE HP-UX	111 version 3				
See Footnotes:	12				
Kernel:	n/a				
	SAN	DLC	FX		
StorNext 5	✓				
5.0.1	√				
5.1.0	✓				
5.1.1	✓				
5.2.0.x	$\checkmark$				
5.2.1	$\checkmark$				
5.2.2	$\checkmark$				
5.3.0	$\checkmark$				
5.3.1.x	$\checkmark$				
5.3.2.x	$\checkmark$				
5.4.0.1	$\checkmark$				
5.4.0.2	5.4.0.1				
5.4.0.3	5.4.0.1				
5.4.0.4	5.4.0.1				
StorNext 6.0	5.4.0.1				

Red Hat 6.6 equivalent CentOS 13 See Footnotes: Kernel: 2.6.32-504.16.2.EL DLC SAN FX StorNext 5  $\checkmark$ ✓  $\checkmark$  $\checkmark$ 5.0.1 5.1.0  $\checkmark$  $\checkmark$  $\checkmark$ ✓ 5.1.1 5.2.0.x  $\checkmark$  $\checkmark$ √ 5.2.1  $\checkmark$ √ √ 5.2.2 5.3.0  $\checkmark$ ✓ 5.3.1.x  $\checkmark$ ✓  $\checkmark$ ✓ 5.3.2.x 5.4.0.1  $\checkmark$ ✓  $\checkmark$ ✓ 5.4.0.2  $\checkmark$  $\checkmark$ 5.4.0.3 5.4.0.4  $\checkmark$ ✓  $\checkmark$ ✓ StorNext 6.0

<sup>13</sup> Platform is supported only if the issue can be reproduced on the equivalent Red Hat release. Only the "standard" versions of this platform are supported. "Special" or "optimized" versions are not supported.

<sup>12</sup> HPE UX 11iv3 requires the "0909 Patch set".

CentOS	Red Hat 6.7 equivalent			
See Footnotes:	13			
Kernel:	2.6.32-57	3.EL6		
	SAN	DLC	FX	
StorNext 5	$\checkmark$	✓		
5.0.1	✓	✓		
5.1.0	✓	✓		
5.1.1	✓	✓		
5.2.0.x	✓	✓		
5.2.1	✓	✓		
5.2.2	✓	✓		
5.3.0	$\checkmark$	$\checkmark$		
5.3.1.x	$\checkmark$	$\checkmark$		
5.3.2.x	✓	✓		
5.4.0.1	$\checkmark$	$\checkmark$		
5.4.0.2	~	✓		
5.4.0.3	~	✓		
5.4.0.4	$\checkmark$	$\checkmark$		
StorNext 6.0	$\checkmark$	$\checkmark$		

CentOS	Red Hat 6.8 equivalent			
See Footnotes:	13			
Kernel:	2.6.32-642.EL6			
	SAN	DLC	FX	
StorNext 6.0	$\checkmark$	$\checkmark$		

CentOS	Red Hat 7.1 equivalent				
See Footnotes:	13				
Kernel:	3.10.0-22	9.EL7			
	SAN	DLC	FX		
StorNext 5					
5.0.1					
5.1.0					
5.1.1					
5.2.0.x					
5.2.1					
5.2.2					
5.3.0	$\checkmark$	$\checkmark$			
5.3.1.x	$\checkmark$	$\checkmark$			
5.3.2.x	$\checkmark$	$\checkmark$			
5.4.0.1	$\checkmark$	$\checkmark$			
5.4.0.2	$\checkmark$	$\checkmark$			
5.4.0.3	$\checkmark$	✓			
5.4.0.4	$\checkmark$	✓			
StorNext 6.0	$\checkmark$	$\checkmark$			

CentOS	Red Hat	7.2 equival	ent		
See Footnotes:	13				
Kernel:	3.10.0-32	7.4.5.EL7			
	SAN	DLC	FX		
StorNext 5					
5.0.1					
5.1.0					
5.1.1					
5.2.0.x					
5.2.1					
5.2.2					
5.3.0	$\checkmark$	$\checkmark$			
5.3.1.x	$\checkmark$	$\checkmark$			
5.3.2.x	$\checkmark$	$\checkmark$			
5.4.0.1	$\checkmark$	$\checkmark$			
5.4.0.2	$\checkmark$	$\checkmark$			
5.4.0.3	$\checkmark$	$\checkmark$			
5.4.0.4	$\checkmark$	$\checkmark$			
StorNext 6.0	$\checkmark$	$\checkmark$			

CentOS	Red Hat 7.3 equivalent				
See Footnotes:	13				
Kernel:	3.10.0-514.6.1.el7				
	SAN DLC FX				
StorNext 6.0	✓	$\checkmark$			

Scientific Linux	Red Hat	6 equivale	nt
See Footnotes:	13		
Kernel:	n/a		
	SAN	DLC	FX
StorNext 5	$\checkmark$	✓	
5.0.1	$\checkmark$	✓	
5.1.0	$\checkmark$	✓	
5.1.1	$\checkmark$	✓	
5.2.0.x	✓	✓	
5.2.1	$\checkmark$	✓	
5.2.2	$\checkmark$	✓	
5.3.0	$\checkmark$	✓	
5.3.1.x	$\checkmark$	$\checkmark$	
5.3.2.x	$\checkmark$	✓	
5.4.0.1	$\checkmark$	$\checkmark$	
5.4.0.2	$\checkmark$	✓	
5.4.0.3	$\checkmark$	✓	
5.4.0.4	$\checkmark$	✓	
StorNext 6.0	$\checkmark$	$\checkmark$	

Scientific Linux	Red Hat 7 based versions				
See Footnotes:	13				
Kernel:	n/a				
	SAN	DLC	FX		
StorNext 5					
5.0.1					
5.1.0					
5.1.1					
5.2.0.x					
5.2.1					
5.2.2					
5.3.0	$\checkmark$	$\checkmark$			
5.3.1.x	$\checkmark$	$\checkmark$			
5.3.2.x	$\checkmark$	$\checkmark$			
5.4.0.1	$\checkmark$	$\checkmark$			
5.4.0.2	$\checkmark$	$\checkmark$			
5.4.0.3	$\checkmark$	$\checkmark$			
5.4.0.4	✓	✓			
StorNext 6.0	$\checkmark$	$\checkmark$			

Oracle OEL	Red Hat 6 equivalent		
See Footnotes:	13		
Kernel:	n/a		
	SAN	DLC	FX
StorNext 5	$\checkmark$	✓	
5.0.1	$\checkmark$	$\checkmark$	
5.1.0	~	$\checkmark$	
5.1.1	✓	$\checkmark$	
5.2.0.x	✓	$\checkmark$	
5.2.1	$\checkmark$	$\checkmark$	
5.2.2	$\checkmark$	$\checkmark$	
5.3.0	$\checkmark$	$\checkmark$	
5.3.1.x	$\checkmark$	$\checkmark$	
5.3.2.x	✓	$\checkmark$	
5.4.0.1	$\checkmark$	$\checkmark$	
5.4.0.2	✓	$\checkmark$	
5.4.0.3	✓	$\checkmark$	
5.4.0.4	~	$\checkmark$	
StorNext 6.0	$\checkmark$	$\checkmark$	

Oracle OEL	Red Hat 7 equivalent			
See Footnotes:	13			
Kernel:	n/a			
	SAN	DLC	FX	
StorNext 5				
5.0.1				
5.1.0				
5.1.1				
5.2.0.x				
5.2.1				
5.2.2				
5.3.0	✓	✓		
5.3.1.x	$\checkmark$	$\checkmark$		
5.3.2.x	$\checkmark$	$\checkmark$		
5.4.0.1	$\checkmark$	$\checkmark$		
5.4.0.2	$\checkmark$	$\checkmark$		
5.4.0.3	$\checkmark$	$\checkmark$		
5.4.0.4	$\checkmark$	$\checkmark$		
StorNext 6.0	$\checkmark$	$\checkmark$		

Ubuntu Linux	14.04.0 and 14.04.1 LTS versions				
See Footnotes:	7				
Kernel:	n/a				
	SAN	DLC	FX		
StorNext 5					
5.0.1					
5.1.0					
5.1.1					
5.2.0.x	$\checkmark$	✓			
5.2.1	$\checkmark$	$\checkmark$			
5.2.2	$\checkmark$	✓			
5.3.0	$\checkmark$	✓			
5.3.1.x	$\checkmark$	✓			
5.3.2.x	$\checkmark$	✓			
5.4.0.1	$\checkmark$	✓			
5.4.0.2	$\checkmark$	✓			
5.4.0.3	$\checkmark$	✓			
5.4.0.4	✓	✓			
StorNext 6.0	$\checkmark$	$\checkmark$			

Ubuntu Linux	14.04.2 LTS			
See Footnotes:	7			
Kernel:	n/a			
	SAN	DLC	FX	
StorNext 5				
5.0.1				
5.1.0				
5.1.1				
5.2.0.x				
5.2.1	$\checkmark$	✓		
5.2.2	$\checkmark$	✓		
5.3.0	$\checkmark$	✓		
5.3.1.x	$\checkmark$	$\checkmark$		
5.3.2.x	$\checkmark$	$\checkmark$		
5.4.0.1	$\checkmark$	$\checkmark$		
5.4.0.2	$\checkmark$	$\checkmark$		
5.4.0.3	$\checkmark$	$\checkmark$		
5.4.0.4	$\checkmark$	$\checkmark$		
StorNext 6.0	$\checkmark$	$\checkmark$		

#### 8.0 StorNext Client Interoperability

In general back-revision clients (e.g., StorNext 4.3.x clients with StorNext 5.0.x MDC) are supported for the interval of time that is required to upgrade a configuration; with the assumption that once the configuration process is complete, all clients would be at the same level.

The following table describes back-revision clients that are supported with this release.

#### **StorNext Client Interoperability**

StorNext SAN Client Version	Platform
StorNext 5 Release 5.x	Quantum recommends that clients be upgraded along with the MDC. <sup>14</sup>
StorNext 6 Release 6.x	Quantum recommends that clients be upgraded along with the MDC. <sup>14</sup>

#### Important Notes

- If a StorNext version is not listed, it is not supported as a back-revision client, even during the upgrade process.
- Clients ahead of a particular MDC (for example, StorNext 4.7.1 clients with StorNext 4.7.0 MDC) are not supported.
- The StorNext MDC must be running an equivalent or more recent version of StorNext than the client is running.
- StorNext G300 or DLS Gateways must be running the equivalent version of the StorNext MDC or earlier and must be running equivalent to all of their clients or newer.
- All components (for example, File System, Storage Manager, and so on) installed on the same machine must be running the same version of StorNext.
- The StorNext DDM component must be at the same version at that running on the MDC.

<sup>&</sup>lt;sup>14</sup> Except as noted to be incompatible in the table in section 6.0

#### 9.0 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 2008 Server 2012 Vista 7 8/8.1 10	All SN supported service packs in the supported operating systems and platforms table	V	✓
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	~	✓
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	~	~

**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. In particular, 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.

Product	Reference
StorNext API (SNAPI)	<ul> <li>SNAPI 2.0.3 is the latest and final release of SNAPI.</li> <li>For compatibility between SNAPI and StorNext, see the <i>StorNext SNAPI 2.0.x Compatibility</i> document available online at <a href="http://www.quantum.com/snsdocs">http://www.quantum.com/snsdocs</a>.</li> <li>StorNext Web Services enables you to run third-party application program interfaces (APIs) with StorNext. To view the latest commands supported by the StorNext Web Services, refer to the <i>StorNext 6 Web Services Guide</i> available online at <a href="http://www.quantum.com/snsdocs">http://www.quantum.com/snsdocs</a>.</li> </ul>
StorNext Partial File Retrieval (PFR)	For compatibility between PFR and StorNext, see the <i>StorNext Partial File Retrieval 1.x Compatibility</i> document available online at <u>http://www.quantum.com/snsdocs</u> .
StorNext Connect	For compatibility between StorNext Connect and StorNext, see the <i>StorNext Connect Compatibility Guide</i> available online at <u>http://qsupport.quantum.com/kb/flare/Content/connect/DocSite/PDFs/PDF Downloads.htm</u> .
StorNext Appliance Controller	For compatibility between StorNext Appliance Controller and StorNext, see the <i>Appliance Controller Compatibility Guide</i> available online at <a href="http://www.quantum.com/acc_cg">http://www.quantum.com/acc_cg</a> .
Lattus	For compatibility between Lattus and StorNext, see the appropriate Lattus Release Notes document available online at <u>http://www.quantum.com/lattusdocs</u> .
DXi	For compatibility between DXi and StorNext, see the appropriate DXi product page online at <u>http://www.quantum.com/documentation</u> .

#### **10.0 General Compatibility with other Products**

#### 11.0 Quantum Appliance Compatibility

- This table uses StorNext M440 as a generic term that applies to the StorNext M441D, M441Q, M445D SSD and M445Q SSD models.
- This table uses StorNext M660 as a generic term that applies to the StorNext M661, M661XL, M662 M662XL and M665 SSD models.
- This table uses G300 as a generic term that applies to the StorNext G301 and G302 models.
- Appliances must be at 5.3.1 in order to update to 5.3.2.
- If your system is running StorNext 5.4.0.3 with Storage Manager, then you must read and execute the instructions in <u>Product Alert Number 48</u> when upgrading to later versions of StorNext.

Quantum Appliance Compatibility with StorNext Releases								
Appliance	M330	M440	M660	Pro Foundation	Artico	Xcellis Workflow Director	Xcellis Workflow Extender	G300
StorNext Release					T			
StorNext 4.3.2	$\checkmark$	✓	✓					$\checkmark$
StorNext 4.3.3	$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$
StorNext 4.7								
StorNext 4.7.0.1	$\checkmark$	✓	✓					✓
StorNext 4.7.1	$\checkmark$	✓	✓					✓
StorNext 4.7.2								
StorNext 4.7.3								
StorNext 5	✓	✓	✓					$\checkmark$
StorNext 5 release 5.0.1	✓	✓	✓					$\checkmark$
StorNext 5 release 5.1.0	✓	✓	✓					$\checkmark$
StorNext 5 release 5.1.1		✓	$\checkmark$					$\checkmark$
StorNext 5 release 5.2.0	✓	✓	✓	✓				$\checkmark$
StorNext 5 release 5.2.0.1		✓	✓	✓				$\checkmark$
StorNext 5 release 5.2.0.2					✓			
StorNext 5 release 5.2.1	✓	✓	✓	✓	$\checkmark$			$\checkmark$
StorNext 5 release 5.2.2	✓	✓	✓	✓	✓			$\checkmark$
StorNext 5 release 5.3.0		✓	✓	✓	✓	✓		$\checkmark$
StorNext 5 release 5.3.1	✓	✓	✓	✓	✓	✓		$\checkmark$
StorNext 5 release 5.3.1.1						✓		

Quantum Appliance C	ompa	atibili	ty wit	h Sto	rNex	t Rele	eases	
Appliance	M330	M440	M660	Pro Foundation	Artico	Xcellis Workflow Director	Xcellis Workflow Extender	G300
StorNext 5 release 5.3.2.1		✓	$\checkmark$	$\checkmark$	✓	✓		$\checkmark$
StorNext 5 release 5.4.0.1		✓	✓	~	✓	✓	✓	✓
StorNext 5 release 5.4.0.2		$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$
StorNext 5 release 5.4.0.3 is not supported								
StorNext 5 release 5.4.0.4		✓	✓	~	✓	✓	✓	$\checkmark$
StorNext 6.0		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$

#### 12.0 StorNext Browser Support

**Important note regarding the Software Online Help**: The tool that we used to generate the StorNext Software Online Help in the past, RoboHelp, is not supported with newer versions of supported web browsers. This issue only affects StorNext versions 5.2.0 and earlier. For combinations that are not supported, the StorNext Software Online Help does not display correctly in StorNext GUI.

The following browser versions are supported with StorNext versions 5.2.0 and earlier:

- Firefox version 36 and later
- Google Chrome version 40 and later
- Microsoft Internet Explorer version 10 and later, only if Secure Socket Layer 3.0 is disabled

Quantum recommends using the latest released version of the following browsers for the StorNext GUI:

- Firefox version 51 and later
- Microsoft Internet Explorer version 11 and later
- Chrome version 56 and later
- Safari version 10.12 and later
- Microsoft Edge version 38.14393.0.0 and later

#### 13.0 Supported Quantum Library and Drive List

		Qu	antı	um S	Supp	oorte	ed L	ibra	ries	and	Таре	Drive	6		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		IBM LTO-2	✓	✓	✓	✓	✓	✓	✓	✓					
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>√</b>	✓	LTFS is only
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>√</b>	available for LTO-
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>v</b>	<ul> <li>✓</li> </ul>	5/6/7 drives which
	Scalar i500	IBM LTO-6	~	~	~	~	✓	✓	~	~	~	✓ 16	✓ 16	✓ 16	support partitioning.
		IBM LTO-7								✓ 17	✓ 17	✓ 16 17	✓ 16 17	✓ 16 17	Support for LTFS with LTO-7 drives
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	requires StorNext 5.4.0 or later
		HPE LTO-5	✓	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	0.4.0 01 10101
		HPE LTO-6	✓	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	~	~	
		IBM LTO-1	✓	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓	✓					
_		IBM LTO-2	✓	✓	✓	✓	✓	✓	✓	✓					
Quantum		IBM LTO-3	✓	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓	
lan		IBM LTO-4	~	~	~	~	✓	~	~	✓	~	✓	~	✓	
ğ		IBM LTO-5	~	~	~	~	~	~	~	✓	~	✓	~	~	
		IBM LTO-6	~	~	~	~	~	~	~	~	~	<b>√</b> <sup>18</sup>	✓ 18	✓ 18	LTFS is only available for LTO-
	Scalar	IBM LTO-7								✓ 19	✓ 19	✓ <sup>18</sup> 19	✓ 18 19	✓ 18 19	5/6/7 drives which support
	i6000 /	HPE LTO-3	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	✓	$\checkmark$	✓	partitioning.
	i2000	HPE LTO-4	✓	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	✓	~	Support for LTFS with LTO-7 drives
		HPE LTO-5	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	requires StorNext
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	5.4.0 or later
		Quantum DLT- S4	~	~	~	~	~	~	~	~					
		Quantum SDLT 320 SCSI	~	~	~	~	~	~	~	~					
		Quantum SDLT 600 FC	~	~	~	~	~	~	~	~					

<sup>15</sup> StorNext supports LTO WORM functionality where offered by the drive vendor. Please see the vendor website for more details.
 <sup>16</sup> APFO supported
 <sup>17</sup> The i500 requires firmware version 8.4 or later to support LTO-7
 <sup>18</sup> APFO supported i6k only with LTO-6 or LTO-7
 <sup>19</sup> LTO-7 is not available in the Scalar i2000 library.

		Qu	antu	ım S	Supp	orte	ed L	ibra	ries	and	Таре	Drives	6		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	LTFS is only available for LTO-
		HPE LTO-5	✓	✓	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	✓	✓	✓	✓	✓	5/6/7 drives which
	Scalar i40 /	HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	~	support
	i80	IBM LTO-5								✓	✓	✓	✓	✓	partitioning. Support for LTFS
		IBM LTO-6								✓	✓	✓	✓	✓	with LTO-7 drives
		IBM LTO-7									✓	~	~	~	requires StorNext 5.4.0 or later.
	Scalar i3	IBM LTO-6											~	~	LTFS is only available for LTO- 5/6/7 drives which support
		IBM LTO-7											~	~	partitioning. Support for LTFS with LTO-7 drives requires StorNext 5.4.0 or later.
		IBM LTO-6											~	~	Fibre Channel Drives. LTFS is only available for LTO- 5/6/7 drives which
	Scalar i6	IBM LTO-7											~	~	support partitioning. Support for LTFS with LTO-7 drives requires StorNext 5.4.0 or later.
		IBM LTO-1	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	✓					
	Scalar 24	IBM LTO-2	✓	✓	✓	✓	✓	~	✓	✓					
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Scalar 50	HP LTO-4	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	
		IBM LTO-1	✓	✓	✓	✓	✓	$\checkmark$	✓	✓					
	Scalar 100	IBM LTO-2	✓	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$					NOTE: 2.10.0013 firmware not to be
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	~	✓	✓	✓	used
		AIT-2	✓	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	

		Qu	antu	ım S	Supp	orte	ed L	ibra	ries	and	Таре	Drives	5		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		IBM LTO-2	✓	~	✓	~	✓	✓	~	~					Must use SDLC <sup>20</sup>
	0	IBM 3590B1A	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	- SCSI Target Mode or Native
	Scalar 1000	AIT-1	~	~	~	~	~	~	✓	✓	~	✓	✓	~	SCSI DAS/ACI is no longer supported
		IBM LTO-1	✓	>	✓	✓	~	~	~	~					
		IBM LTO-2	✓	~	✓	~	✓	~	✓	✓					
		IBM LTO-3	✓	~	✓	✓	~	✓	~	~	✓	~	$\checkmark$	✓	Must use SDLC 20
	Scalar	IBM LTO-4	✓	~	✓	✓	~	~	~	~	✓	~	~	✓	SCSI Target Mode or Native SCSI
	10000	IBM LTO-5	✓	>	✓	✓	>	✓	>	>	~	~	~	✓	DAS/ACI is no
		AIT-2	✓	>	✓	✓	>	✓	>	>	✓	~	~	✓	longer supported
		AIT-2 WORM	✓	>	$\checkmark$	$\checkmark$	>	$\checkmark$	>	>	✓	~	$\checkmark$	$\checkmark$	
		IBM 3592	✓	>	✓	✓	>	✓	>	>	~	~	~	✓	
	PX500	HPE LTO-3	✓	~	✓	✓	✓	✓	✓	✓	✓	~	$\checkmark$	~	
		HPE LTO-2	✓	~	✓	✓	✓	✓	✓	✓					
	PX720	HPE LTO-3	✓	~	✓	~	~	~	~	~	✓	~	~	~	
		DLT S4	✓	✓	$\checkmark$	✓	✓	✓	✓	✓					

<sup>&</sup>lt;sup>20</sup> Scalar Distributed Library Controller has been tested up to version 2.8

#### 14.0 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.

		Non-Qua	ntum	ո Su	ppor	ted	Libra	aries	and	Тар	be Di	rives	5		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		IBM LTO-2	✓	✓	✓	✓	✓	✓	✓	✓					
	PV136T	IBM LTO-3	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	$\checkmark$	$\checkmark$	~	
		IBM LTO-4	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	$\checkmark$	$\checkmark$	~	
Dell	PowerVaul	IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	~	
	t ML6000	IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	~	
	6010 / 6020	IBM LTO-5	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	$\checkmark$	$\checkmark$	~	
	/ 6030	IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	~	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	~	
	ESL E Series	HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	~	
	Series	HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	~	
		HPE LTO-2	✓	✓	✓	✓	✓	✓	✓	✓					
	MSL 6000	HPE LTO-3	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	
		HPE LTO-4	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	
		HPE LTO-2	✓	✓	$\checkmark$	✓	✓	✓	✓	✓					
	MSL G3	HPE LTO-3	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	
	Series 2024 / 4048	HPE LTO-4	✓	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	✓	
	/ 8096	HPE LTO-5	✓	✓	$\checkmark$	✓	~	✓	~	✓	✓	~	✓	~	
HPE		HPE LTO-6	✓	✓	✓	✓	>	✓	✓	$\checkmark$	✓	>	✓	>	
-		HPE LTO-3	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
	EML E Series	HPE LTO-4	✓	✓	$\checkmark$	✓	~	✓	~	✓	✓	>	~	>	
	Certes	HPE LTO-5	✓	✓	✓	✓	>	✓	✓	>	✓	>	~	>	
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	$\checkmark$	
	ESL G3	HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	E3L 63	HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	
		HPE LTO-7										✓	✓	✓	
		HPE LTO-3	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	
	MSL 6480	HPE LTO-4	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
		HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	$\checkmark$	

		Non-Qua	ntum	n Suj	ppor	ted	Libra	aries	and	Tap	be Di	rives	;		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	<ul> <li>✓</li> </ul>	✓	✓	✓	
	TS3100	IBM LTO-7	<u> </u>		,	,	,				✓	✓	✓	✓	
		IBM LTO-2	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	$\checkmark$	
		IBM LTO-3	✓	✓	✓	✓	$\checkmark$	✓	✓	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	
		IBM LTO-4	✓	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	
		IBM LTO-5	$\checkmark$	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	
		IBM LTO-6	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓	$\checkmark$	
	TS3500	IBM LTO-7									$\checkmark$	✓	✓	$\checkmark$	
		IBM 3592 (J1A and E05)	~	~	~	~	✓	✓	~	✓	~	✓	✓	✓	
		IBM TS1120	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
BM		IBM TS1130	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
—		IBM TS1140	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
		IBM TS1150									$\checkmark$	$\checkmark$	✓	~	
		IBM LTO-3	✓	✓	~	✓	✓	✓	✓	✓	✓	✓	✓	~	
		IBM LTO-4	✓	✓	~	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	TS3310	IBM LTO-5	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	✓	
		IBM LTO-6	✓	✓	✓	✓	✓	$\checkmark$	✓	$\checkmark$	✓	✓	✓	✓	
		IBM LTO-7									✓	$\checkmark$	✓	✓	
		TS1140									21	21	21	21	
	TS4500	TS1150									✓	~	✓	~	
		IBM LTO-7									$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
		T9840C	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	$\checkmark$	
		T9840D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ပ္ပ		T10000A <sup>24</sup>	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	$\checkmark$	]
I/F	L180 /	T10000B <sup>24</sup>	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	$\checkmark$	
CS	L700 / L1400	HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
e S		HPE LTO-4	✓	✓	$\checkmark$	✓	~	✓	$\checkmark$	✓	✓	~	✓	~	
Oracle SCSI / FC		IBM LTO-3	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	$\checkmark$	
ō		IBM LTO-4	✓	✓	✓	✓	~	✓	✓	✓	✓	~	$\checkmark$	~	
	61 2000	T9840C	✓	✓	$\checkmark$	✓	~	✓	$\checkmark$	✓	✓	~	✓	~	
	SL3000	T9840D	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	$\checkmark$	✓	$\checkmark$	

<sup>21</sup> 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.

		Non-Qua	ntum	n Suj	opor	ted	Libra	aries	and	l Tap	be Di	rives	5		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		T10000A <sup>24</sup>	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	$\checkmark$	✓	✓	✓	✓	
		T10000B <sup>24</sup>	✓	✓	$\checkmark$	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$	
		T10000C <sup>22 24</sup>	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	✓	✓	$\checkmark$	$\checkmark$	
		T10000D <sup>24</sup>	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-5	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	
		HPE LTO-6	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	
		IBM LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-4	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	
		IBM LTO-5	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	✓	
		IBM LTO-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	CI 500	HPE LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SL500	IBM LTO-3	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	
		IBM LTO-5	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
	SI 450	HPE LTO-5	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
	SL150	HPE LTO-6	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
	9740	Sun/STK 9840	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Obsolete
2.X		T9840C	✓	~	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
8.2		T9840D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7.3 .×/		T10000A <sup>24</sup>	✓	✓	✓	✓	~	~	✓	~	✓	~	~	~	
R.1 8.1	L180 / L700 /	T10000B <sup>24</sup>	✓	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
Oracle ACSLS 7.3/ 7.3.1 / 8.0.x / 8.1.x / 8.2.x / 8.3 <sup>23</sup>	L1400	HPE LTO-3	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	
¢ A 8.0		HPE LTO-4	✓	✓	✓	✓	✓	~	✓	✓	✓	✓	~	✓	
acle .1 / 3 <sup>2</sup>		IBM LTO-3	✓	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	✓	✓	✓	
Or: 7.3 / 8.		IBM LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

<sup>&</sup>lt;sup>22</sup> 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. <sup>23</sup> ACSLS versions are supported on Solaris installs only, ACSLS 8.3 is the first version that supports Oracle Linux. <sup>24</sup> When using T10000 drives, the STK library parameter "Fastload" must be set to "OFF".

		Non-Qua	ntun	ו Su	ppor	ted	Libra	aries	and	l Tap	be Di	rives	5		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		T9840C	✓	✓	$\checkmark$	✓	~	✓	✓	✓	✓	✓	✓	✓	
		T9840D	✓	✓	✓	~	✓	✓	~	✓	✓	✓	✓	~	
		T10000A <sup>24</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000B <sup>24</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		T10000C <sup>22 24</sup>	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
		T10000D <sup>24</sup>	$\checkmark$	✓	$\checkmark$	✓	✓	✓	$\checkmark$	✓	✓	✓	✓	✓	
		HPE LTO-3	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	$\checkmark$	
		HPE LTO-4	$\checkmark$	✓	$\checkmark$	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SL3000	HPE LTO-5	✓	~	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of ACSLS 7.3.1
		HPE LTO-6	✓	✓	<b>√</b>	✓	✓	✓	✓	✓	✓	✓	✓	<b>√</b>	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 Requires minimum of
		IBM LTO-7											✓ ✓	✓ ✓	ACSLS 8.4
		HPE LTO-3	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Requires minimum of
	SL500	HPE LTO-5	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	ACSLS 7.3.1
		IBM LTO-3	✓ ✓	v √	v √	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	
		IBM LTO-4	<ul><li>▼</li></ul>	▼ ✓	▼ √	▼ ✓	<ul><li>✓</li></ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	▼ ✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	Requires minimum of
		IBM LTO-5 T9840C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	ACSLS 7.3.1
		T9840C	· •	· √	√	· ✓	· •	· •	·	· •	· •	·	· •	·	
		T10000A <sup>24</sup>	· ✓	· ✓	· √	· •	· •	· ✓	· ✓	· ✓	· ✓	· ✓	· ✓	· ✓	
		T10000B <sup>24</sup>	· ✓	· ✓	· √	· ✓	· ✓	· ✓	· ✓	· ✓	√ 	· ✓	· ✓	· ✓	
	SL8500	T10000C <sup>22</sup> <sup>24</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	310300	T10000D <sup>24</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		HPE LTO-5	~	~	~	~	✓	~	~	~	~	~	~	~	Requires minimum of ACSLS 7.3.1

		Non-Qua	ntum	n Su	ppor	ted	Libra	aries	and	І Тар	e Di	rives	5		
Vendor	Libraries	Drive Types <sup>15</sup>	StorNext 5	StorNext 5 Release 5.0.1	StorNext 5 Release 5.1.0	StorNext 5 release 5.1.1	StorNext 5 release 5.2.0.x	StorNext 5 release 5.2.1	StorNext 5 release 5.2.2	StorNext 5 release 5.3.0	StorNext 5 release 5.3.1.x	StorNext 5 release 5.3.2.x	StorNext 5 release 5.4.x	StorNext 6.0	Notes
		HPE LTO-6	~	~	~	~	~	~	~	~	~	~	~	~	Requires minimum of ACSLS 8.2
		IBM LTO-3	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	
		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
	01.450	HPE LTO-5	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	✓	
	SL150	HPE LTO-6	~	~	~	~	~	~	~	~	✓	~	~	~	Requires minimum of ACSLS 8.2
tar		IBM LTO-3	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	✓	✓	$\checkmark$	✓	✓	
Qualstar	XLS	IBM LTO-4	✓	✓	~	~	~	~	~	~	✓	~	~	✓	
		IBM LTO-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sony	Petasite CSM-200	IBM LTO-4 (T1600)	~	~	~	~	~	~	~	~	~	~	~	~	
		LTO-3	~	~	~	~	~	~	~	~	~	~	~	~	LTO-7 with T50e library only.
ogic	T-Series T50e /	LTO-4	~	~	~	~	~	~	~	~	~	~	~	~	See Bulletin 46 Library firmware is known as BlueScale
ra Lo	T120 / T200 / T380 /	LTO-5	~	~	~	~	~	~	~	~	~	~	~	~	11. Both L700 emulation and Native
ect		LTO-6	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	$\checkmark$	✓	✓	✓	mode are supported.
Sp	- T200 / t380 / t380 / t680 / S T950 / T-	LTO-7											✓	✓	In L700 emulation mode, LTO-5 drives
	Finity	IBM TS1140	~	~	~	~	~	~	~	~	~	~	~	~	report as LTO-4, limiting the capacity of the media.

#### 15.0 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 5.3.2 introduces support for IBM Advanced Path Failover (APFO) for redundant paths to IBM LTO-6 and LTO-7 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 5.3.2 supports IBM Advanced Path Failover (APFO) with IBM LTO-6 and LTO-7 tape devices installed in Scalar i500 and i6k libraries.
- Other Quantum and non-Quantum libraries will be supported with a future version of StorNext.

#### Notes:

- LTFS tape format is not currently supported with Advanced Path Failover.
- The IBM **lin\_tape** driver version 3.0.10 is not compatible with StorNext and cannot be used.

• If data path failover is not enabled, you must enable SCSI-3 persistent reservation for IBM APFO **lin\_tape** driver in the **lin\_tape.conf**.

For additional information on how to configure **SCSI Persistent Reservations**, see the **Tape Devices and Persistent SCSI Reserve** section in the *StorNext User's Guide* available online at <u>http://www.quantum.com/snsdocs</u>.

	Minimum Firmware / Drive	er Version Compatibility	
		StorNext Release	
	StorNext 5 Release 5.3.2	StorNext 5 Release 5.4.0.x	StorNext 6.0
IBM lin_tape driver version	3.0.8-1	3.0.12	3.0.19
Quantum Scalar i3 & i6			111G.GS002 – i1.1.1
Quantum Scalar i6k	735Q.GS04400 - i12.4.1	735Q.GS04400 - i12.4.1	741Q.GS00900 - i12.4.6
Quantum Scalar i500	670G.GS003 – i8.4	670G.GS003 – i8.4	670G.GS003 – i8.6
IBM LTO-6 Drive FH	G350	G350	G9P4
IBM LTO-7 Drive HH			G9Q5
IBM LTO-7 Drive FH	G340	G5S0	G9Q4

Supported Operating	Environments for IBM Advanced Path Failover							
APFO Driver Version	Operating System							
3.0.8	RHEL 6, RHEL 7, SLES 11							
3.0.12	RHEL 6, RHEL 7, SLES 11, SLES 12							
3.0.19	RHEL 6, RHEL 7, SLES 11, SLES 12							

#### 16.0 Xsan Compatibility

				rver Clien			
Xsan controller version	StorNext 6.0	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 or 5.2.1
Xsan 5			$\checkmark$	$\checkmark$	$\checkmark$		
Xsan 4.1					$\checkmark$	$\checkmark$	
Xsan 4					$\checkmark$	$\checkmark$	$\checkmark$

StorNext MDC with Apple Xsan Clients					
StorNext controller version	Xsan 5 Client 10.12	Xsan 4.1 Client 10.11	Xsan 4 Client 10.10		
StorNext 6.0	✓				
StorNext 5.4.x	✓	$\checkmark$	✓		
StorNext 5.3.2.x	✓	✓	✓		
StorNext 5.3.1		~	<ul> <li>✓</li> </ul>		
StorNext 5.3.0		✓	✓		
StorNext 5.2.2		✓	<ul> <li>✓</li> </ul>		
StorNext 5.2.0 / 5.2.1			<ul> <li>✓</li> </ul>		

#### 17.0 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 release 5.4.0.1 or later.

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

#### 18.0 Network File System Support

With some limitations outlined below, StorNext supports Network File System versions 3 and 4.

#### Limitations

- NFSv3 is not supported in an NFS-HA configuration.
- NFS-HA is only supported on the Xcellis Workflow Director.
- 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.
- Concurrently sharing the same StorNext file system from multiple NFS servers is not supported when used with the StorNext NAS option.
- NFSv4 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 only supported when the NFS server is a StorNext Appliance running StorNext version 5.4.0.1 or later releases.
- NFSv4 delegations are not supported.

#### **19.0 Data Replication Compatibility**

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

To ensure maximum replication performance Quantum strongly recommends that all systems utilizing replication upgrade to 4.7.1 or higher.

Note: If a source replication policy uses deduplication, the target policy must also use deduplication.

		Target Release							
Source Release	StorNext 4.2	StorNext 4.3	StorNext 4.7.x	StorNext 5 release 5.0.x	StorNext 5 release 5.1.x	StorNext 5 release 5.2.x	StorNext 5 release 5.3.x	StorNext 5 release 5.4.x	StorNext 6.0
StorNext 4.2	~								
StorNext 4.3		✓	~	~	~				
StorNext 4.7.x		✓	~	~	~	~	~	~	
StorNext 5 release 5.0.x		✓	~	~	~	~	~	✓	~
StorNext 5 release 5.1.x		✓	~	~	~	✓	~	✓	✓
StorNext 5 release 5.2.x			~	~	~	~	~	~	~
StorNext 5 release 5.3.x			~	~	~	~	~	~	~
StorNext 5 release 5.4.x			~	~	~	~	~	~	~
StorNext 6.0				~	~	~	~	~	~

#### 20.0 FlexTier<sup>™</sup> License Compatibility

Public Cloud				
License		StorNext 5.4.x	StorNext 6.0	
		FlexTier		
Provider	Service	(formerly FlexStor)	FlexTier	
Amazon S3	Simple Storage Service	~	√	
	Infrequent Access	~	$\checkmark$	
	Glacier	~	√	
	Gov Cloud	~	√	
	Commercial Cloud Services	~	√	
Microsoft	Azure	~	$\checkmark$	
Google (S3 Compatible)	Cloud Platforms		$\checkmark$	

Private Cloud					
License		StorNext 5.4.x	StorNext 6.0		
		FlexTier			
Provider	Platform	(formerly FlexStor)	FlexTier		
NetApp	Webscale StorageGRID	~	$\checkmark$		
IBM	Cloud Object Storage (Cleversafe)	$\checkmark$	~		
SCALITY	RING	$\checkmark$	$\checkmark$		

#### 21.0 FlexSync<sup>™</sup> Compatibility

•

0

- StorNext FlexSync requires StorNext 6.0 or later, and is available for StorNext Xcellis appliances and Xcellis Workflow Extenders only.
- FlexSync software may be installed on either the primary or secondary node of the Xcellis appliance or Workflow Extender. Single and dual node Xcellis appliances including the single node only Xcellis appliance, may be used. See the <u>FlexSync Documentation Center</u> for details.
  - FlexSync software may be installed on these StorNext clients to act as a data mover:
    - StorNext 6 Linux SAN client.
      - StorNext 6 Distributed LAN client.
        - StorNext Xcellis appliance or Workflow Extender running StorNext 6.0 or later.

See the <u>Planning</u> section of the <u>FlexSync Documentation Center</u> for additional details regarding prerequisites, system guidelines, and compatibility.

#### 22.0 QXS Interoperability and Certification

• All Quantum-branded QXS-3/4/6 fibre channel (RC models with fibre channel connectivity kit) models can be used as primary storage in a StorNext environment.

- 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.

See the <u>QXS Interoperability Matrix</u> for complete details on StorNext interoperability with StorNext Software.