Symantec Storage Foundation and High Availability Solutions 6.0, 6.0.1, 6.0.2, and DDI_R1_2016 for Windows
Hardware Compatibility List

Symantec Storage Foundation and High Availability Solutions 6.0, 6.0.1, 6.0.2, and DDI_R1_2016 for Windows Hardware Compatibility List

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Introduction

Created on July 24, 2023

This Hardware Compatibility List (HCL) contains support information for hardware products tested with the following Symantec Storage Foundation and High Availability Solutions for Windows product releases and platforms:

• 6.0, 6.0.1, and DDI_R1_2016 for Windows Server 2008, and Windows Server 2008 R2
• 6.0.2, and DDI_R1_2016 for Windows Server 2012

The HCL also contains information for Dynamic Multi-Pathing for Windows 6.0, 6.0.1, and 6.0.2.
The list is divided into sections for servers, disk storage arrays, host bus adapters, and switches.
Use the links in the Contents to access the specific sections. All devices are presented by operating system and manufacturer.

This HCL represents the limits of Symantec support for disk storage arrays qualified for use with the Symantec 6.0 Storage Foundation for Windows products in this list. There are no implied additions or exceptions to the tested or compatible devices on the provided lists.

The information in the Hardware Compatibility List (HCL) for Storage Foundation documentation is provided "as is," and all express or implied conditions, representations and warranties, including any implied warranty of merchantability, fitness for a particular purpose or non-infringement, are disclaimed, except to the extent that such disclaimers are held to be legally invalid, Symantec corporation shall not be liable for incidental or consequential damages in connection with the furnishing, performance, or use of this documentation.
The information contained in this HCL documentation is subject to change without notice.

General Notes:

• For support purposes, "Yes", or the instance of any software option in a cell in any of the matrices, indicates Symantec support for the product stack under which it appears. To verify support for a given device, make sure that the manufacturer also shows support for the device in its own HCL.

• Devices are listed by the name and series model number provided by the manufacturer.

• All hardware configurations listed have been qualified with the following products: Symantec Storage Foundation 6.0, Symantec Dynamic Multi-Pathing 6.0 for Windows, and Symantec Storage Foundation and High Availability Solutions for Windows (SFW plus Symantec Cluster Server for Windows). The following options are also supported by this HCL list: Symantec Storage Foundation for Windows - Volume Replicator Option, Symantec Storage Foundation for Windows - FlashSnap Option, Symantec Storage Foundation for Windows - Dynamic Multi-Pathing (DMP), Symantec Storage Foundation for Windows - Cluster Option for Microsoft Clustering.

• Configurations using any multi-pathing software (Symantec Storage Foundation for Windows - Dynamic Multi-pathing (DMP) or third-party) are restricted to the Symantec HCL list. This includes Symantec DMP implementations based upon Symantec MPIO Device Specific Modules (DSMs). For third party multi-pathing products only the ones listed on the HCL are fully tested and supported. The supported hardware list has been specifically qualified and approved by the Symantec Compatibility Lab (cLAB). Hardware that does not appear on this list is not supported when used with Symantec DMP or any 3rd-party multi-pathing solution. Employing a multi-pathing solution with Symantec Storage Foundation for Windows on non-certified hardware can result in unpredictable and possibly data-threatening behavior. Certified hardware is selected by Symantec Product Management, based on market research and input from the field, including customer feedback. If a customer would like to have their hardware considered for inclusion on this HCL, simply submit your request to your Symantec Sales Representative.

• Configurations should follow storage configuration best practices set forth by the hardware manufacturer in addition to those provided by Symantec. Symantec provided storage configuration best practices for zoning in a Storage Foundation for Windows environment are at <http://www.veritas.com/docs/TECH54713> .

• A minimum version of Storage Foundation for Windows 6.0.2 is required to support Windows Server 2012.

• Storage Foundation for Windows 6.0 and 6.0.1 support Windows Server 2008 R2 with Hyper-V configuration.

• Storage Foundation for Windows 6.0.2 supports Windows Server 2012 with Virtual Fibre Channel configuration.

NOTE: The new functionality and cumulative fixes of the Device Specific Module (DSM) are delivered through the updated Device Driver Installation (DDI) package to ensure proper functioning of the storage hardware. The latest DDI package can be found at <https://sort.veritas.com/asl> .

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Product Acronyms

Acronym	Definition
DMP	Dynamic Multi-pathing for Windows
SFW	Storage Foundation for Windows
SFW HA	Storage Foundation High Availability for Windows

Unified Computing and Blade Platforms

All Unified Computing and Blade Platforms shown here were tested with drivers and firmware supported by the OS and storage manufacturers. Check with these manufacturers for:

• Minimum driver and firmware levels

• Specific driver and firmware support

• Support for the stated Symantec products

• Other functional options

Device Support

Manufacturer	Platform/module	Connection
HP	Virtual Connect Module	FC, 1GbE, 10GbE

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Disk Arrays and Storage Devices

All storage configurations shown here were tested with drivers and firmware supported by the storage array vendors. Check with these vendors for:

• Minimum driver and firmware levels

• Specific driver and firmware support

• Support for the stated Symantec products

• Other functional options

Symantec supports hardware products listed here that include virtualization capability, but Symantec does not support compatibility issues that can be attributed to the virtualization feature. Symantec requires any compatibility issue to be reproduced in a non-virtualization environment. If the issue is confirmed to be related to Symantec products, Symantec will support its software at the same level as when that software is not running with hardware virtualization products. Symantec will cooperate with virtualization vendors, and attempt to assist in the diagnosis of problems found between the virtualization and Symantec products.

If the Device/family column in a table includes a third party multipathing qualifier (i.e. **with PowerPath**, **with Subsystem Device Driver**, **with HDLM**, or **with DS Storage Manager**), it means the storage array supports third party multipathing. If a row does not include a third party Multipathing qualifier, third party multipathing is not supported on that storage array.

Supported third party multi-pathing solutions are: PowerPath, SDD DSM, HDLM, and Storage Manager.

Hardware-specific features like LUN Snapshot or Thin Reclamation are supported only if they are explicitly listed for the devices in the **Advanced Features** column. When a hardware-specific feature is listed, it applies to all product stacks (SFW, and SFW HA).

NOTE: For Active/Active (A/A) arrays, unless stated otherwise, Symantec supports the same Non-Disruptive Upgrade (NDU) operations that the storage vendor supports.

Symantec Dynamic Multi-Pathing (DMP) with Multipath I/O (MPIO) Device Specific Modules (DSMs) support:
• Symantec Storage Foundation 6.0 for Windows
• DMP supports multi-pathing via DSMs integrated with the MPIO framework
• Supported with FC Storport Miniport drivers, iSCSI HBAs, Microsoft iSCSI Software Initiator
• Basic disks are supported with DMP, SCSI-3 support is supported with basic disks
• Boot from SAN is supported with Dynamic and Basic disks provided customers follow Microsoft's Boot from SAN recommendations
• Boot and Data Volumes are supported on the same BUS/HBA's for clustered and non-clustered servers
• Symantec DMP MPIO DSMs are not supported with FC Port drivers or FC SCSI Miniport drivers
Arrays listed in the HCL are also supported with the Microsoft DSM (MSDSM) in configurations where it coexists with Symantec Storage Foundation for Windows, as long as the array satisfies Microsoft's requirements for support, including being supported for use with MSDSM by the array vendors.

Support Legend

Term	Meaning	Definition
Yes	Supported	"Yes" or any other details imply the device is supported with the features listed, if any.
No	Not supported	"No" or the absence of any details imply the device is not supported for that product.
Advanced Reporting	Advanced Reporting supported	Support reporting Enclosure information and special properties of a LUN discovered by the Device Discovery Layer (DDL) that helps storage administration.
NDU	NDU supported	Support for upgrading firmware/microcode on storage array controllers while applications are running on servers.
Thin Reclamation	Thin Reclamation supported	Support for storage optimization by recovering blocks from deleted files or data. It adds the storage back to the storage thin pool. LUNs supported with thin reclamation are denoted by their Advanced Reporting attribute.

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Modes

Term	Meaning	Definition	Supported DSM Load Balance Mode
Active/Active (A/A)	Array supported in Active/Active mode	A/A arrays support simultaneous I/O on all paths.	Fail Over Only (Active/Passive), Round Robin (Active/Active), Round Robin with Subset, Dynamic Least Queue Depth, Weighted Paths, Least Blocks, Balanced Path
Asymmetric Logical Unit Access (ALUA) [1]	Array configured in Active/Active-Asymmetric mode	ALUA arrays support Active-Optimized (AO), Active-Non Optimized (ANO), Standby (Standby) path, and Unavailable states; the multi-pathing driver seeks the most optimized path for the I/O transmission rate. On ALUA arrays that support AO, and ANO path states, simultaneous I/O on all paths is supported. On ALUA arrays that support AO, and Standby path states, I/O can be sent through AO paths only, not Standby paths.	Fail Over Only (Active/Passive), Round Robin (Active/Active), Dynamic Least Queue Depth, Least Blocks, Balanced Path
Active/Passive-Concurrent (A/P-C)	Array supported in Active/Passive-Concurrent mode	A/P-C arrays support I/O on multiple primary (active) paths, while the secondary (passive) paths are engaged if all primary paths fail.	Fail Over Only (Active/Passive), Round Robin (Active/Active), Dynamic Least Queue Depth, Least Blocks, Balanced Path

1. Denoted as A/A-A

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3PAR

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
E-Class, S-Class [1] [2] [3]	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes

1. Consult 3PAR's Configuration Matrix for interoperability and space reclamation support.

2. More 3PAR array systems support information is under the HP section.

3. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

Dell EMC

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
Celerra series	A/A-A	Fibre Channel		Yes	Yes	Yes
Celerra series	A/P-C	Fibre Channel		Yes	Yes	Yes
CLARiiON AX series [1]	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
CLARiiON AX series [1]	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes
CLARiiON AX series with PowerPath [1]	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
CLARiiON AX series with PowerPath [1]	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes
CLARiiON CX series	A/A-A	Fibre Channel	NDU	Yes	Yes	Yes
CLARiiON CX series	A/P-C	Fibre Channel	NDU	Yes	Yes	Yes
CLARiiON CX series with PowerPath	A/A-A	Fibre Channel		Yes	Yes	No
CLARiiON CX series with PowerPath	A/P-C	Fibre Channel		Yes	Yes	No
CLARiiON CX3 series	A/A-A	Fibre Channel, iSCSI	Advanced Reporting, NDU	Yes	Yes	Yes
CLARiiON CX3 series	A/P-C	Fibre Channel, iSCSI	Advanced Reporting, NDU	Yes	Yes	Yes
CLARiiON CX3 series with PowerPath	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
CLARiiON CX3 series with PowerPath	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes
CLARiiON CX4 series	A/A-A	Fibre Channel, iSCSI	Advanced Reporting, NDU, Thin Reclamation	Yes	Yes	Yes
CLARiiON CX4 series	A/P-C	Fibre Channel, iSCSI	Advanced Reporting, NDU, Thin Reclamation	Yes	Yes	Yes
CLARiiON CX4 series with PowerPath	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
CLARiiON CX4 series with PowerPath	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes
EqualLogic PS5000 series [2]	A/A	iSCSI		Yes	Yes	Yes
EqualLogic PS6000 series	A/A	iSCSI		Yes	Yes	Yes
PowerMax series	A/A	Fibre Channel		No	Yes	Yes
PowerVault MD32xx Series	A/P-C	iSCSI, SAS		Yes	Yes	Yes

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Dell EMC

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
PowerVault MD36xx Series	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes
PowerVault MD38xx Series [3]	A/P-C	Fibre Channel		No	Yes	Yes
SC Series [4]	A/A	Fibre Channel, iSCSI		Yes	Yes	Yes
ScaleIO	A/A	Ethernet	Advanced Reporting, Thin Reclamation	No	Yes	Yes
Symmetrix 3000 series	A/A	Fibre Channel		Yes	Yes	Yes
Symmetrix 3000 series with PowerPath	A/A	Fibre Channel		Yes	Yes	No
Symmetrix 8000 series [5]	A/A	Fibre Channel		Yes	Yes	Yes
Symmetrix 8000 series with PowerPath	A/A	Fibre Channel		Yes	Yes	No
Symmetrix DMX series [6] [7]	A/A	Fibre Channel	Advanced Reporting	Yes	Yes	Yes
Symmetrix DMX series with PowerPath [7]	A/A	Fibre Channel		Yes	Yes	Yes
Symmetrix VMAX series [8]	A/A	FCoE, Fibre Channel, iSCSI	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
Symmetrix VMAX series with PowerPath	A/A	Fibre Channel		Yes	Yes	Yes
Unity series	A/A-A	Fibre Channel		No	Yes	Yes
Unity series with PowerPath	A/A-A	Fibre Channel		No	Yes	Yes
VMAX3/VMAX All Flash Family series	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
VMAX3/VMAX All Flash Family series with PowerPath	A/A	Fibre Channel		Yes	Yes	No
VNX series [9]	A/A-A	Fibre Channel, iSCSI	NDU, Thin Reclamation	Yes	Yes	Yes
VNX series [9]	A/P-C	Fibre Channel, iSCSI	NDU, Thin Reclamation	Yes	Yes	Yes
VNX series with PowerPath	A/A-A	Fibre Channel		Yes	Yes	Yes
VNX series with PowerPath	A/P-C	Fibre Channel		Yes	Yes	Yes
VNX2 series [9]	A/A-A	Fibre Channel		Yes	Yes	Yes
VNX2 series with PowerPath	A/A-A	Fibre Channel		No	Yes	Yes
VNX2e series	A/A-A	Fibre Channel		No	Yes	Yes
VPLEX [8]	A/A	Fibre Channel	Advanced Reporting	Yes	Yes	Yes
VPLEX with PowerPath	A/A	Fibre Channel		No	Yes	Yes
XtremIO	A/A	FCoE, Fibre Channel, iSCSI		Yes	Yes	Yes

1. Supports CLARiiON AX4 only.

2. There is a known problem of IO hang sometimes when a NIC port is disabled on the Switch. Also, it is recommended to use 2 NICs for private heartbeat and a separate NIC for public-mix use or client-only use in MSCS environments due to a known issue when Private NICs are used for private heartbeat and other types of traffic.

3. Requires CP5 or higher for VDID or Enclosure discovery.

4. Support Storage Center OS (SCOS) software version 6.2.2 and higher.

5. Requires firmware version 5568.67 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

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6. Requires firmware version 5670.73 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

7. Supports Symmetrix DMX-3 and Symmetrix DMX-4 only.

8. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

9. Supported with block mode storage only.

Fujitsu

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
ETERNUS DX400/DX500/DX600 series [1] [2] [3] [4] [5]	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
ETERNUS DX400/DX500/DX600 series [1] [2] [3] [4] [5]	A/A-A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
ETERNUS DX60/DX80/DX90/DX100/DX200 series [1] [2] [3] [4] [5] [6]	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
ETERNUS DX60/DX80/DX90/DX100/DX200 series [1] [2] [3] [4] [5] [6]	A/A-A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
ETERNUS DX8000 S3/S4 series [1] [2] [3] [4] [5]	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
ETERNUS DX8000 S3/S4 series [1] [2] [3] [4] [5]	A/A-A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
ETERNUS DX8000 series [1] [2] [3] [4] [5]	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
ETERNUS DX8000 series [1] [2] [3] [4] [5]	A/A-A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
ETERNUS VS850	A/A-A	Fibre Channel		Yes	Yes	Yes
ETERNUS VS850 with Subsystem Device Driver	A/A-A	Fibre Channel		Yes	Yes	Yes
ETERNUS2000 series [4]	A/A	Fibre Channel		Yes	Yes	Yes
ETERNUS4000 series [1] [4] [5] [7]	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
ETERNUS6000 series [4]	A/A	Fibre Channel		Yes	Yes	Yes
ETERNUS8000 series [1] [4] [5]	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes

1. A minimum version of 6.0.1 is required to support Thin Reclamation with this array. There are known issues with Reclamation, see <http://www.veritas.com/docs/TECH164853> for more details.

2. Ensure proper array settings are configured to support this mode.

3. Fujitsu Storage Cluster is not supported.

4. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

5. There are known issues with Reclamation, see <http://www.veritas.com/docs/TECH164853> for more details.

6. Thin Reclamation is not supported with ETERNUS DX60/DX60 S2/DX80/DX90.

7. Excludes ETERNUS4000 models 80 and 100.

Hewlett Packard Enterprise

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
2000 G2 series [1]	A/A-A	Fibre Channel, iSCSI, SAS		Yes	Yes	Yes
3PAR F/T-Class, StoreServ 7000/8000/9000/10000/20000 Storage [1] [2] [3]	A/A	Fibre Channel	NDU, Thin Reclamation	Yes	Yes	Yes
EVA GL 3000/5000 [4] [5]	A/A-A	Fibre Channel		Yes	Yes	Yes
EVA4000/6000/8000 [6] [7]	A/A-A	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
EVA4100/6100/8100 [6] [7]	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
EVA4400/6400/8400 series [6]	A/A-A	Fibre Channel	NDU	Yes	Yes	Yes
MSA 1040 SAN	A/A-A	Fibre Channel		Yes	Yes	Yes
MSA 2040 SAN	A/A-A	Fibre Channel, iSCSI, SAS		Yes	Yes	Yes
MSA P2000	A/A-A	Fibre Channel		Yes	Yes	Yes
MSA1000	A/A	Fibre Channel		Yes	Yes	Yes
MSA1500 [1] [4]	A/A	Fibre Channel		Yes	Yes	Yes
MSA2000fc series [1]	A/A	Fibre Channel		Yes	Yes	Yes
MSA2012i [1]	A/A	iSCSI		Yes	Yes	Yes
MSA2012sa [1]	A/A	SAS		Yes	Yes	Yes
MSA2212i	A/A	iSCSI		Yes	Yes	Yes
MSA2212sa	A/A	SAS		Yes	Yes	Yes
P2000 G3 MSA series [1] [8]	A/A-A	Fibre Channel, iSCSI, SAS		Yes	Yes	Yes
P6000 EVA series [1]	A/A-A	FCoE, Fibre Channel, iSCSI		Yes	Yes	Yes
P9500 [9]	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
XP10000/12000 [10]	A/A	Fibre Channel		Yes	Yes	Yes
XP128/1024 [11]	A/A	Fibre Channel		Yes	Yes	Yes
XP20000/24000	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
XP48	A/A	Fibre Channel		Yes	Yes	Yes
XP512	A/A	Fibre Channel		Yes	Yes	Yes
XP7 series	A/A	Fibre Channel		Yes	Yes	Yes

1. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

2. 3PAR F/T-Class maximum firmware version is 3.1.3; 3PAR StoreServ 7000/10000 minimum firmware version 3.1.2 and StoreServ 8000/20000 minimum firmware version 3.2.2 are required.

3. StoreServ 8000/20000 minimum firmware version 3.2.2 MU1 is required for Thin Reclamation support.

4. Active/Active array firmware is required. Contact your local HP representative for more information.

5. Requires firmware version 4.004 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

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6. Requires firmware version 5030 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

7. When utilizing the HP EVA arrays with SFW DMP, iSCSI is supported when used with the HP EVA iSCSI Connectivity Option. However, Active/Active Load Balancing algorithms are not supported in this configuration because SCSI-3 Persistent Reservation is not supported with the EVA iSCSI Connectivity Option at this point in time. Therefore, SCSI-3 support cannot be used and must be disabled in the system registry or system wide in the Symantec Enterprise Administrator (VEA) Control Panel System Settings when the EVA iSCSI Connectivity Option, by itself or in combination with other arrays, is connected to a host.

8. There is a known issue with support for HP P2000 G3 MSA series arrays where disabling all but 1 active path to the lun causes disk missing from the server.

9. Requires firmware version 70-01-04-00/00 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

10. Requires firmware version 50-01-40-00/00 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

11. Requires firmware version 21-09-15 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

Hitachi Vantara

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
AMS/WMS series	A/P-C	Fibre Channel	Advanced Reporting, NDU	Yes	Yes	Yes
AMS/WMS series with HDLM (Hitachi Dynamic Link Manager)	A/P-C	Fibre Channel		Yes	Yes	No
HUS 100 series	A/A	Fibre Channel	Advanced Reporting	Yes	Yes	Yes
HUS 100 series with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		No	Yes	Yes
HUS VM	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
HUS VM with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		No	Yes	Yes
Lightning 9900V series [1]	A/A	Fibre Channel		Yes	Yes	Yes
Lightning 9900V series with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	No
SANRISE H12000 [2]	A/A	Fibre Channel		Yes	Yes	Yes
SANRISE H12000 with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	No
SMS/AMS2000 series [3] [4]	A/A	Fibre Channel, iSCSI	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
SMS/AMS2000 series with HDLM (Hitachi Dynamic Link Manager) [3]	A/A	Fibre Channel, iSCSI		Yes	Yes	Yes
Thunder 9500V series [5]	A/P-C	Fibre Channel	Advanced Reporting, NDU	Yes	Yes	Yes
Thunder 9500V series with HDLM (Hitachi Dynamic Link Manager)	A/P-C	Fibre Channel		Yes	Yes	Yes
USP/NSC series [6]	A/A	Fibre Channel		Yes	Yes	Yes
USP/NSC series with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes
USPV/USPVM	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
USPV/USPVM with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes
VSP [7]	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
VSP with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes
VSP G series	A/A	Fibre Channel	Thin Reclamation	Yes	Yes	Yes
VSP G series with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		No	Yes	No

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Hitachi Vantara

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
VSP Gx00/Fx00 series	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes

1. Requires firmware version 21-10-13-00/00 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

2. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

3. Excludes SMS100.

4. SMS does not support Thin Provisioning.

5. During a Hitachi online format of new LUNS, certain SCSI commands are disabled which may temporarily suspend data access. Contact Hitachi for a list of these commands.

6. Requires firmware version 50-05-22-00/00 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

7. Requires firmware version 70-01-04-00/00 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

Huawei

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
18000 series [1]	A/A	Fibre Channel		Yes	Yes	Yes
OceanStor Series [2] [3] [4]	A/A-A	Fibre Channel, iSCSI	Thin Reclamation	Yes	Yes	Yes
S5000 series	A/P-C	Fibre Channel	NDU	Yes	Yes	Yes
VIS series	A/A	Fibre Channel		Yes	Yes	Yes

1. For Huawei 18000 A/A, MS KB <http://support.microsoft.com/kb/2522766> is required. Check "Prerequisites" of the KB to install MS KB.

2. DDI Q1 2013 is the minimum version required to support Huawei Dorado5100 and Huawei S2200T storage arrays.

3. For OceanStor V3 models, MS KB <http://support.microsoft.com/kb/2522766> is required. Check "Prerequisites" of the KB to install MS KB.

4. Thin Reclamation is only supported with OceanStor Series with volumes track aligned to 2048 sectors, the ALUA explicit trespass on Thin LUN is not supported.

IBM

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
DS3950 [1] [2]	A/P-C	Fibre Channel		Yes	Yes	Yes
DS3950 with DS Storage Manager	A/P-C	Fibre Channel		Yes	Yes	Yes
DS5020 [1] [2]	A/P-C	Fibre Channel	NDU	Yes	Yes	Yes
DS5020 with DS Storage Manager	A/P-C	Fibre Channel		Yes	Yes	Yes

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IBM

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
ESS 750/800 series [3]	A/A	Fibre Channel		Yes	Yes	Yes
ESS 750/800 series with Subsystem Device Driver [4]	A/A	Fibre Channel		Yes	Yes	No
FlashSystem series [5]	A/A	Fibre Channel		Yes	Yes	Yes
Spectrum Virtualize series [2]	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
Spectrum Virtualize series with Subsystem Device Driver	A/A-A	Fibre Channel		Yes	Yes	Yes
Storwize series [2]	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
Storwize series with Subsystem Device Driver [4]	A/A-A	Fibre Channel		Yes	Yes	Yes
System Storage DS3000 series [1] [2]	A/P-C	Fibre Channel, iSCSI, SAS		Yes	Yes	Yes
System Storage DS3500 series [1] [2]	A/P-C	Fibre Channel, iSCSI, SAS		Yes	Yes	Yes
System Storage DS5000 series [1] [2]	A/P-C	Fibre Channel		Yes	Yes	Yes
System Storage DS5000 series with DS Storage Manager	A/P-C	Fibre Channel		Yes	Yes	Yes
System Storage DS6000 series [6]	A/A-A	Fibre Channel		Yes	Yes	Yes
System Storage DS6000 series with Subsystem Device Driver [4]	A/A-A	Fibre Channel		Yes	Yes	Yes
System Storage DS8000 series [6]	A/A	Fibre Channel		Yes	Yes	Yes
System Storage DS8000 series with Subsystem Device Driver [4]	A/A	Fibre Channel		Yes	Yes	Yes
System Storage N series [7]	A/A-A	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
System Storage N series [7]	A/P-C	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
System Storage XIV series [8] [9]	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
TotalStorage DS4000 series [1]	A/P-C	Fibre Channel	NDU	Yes	Yes	Yes
TotalStorage DS4000 series with DS Storage Manager	A/P-C	Fibre Channel		Yes	Yes	No

1. IMPORTANT: These arrays require additional configuration steps in order to work properly with Symantec Storage Foundation for Windows. Before attempting to use any of these arrays with Symantec Storage Foundation for Windows DMP software, please contact the array hardware manufacturer for additional configuration instructions and updates. Several special settings must be enabled on these arrays to allow compatibility with DMP, including Auto Volume Transfer (AVT), also referred to as Auto Logical Drive Transfer (ADT). Specific firmware levels from the manufacturer for these arrays may also be required.

2. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

3. Requires firmware version 2.3.2.71 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

4. IBM SDD Version 2.4.2.0-1 is not supported, there are known issues of Blue screen (BSOD) during use of this version of the driver.

5. Supports FlashSystem 840/900 models.

6. Requires firmware version 6.1.600.46 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

7. Requires ONTAP version 7.0.2 or higher to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

8. Excludes A9000 & A9000R models.

9. To obtain Clustering support with IBM XIV, a minimum Firmware level of 10.0.1.c is required.

Imation

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
Nexsan E-Series Systems	A/A	Fibre Channel		Yes	Yes	Yes

Infinidat

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
InfiniBox F-Series	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes

Intel

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
DC P3700	A/A	PCIe	Advanced Reporting	Yes	Yes	Yes
SSD 910	A/A	PCIe		No	Yes	Yes

NetApp

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
AFF Series [1]	A/A-A	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
FAS2000/FAS900/FAS200 series [2] [3] [4]	A/A-A	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
FAS2000/FAS900/FAS200 series [4]	A/P-C	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
FAS3000/V3000 series [2] [3] [4]	A/A-A	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
FAS3000/V3000 series [4]	A/P-C	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
FAS6000/V6000 series [2] [3] [4]	A/A-A	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
FAS6000/V6000 series [4]	A/P-C	Fibre Channel, iSCSI	NDU	Yes	Yes	Yes
FAS8000/FAS9000 Series [2] [3]	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
FAS8000/FAS9000 Series	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes
GF series	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes

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NetApp

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
GF series	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes
NearStore R100	A/A-A	Fibre Channel, iSCSI		Yes	Yes	Yes
NearStore R100	A/P-C	Fibre Channel, iSCSI		Yes	Yes	Yes

1. A minimum version of ONTAP 8.3 is required to support this array.

2. Storage Foundation 6.0.x supports configurations that run Clustered Data ONTAP (cDOT) version 8.2.1 or greater with a limitation of TWO Controller Nodes only.

3. Storage Foundation 6.1 supports configurations that run Clustered Data ONTAP (cDOT) version 8.2.1 or greater with a limitation of TWO Controller Nodes only.

4. There is a known issue with support for NetApp arrays. When the interconnect cable between the filers is disconnected, the servers get rebooted and stay at boot prompt until the cable is reconnected and servers are rebooted.

Nexenta

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
NexentaStor [1]	A/A-A	Fibre Channel		Yes	Yes	Yes

1. DDI Q1 2013 is the minimum version required to support this appliance.

Nexsan

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
Beast Systems	A/A	Fibre Channel		Yes	Yes	Yes

Nihon Unisys

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
SANARENA 2200	A/A	Fibre Channel		Yes	Yes	Yes
SANARENA 2200 with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	No

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NimbleStorage

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
CS/AF/HF-Series	A/P-C	Fibre Channel	Advanced Reporting, Thin Reclamation	No	Yes	Yes

Oracle

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
Axiom series [1]	A/A-A	Fibre Channel	NDU	Yes	Yes	Yes
FS1-2	A/A-A	Fibre Channel	Advanced Reporting	Yes	Yes	Yes
Storage 6580/6780 series	A/P-C	Fibre Channel	NDU	Yes	Yes	Yes
StorageTek 2500 series	A/P-C	Fibre Channel, iSCSI, SAS		Yes	Yes	Yes
StorageTek 6140 array	A/P-C	Fibre Channel		Yes	Yes	Yes
StorageTek 9900 series	A/A	Fibre Channel		Yes	Yes	Yes
StorageTek 9900 series with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes
StorageTek 9985/9990 series	A/A	Fibre Channel		Yes	Yes	Yes
StorageTek 9985/9990 series with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes
StorageTek 9985V system	A/A	Fibre Channel		Yes	Yes	Yes
StorageTek 9985V system with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes
StorageTek 9990V system	A/A	Fibre Channel		Yes	Yes	Yes
StorageTek 9990V system with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes
Sun Storage 6180 array	A/P-C	Fibre Channel	NDU	Yes	Yes	Yes
ZFS Storage Appliance series [2] [3]	A/A-A	Fibre Channel, iSCSI	Advanced Reporting, NDU	Yes	Yes	Yes

1. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

2. Excludes ZFS Storage ZS4-4.

3. ZFS Storage ZS3-2 is not supported yet.

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Pure Storage

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
FlashArray series	A/A	Fibre Channel	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes

SanDisk

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
ioDrive	A/A	PCIe		Yes	Yes	Yes
ioDrive2	A/A	PCIe	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
ioMemory PX600 series [1] [2]	A/A	PCIe	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes
ioMemory SX300 series [1] [2]	A/A	PCIe	Advanced Reporting, Thin Reclamation	Yes	Yes	Yes

1. Patch is required, see <https://sort.veritas.com/patch/detail/11064> for SFW 6.0.2 and <https://sort.veritas.com/patch/detail/11063> for SFW 6.0.1 for details.

2. Patch is required, see <https://sort.veritas.com/patch/detail/11065> for details.

StorageTek

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
FlexLine 200/300 series [1]	A/P-C	Fibre Channel		Yes	Yes	Yes

1. Support for the StorageTek Flexline 300 series Storage Systems includes the FLX380 array only.

Sun

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
StorageTek 6130 [1]	A/P-C	Fibre Channel		Yes	Yes	Yes
StorageTek 6540	A/P-C	Fibre Channel		Yes	Yes	Yes
StorEdge 9910/9960 [2]	A/A	Fibre Channel		Yes	Yes	Yes
StorEdge 9910/9960 with HDLM (Hitachi Dynamic Link Manager)	A/A	Fibre Channel		Yes	Yes	Yes

1. The Sun StorEdge 6130 array requires additional configuration steps in order to work properly with Symantec Storage Foundation for Windows. Before attempting to use the Sun StorEdge 6130 array with Symantec Storage Foundation for Windows DMP software, please contact the array hardware manufacturer for additional configuration instructions and updates. Several special settings must be enabled on these arrays to allow compatibility with DMP. Specific firmware levels from the manufacturer for these arrays may also be required.

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2. Please check with Storage Array Manufacturer's Hardware Compatibility Support Matrices for required firmware to support Active/Active DSM mode in a cluster (VCS/MSCS/WSFC) with this array.

Violin Memory

Device/Family	Mode	Interface	Advanced Features	2008	2008 R2	2012
Violin 3000/6000 series	A/A	Fibre Channel	NDU	Yes	Yes	Yes
Violin 3000/6000 series [1]	A/A-A	Fibre Channel	NDU	Yes	Yes	Yes

1. A minimum array firmware version G5.5.1 is required to support ALUA mode.

Device Family Membership

3PAR

Device Family	Members
E-Class, S-Class	E200 Storage System, S200 Storage System, S400 Storage System, S800 Storage System

Dell EMC

Device Family	Members
Celerra series	Celerra NS120, Celerra NS40, Celerra NS700
CLARiiON AX series	Celerra NX4, CLARiiON AX100, CLARiiON AX4
CLARiiON CX series	CLARiiON CX300, CLARiiON CX400, CLARiiON CX500, CLARiiON CX600, CLARiiON CX700
CLARiiON CX3 series	CLARiiON CX3 Model 10, CLARiiON CX3 Model 20, CLARiiON CX3 Model 40, CLARiiON CX3 Model 80
CLARiiON CX4 series	CLARiiON CX4 Model 120, CLARiiON CX4 Model 240, CLARiiON CX4 Model 480, CLARiiON CX4 Model 960
EqualLogic PS5000 series	EqualLogic PS5000E, EqualLogic PS5000X, EqualLogic PS5000XV, EqualLogic PS5500E
EqualLogic PS6000 series	EqualLogic PS6000E, EqualLogic PS6000S, EqualLogic PS6000X, EqualLogic PS6000XV, EqualLogic PS6000XVS, EqualLogic PS6010E, EqualLogic PS6010S, EqualLogic PS6010X, EqualLogic PS6010XV, EqualLogic PS6010XVS, EqualLogic PS6100E, EqualLogic PS6100X, EqualLogic PS6100XV, EqualLogic PS6100XV3.5", EqualLogic PS6500E, EqualLogic PS6500X, EqualLogic PS6500XV, EqualLogic PS6510E, EqualLogic PS6510X, EqualLogic PS6600, EqualLogic PX6100S, EqualLogic PX6100XS
PowerMax series	PowerMax 2000, PowerMax 2500, PowerMax 8000, PowerMax 8500
PowerVault MD32xx Series	PowerVault MD3200, PowerVault MD3200i, PowerVault MD3220, PowerVault MD3220i

page 18, Disk Arrays and Storage Devices, Sun

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Dell EMC

Device Family	Members
PowerVault MD36xx Series	PowerVault MD3600f, PowerVault MD3600i
PowerVault MD38xx Series	PowerVault MD3800f
SC Series	SC4000, SC4020, SC420F, SC5020, SC5020F, SC7020, SC7020F, SC8000, SC9000, SCv2000, SCv3000
Symmetrix 3000 series	Symmetrix 37xx, Symmetrix 3830, Symmetrix 4.x
Symmetrix 8000 series	Symmetrix 8230, Symmetrix 8430, Symmetrix 8530, Symmetrix 8830
Symmetrix DMX series	Symmetrix DMX 1000, Symmetrix DMX 2000, Symmetrix DMX 3000, Symmetrix DMX 800, Symmetrix DMX-3, Symmetrix DMX-4
Symmetrix VMAX series	Symmetrix VMAX, Symmetrix VMAXe
Unity series	Unity 300, Unity 300F, Unity 350F, Unity 400, Unity 400F, Unity 450F, Unity 500, Unity 500F, Unity 550F, Unity 600, Unity 600F, Unity 650F, Unity VSA
VMAX3/VMAX All Flash Family series	VMAX 100K, VMAX 10K, VMAX 200K, VMAX 20K, VMAX 250F, VMAX 250FX, VMAX 350F, VMAX 400K, VMAX 40K, VMAX 450F, VMAX 450FX, VMAX 850F, VMAX 850FX, VMAX 950F, VMAX 950FX, VMAX3
VNX series	VNX 5100, VNX 5300, VNX 5500, VNX 5700, VNX 7500
VNX2 series	VNX5200, VNX5400, VNX5600, VNX5800, VNX7600, VNX8000
VNX2e series	VNXe1600, VNXe3200

Fujitsu

Device Family	Members
ETERNUS DX400/DX500/DX600 series	ETERNUS AF650, ETERNUS AF650 S2, ETERNUS AF650 S3, ETERNUS DX410, ETERNUS DX410 S2, ETERNUS DX440, ETERNUS DX440 S2, ETERNUS DX500 S3, ETERNUS DX500 S4, ETERNUS DX500 S5, ETERNUS DX600 S3, ETERNUS DX600 S4, ETERNUS DX600 S5
ETERNUS DX60/DX80/DX90/DX100/DX200 series	ETERNUS AF150 S3, ETERNUS AF250, ETERNUS AF250 S2, ETERNUS AF250 S3, ETERNUS DX100 S3, ETERNUS DX100 S4, ETERNUS DX100 S5, ETERNUS DX200 S3, ETERNUS DX200 S4, ETERNUS DX200 S5, ETERNUS DX200F, ETERNUS DX60, ETERNUS DX60 S2, ETERNUS DX60 S3, ETERNUS DX60 S4, ETERNUS DX60 S5, ETERNUS DX80, ETERNUS DX80 S2, ETERNUS DX90, ETERNUS DX90 S2
ETERNUS DX8000 S3/S4 series	ETERNUS DX8700 S3, ETERNUS DX8900 S3, ETERNUS DX8900 S4, ETERNUS DX900 S5
ETERNUS DX8000 series	ETERNUS DX8100, ETERNUS DX8100 S2, ETERNUS DX8400, ETERNUS DX8700, ETERNUS DX8700 S2
ETERNUS2000 series	ETERNUS2000 Model 100, ETERNUS2000 Model 200, ETERNUS2000 Model 50
ETERNUS4000 series	ETERNUS4000 Model 100, ETERNUS4000 Model 300, ETERNUS4000 Model 400, ETERNUS4000 Model 500, ETERNUS4000 Model 600, ETERNUS4000 Model 80
ETERNUS6000 series	ETERNUS6000 Model 1000, ETERNUS6000 Model 1100, ETERNUS6000 Model 400, ETERNUS6000 Model 500, ETERNUS6000 Model 600, ETERNUS6000 Model 700, ETERNUS6000 Model 800, ETERNUS6000 Model 900
ETERNUS8000 series	ETERNUS8000 Model 1100, ETERNUS8000 Model 1200, ETERNUS8000 Model 2100, ETERNUS8000 Model 2200, ETERNUS8000 Model 700, ETERNUS8000 Model 800, ETERNUS8000 Model 900

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Hewlett Packard Enterprise

Device Family	Members
2000 G2 series	MSA2312fc, MSA2312i, MSA2312sa, MSA2324fc, MSA2324i, MSA2324sa
3PAR F/T-Class, StoreServ 7000/8000/9000/10000/20000 Storage	3PAR F200 Storage, 3PAR F400 Storage, 3PAR StoreServ 10400 Storage, 3PAR StoreServ 10800 Storage, 3PAR StoreServ 20450 Storage, 3PAR StoreServ 20450R2 Storage, 3PAR StoreServ 20800 Storage, 3PAR StoreServ 20850 Storage, 3PAR StoreServ 20850R2 Storage, 3PAR StoreServ 7200 Storage, 3PAR StoreServ 7400 Storage, 3PAR StoreServ 7450 Storage, 3PAR StoreServ 8200 Storage, 3PAR StoreServ 8400 Storage, 3PAR StoreServ 8440 Storage, 3PAR StoreServ 8450 Storage, 3PAR StoreServ 9450 Storage, 3PAR T400 Storage, 3PAR T800 Storage
EVA GL 3000/5000	EVA3000, EVA3000GL, EVA5000, EVA5000GL
EVA4000/6000/8000	EVA4000, EVA6000, EVA8000
EVA4100/6100/8100	EVA4100, EVA6100, EVA8100
EVA4400/6400/8400 series	EVA4400, EVA6400, EVA8400
MSA2000fc series	MSA2012fc, MSA2212fc
P2000 G3 MSA series	P2000 G3 FC, P2000 G3 FC/iSCSI, P2000 G3 iSCSI, P2000 G3 SAS
P6000 EVA series	P6300, P6350, P6500, P6550
XP10000/12000	XP10000, XP12000
XP128/1024	XP1024, XP128
XP20000/24000	XP20000, XP24000
XP7 series	XP7, XP7 Gen 2

Hitachi Vantara

Device Family	Members
AMS/WMS series	AMS1000, AMS200, AMS500, WMS100
HUS 100 series	HUS110, HUS130, HUS150
Lightning 9900V series	9970V, 9980
SMS/AMS2000 series	AMS2100, AMS2300, AMS2500, SMS100
Thunder 9500V series	9500 (DF600), 9500V, 9570V, 9580V, AMS1000, AMS200, AMS500, WMS100
USP/NSC series	NSC55, USP100, USP1100, USP600
USPV/USPVM	USP V, USP VM
VSP G series	VSP F1500, VSP G1000, VSP G1500
VSP Gx00/Fx00 series	VSP F350, VSP F370, VSP F400, VSP F600, VSP F700, VSP F800, VSP F900, VSP G130, VSP G150, VSP G200, VSP G350, VSP G370, VSP G400, VSP G600, VSP G700, VSP G800, VSP G900

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Huawei

Device Family	Members
18000 series	18500, 18800, 18800F, HVS85T, HVS88T
OceanStor Series	Dorado2100, Dorado2100G2, Dorado5100, OceanStor 18500 V3, OceanStor 18500 V5, OceanStor 18500F V5, OceanStor 18800 V3, OceanStor 18800 V5, OceanStor 18800F V5, OceanStor 2100 V3, OceanStor 2200 V3, OceanStor 2600 V3, OceanStor 5300 V3, OceanStor 5300 V5, OceanStor 5300F V5, OceanStor 5500 V3, OceanStor 5500 V5, OceanStor 5500F V5, OceanStor 5600 V3, OceanStor 5600 V5, OceanStor 5600F V5, OceanStor 5800 V3, OceanStor 5800 V5, OceanStor 5800F V5, OceanStor 6800 V3, OceanStor 6800 V5, OceanStor 6800F V5, OceanStor 6900 V3, OceanStor Dorado 18000 V6, OceanStor Dorado 3000 V6, OceanStor Dorado 5000 V6, OceanStor Dorado 6000 V6, OceanStor Dorado 8000 V6, OceanStor Dorado18000 V3, OceanStor Dorado5000 V3, OceanStor Dorado6000 V3, S2200T, S2600T, S2600T V2, S3900-M100, S3900-M200, S3900-M300, S5500T, S5500T V2, S5600T, S5600T V2, S5800T, S5800T V2, S5900-M100, S5900-M200, S6800T, S6800T V2, S6900-M100
S5000 series	S2100, S2300, S2300E, S2600, S5100, S5300, S5500, S5600, S6800E, V1500, V1800
VIS series	S8000, VIS6000, VIS6000T

IBM

Device Family	Members
ESS 750/800 series	ESS 2105-800
FlashSystem series	FlashSystem 710, FlashSystem 820, FlashSystem 840, FlashSystem 900
Spectrum Virtualize series	FlashSystem 5010, FlashSystem 5030, FlashSystem 5100, FlashSystem 5200, FlashSystem 7100, FlashSystem 7200, FlashSystem 7300, FlashSystem 9100, FlashSystem 9200, FlashSystem 9200R, FlashSystem 9500, FlashSystem V9000, SAN Volume Controller, SANVC(2145), Spectrum Virtualize for Public Cloud, Storwize V3500, Storwize V3700, Storwize V5000, Storwize V5010, Storwize V5020, Storwize V5030, Storwize V7000, Storwize V7000 Unified
Storwize series	FlashSystem V9000, SANVC(2145), Storwize V3500, Storwize V3700, Storwize V5000, Storwize V5010, Storwize V5020, Storwize V5030, Storwize V7000, Storwize V7000 Unified
System Storage DS3000 series	DS3200, DS3300, DS3400
System Storage DS3500 series	DCS3700, DS3512, DS3524
System Storage DS5000 series	DS5100, DS5300
System Storage DS6000 series	DS6000 (1750-511), DS6800
System Storage DS8000 series	DS8000, DS8100, DS8300, DS8700, DS8800, DS8870, DS8880
System Storage N series	N3150, N3220, N3240, N3300, N3400, N3600, N3700, N5200, N5300, N5500, N5600, N6040, N6060, N6070, N6210, N6220, N6240, N6250, N6270, N7550T, N7600, N7700, N7750T, N7800, N7900, N7950T
System Storage XIV series	FlashSystem A9000, FlashSystem A9000R, XIV Storage System, XIV Storage System Gen3

IBM

Device Family	Members
TotalStorage DS4000 series	DS4100 (FAStT100), DS4200, DS4300 (FAStT600), DS4400 (FAStT700), DS4500 (FAStT900), DS4700, DS4800

Imation

Device Family	Members
Nexsan E-Series Systems	Nexsan E18, Nexsan E48, Nexsan E60

Infinidat

Device Family	Members
InfiniBox F-Series	InfiniBox F2000, InfiniBox F4000, InfiniBox F6000

NetApp

Device Family	Members
AFF Series	AFF 8020, AFF 8040, AFF 8060, AFF 8080EX, AFF A150, AFF A200, AFF A220, AFF A250, AFF A300, AFF A320, AFF A400, AFF A700, AFF A700s, AFF A800, AFF A900, AFF C190, AFF C250, AFF C400, AFF C800, AFF-A150, AFF-A200, AFF-A220, AFF-A250, AFF-A300, AFF-A320, AFF-A400, AFF-A700, AFF-A700s, AFF-A800, AFF-A900, AFF-C250, AFF-C400, AFF-C800
FAS2000/FAS900/FAS200 series	FAS2020, FAS2040, FAS2050, FAS2220, FAS2240-2, FAS2240-4, FAS250, FAS2520, FAS2552, FAS2554, FAS2620, FAS2650, FAS270, FAS2720, FAS2750, FAS500F, FAS920, FAS940, FAS960, FAS980
FAS3000/V3000 series	FAS3020, FAS3040, FAS3050, FAS3070, FAS3140, FAS3160, FAS3170, FAS3210, FAS3220, FAS3240, FAS3250, FAS3270, V3020, V3040, V3050, V3070, V3140, V3160, V3170, V3210, V3220, V3240, V3250, V3270
FAS6000/V6000 series	FAS6030, FAS6040, FAS6070, FAS6080, FAS6210, FAS6220, FAS6240, FAS6250, FAS6280, FAS6290, V6030, V6040, V6070, V6080, V6210, V6220, V6240, V6250, V6280, V6290
FAS8000/FAS9000 Series	FAS8020, FAS8040, FAS8060, FAS8080EX, FAS8200, FAS8300, FAS8700, FAS9000, FAS9500
GF series	GF270c, GF980

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Nexsan

Device Family	Members
Beast Systems	SASBeast, SATABeast, SATABeast2

NimbleStorage

Device Family	Members
CS/AF/HF-Series	AF1000, AF20, AF3000, AF40, AF5000, AF60, AF7000, AF80, AF9000, CS1000, CS235, CS300, CS3000, CS500, CS5000, CS700, CS7000, HF20, HF40, HF60

Oracle

Device Family	Members
Axiom series	Axiom 300, Axiom 500, Axiom 600
Storage 6580/6780 series	Sun Storage 6580 array, Sun Storage 6780 array
StorageTek 2500 series	StorageTek 2510 array, StorageTek 2530 array, StorageTek 2540 array, Sun Storage 2530-M2 array, Sun Storage 2540-M2 array
StorageTek 9900 series	StorageTek 9970 array, StorageTek 9980 array
StorageTek 9985/9990 series	StorageTek 9985 system, StorageTek 9990 system
ZFS Storage Appliance series	ZFS Storage 7110, ZFS Storage 7120, ZFS Storage 7210, ZFS Storage 7310, ZFS Storage 7320, ZFS Storage 7410, ZFS Storage 7420, ZFS Storage 7430, ZFS Storage ZS3-2, ZFS Storage ZS3-4, ZFS Storage ZS4-4, ZFS Storage ZS5-2, ZFS Storage ZS5-4

Pure Storage

Device Family	Members
FlashArray series	FA-400, FA-405, FA-420, FA-450, FlashArray //X10, FlashArray //X20, FlashArray //X50, FlashArray //X90, FlashArray//C, FlashArray//m10, FlashArray//m20, FlashArray//m50, FlashArray//m70, FlashArray//x70, FlashArray//XL, FlashArray//Xr2, FlashArray//Xr3

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SanDisk

Device Family	Members
ioMemory PX600 series	ioMemory PX600-1000, ioMemory PX600-1300, ioMemory PX600-2600, ioMemory PX600-5200
ioMemory SX300 series	ioMemory SX300-1300, ioMemory SX300-1600, ioMemory SX300-3200, ioMemory SX300-6400

StorageTek

Device Family	Members
FlexLine 200/300 series	FlexLine FLX280, FlexLine FLX380

Sun

Device Family	Members
StorEdge 9910/9960	StorEdge 9910, StorEdge 9960

Violin Memory

Device Family	Members
Violin 3000/6000 series	3120, 3202, 3205, 3210, 3220, 6212, 6232, 6264, 6606, 6616

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Host Bus Adapters

The information presented here does not refer to specific host bus adapter (HBA) models or architectures. Unless stated otherwise, Storage Foundation supports all the HBAs that are supported by the Microsoft Windows Server Catalog and storage array manufacturers listed here. Storage Foundation includes support for Fibre Channel over Ethernet (FCoE) Converged Network Adapters (CNAs), and iSCSI HBAs. For the required HBA BIOS/firmware and driver versions, see the Microsoft Windows Server Catalog and storage array manufacturers' hardware compatibility support matrices.

The information presented here is only to add exceptions for HBA models that have issues and are therefore not supported by the Storage Foundation products listed.

For supported iSCSI initiator versions, see the table below.

iSCSI Support

OS	HBA model	iSCSI software initiator version
Microsoft Windows	Microsoft iSCSI Software Initiator [1]	2.07 or above

1. The Microsoft iSCSI Software Initiator is supported on any Ethernet NIC card that is supported by the Microsoft iSCSI Software Initiator. In general, the Microsoft iSCSI initiator version listed on the HCL has been tested and qualified at the time of the SFW HA release. However, Symantec will support customers utilizing a newer version. Check with Microsoft on the most current and supported release of the iSCSI initiator. When adding a new target to Microsoft's iSCSI Software Initiator, Symantec recommends selecting the adapter and port of the NIC configured for iSCSI connection instead of selecting the default adapter. There is no Symantec DMP support for the Microsoft iSCSI Software Initiator unless an MPIO DSM is available for the specific array.

Switches

The information presented here does not refer to specific switch models or architectures.

Unless stated otherwise, Storage Foundation supports all Fibre Channel switches that are supported by the OS and storage array manufacturers listed here. For the required BIOS/firmware and driver versions for the switches, see the operating system and storage array manufacturers' hardware compatibility support matrices.

The information presented here is only to add exceptions for switch models that have issues and are therefore not supported by the Storage Foundation products listed.

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