



IBM System Storage N series Gateway Support Matrix

Covering:

N5000 System Hardware	N5200 2864-(G10, G20), N5500 2865-(G10, G20) N5300 2869-(G10, G20), N5600 2868-(G10, G20)
N6000 System Hardware	N6040 2858-(A10, A20) with Gateway Feature Code 9551 N6060 2858-(A12, A22) with Gateway Feature Code 9551 N6070 2858-(A11, A21) with Gateway Feature Code 9551 N6210 2858-(C10, C20) with Gateway Feature Code 9551 N6240 2858-(C21, E11, E21) with Gateway Feature Code 9551 N6270 2858-(C22, E12, E22) with Gateway Feature Code 9551
N7000 System Hardware	N7600 2866-(G10, G20), N7800 2867-(G10, G20) N7700 2866-(G11, G21), N7900 2867-(G11, G21) N7700 2866-(A11, A21) with Gateway Feature Code 9551 N7900 2867-(A11, A21) with Gateway Feature Code 9551
Disk Storage Expansion Units	EXN-1000 2861-001 EXN-2000 2863-001 EXN-3000 2857-003 EXN-3500 2857-006 EXN-4000 2863-004
N5000, N6000, N7000 Licensed Gateway Functions	2870-(58A, 58B, 58C, 58D, 58E, 58F, 58G, 58H, 581, 582, 583, 584, 585, 586, 645, 646, 655, 656, 665, 666, 667, 668, 677, 678, 685, 686, 695, 696)

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IBM System Storage

<http://www.ibm.com/systems/storage>

IBM N series Gateway Support Matrix

The IBM N series Gateway Compatibility Matrix provides the latest information on hardware models and FW versions of Switch and Storage array products that are currently qualified for use with IBM N series Gateway systems. This document takes precedence over other documents such as implementation and best practices guides.

For planning upgrades to future versions of switch and array firmware and hardware, please contact your IBM account representative who can obtain information on FW versions that are planned to be qualified in the next 1 to 3 months. If you cannot configure your environment to conform to this Support Matrix, please file a RPQ.

Using this Support Matrix

1. The Support Matrix is organized by the level of Data ONTAP for the following:
 - a. Check Array Vendor, Model and Firmware.
 - b. Check Switch Vendor, Model and Firmware.
 - c. Check the MetroCluster section if using MetroClusters
2. Review the Gateway Connectivity section for options such as:
 - a. Direct Attach (Not all arrays support this)
 - b. Array LUN options
 - c. Switch configurations
3. Review the Gateway System Capacities section for information on:
 - a. Minimum and maximum capacities
 - b. Root Volumes
4. Review the Gateway Support section for information on:
 - a. Use of Advanced Features with Storage Arrays

IBM N series Gateway Support Matrix Table of Contents

The IBM N series Gateway Support Matrix shows IBM N series Gateway systems support information and is divided into the following sections:

[Gateway Support Policies](#)

General policies for support with vendor storage, advanced array features and Data ONTAP currency.

[News and Recent Revisions](#)

Lists news and recent updates to this matrix including Data ONTAP, storage and FW versions.

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[Connectivity](#)

Lists topology, hardware options, size / number of LUNs and Gateway storage RAID support.

[Capacities](#)

Lists max/min raw connected capacity (single/cluster) to IBM N series Gateway models.

[Software](#)

Lists software functionality and products supported.

[Change History](#)

Lists previous updates to matrix by revision including Data ONTAP, storage and FW version.

[Disclaimer](#)

IBM N series Gateway Support Matrix Support Policies

IBM N series support policy

Customers often ask "How is support handled when a gateway is connected to another vendor's equipment?"

Below is the policy statement that describes current, existing support practice which applies to EMC, HP, Sun, HDS, Fujitsu, 3PAR, Veritas, QLogic, Microsoft, VMware, Brocade, Cisco, and any other vendor whose equipment interacts with N series systems:

Support of Customers with N series equipment attached to another vendor's products

If the customer has a support contract with IBM for our equipment, IBM will take responsibility for troubleshooting and fault isolation of support issues that the customer believes involve IBM. If the fault isolation determines that the other vendor's equipment is at fault, IBM Technical Support will advise the customer to open a case with the other vendor and then continue to work with the customer and other vendor to jointly resolve the issue.

Data ONTAP support currency

Our goal is to qualify concurrently with all new Data ONTAP releases.

Use of Advanced Features with Storage Arrays

N series gateway does not support third party array advanced features unless otherwise specified.

Some features are incompatible with Data ONTAP such as array-based thin provisioning, replication, snapshots and LUN resizing. These cannot be supported due to technical or architectural limitations.

Many others features such as array encryption, SSDs, tiering, etc. are possible to support but must be qualified to be confirm that they work properly with Data ONTAP.

Please file a RPQ if you require support for an array advanced feature.

IBM N series Gateway Support Matrix News and Recent Revisions	
Important News	<ul style="list-style-type: none"> • N series Gateway supports new N62xx controllers with 7.3.5.1 GA N series Gateway supports new N62xx controllers with 8.0.x Please review the Connectivity appendix for restrictions • N series Gateway supports native disk shelves as of Data ONTAP 7.3 (see Connectivity section) • Please note separate section for Data ONTAP 8.0 7-Mode
22-Jun-11	<p>Added support for ONTAP release 8.0.2 GA Added support for ONTAP release 7.3.6 RC1 Added support for new HP P9500 (HDS VSP) array for 8.0.x and 7.3.x standard HA Added support for new IBM DS8800 array for 8.0.x and 7.3.x standard HA Added N62xx support for HP P9500 with 8.0.x and 7.3.x Fabric and Stretch MetroCluster Added support for Cisco 4G switch firmware 4.27(e) Added support for Brocade switch firmware 6.3.2b2 for 8.0.x and 7.3.x Fabric MetroCluster Added support for Brocade 8G switch firmware v7.0.0 Added support for HP EVA 4000/6000/8000, 4100/6100/8100 firmware v6.240 Added support for HDS AMS 2xxx firmware v08A0/G and v08A0/J Added support for HDS AMS 200, 500, 1000 firmware v0786/H Added support for HDS VSP firmware v70-01-67 and v70-02-06 Added support for HDS USP-V, USP-VM firmware v60-07-61 and v60-08-02 Added support for IBM XIV firmware v10.2.4a Added support for IBM DS8100, DS8300 firmware v64.33.29.0 Added support for IBM DS4800, DS4700, DS4200 firmware v07.60.52.00 Added support for Fujitsu DX8000, DX400 firmware V20L70 Added N62xx support for 3PAR T/F class array with 7.3.6 RC1 Revised minimum root volume sizes for N6210 and N6240 with ONTAP 8.0.x</p>
16-May-11	<p>Added support for ONTAP release 8.0.2 RC1 Revised wording of restriction on NPIV for Gateway backend switches Added support for HDS AMS 2x00 firmware v08A0/B Added support for HDS VSP firmware v70-01-63-00 Added support for HDS VSP for 7.3.5.1, 8.0.1 and 8.0.2 RC1 Fabric and Stretch MetroCluster with N62xx platforms Added support for HP EVA x400 for 7.3.5.1 Fabric and Stretch MetroCluster with N62xx platforms Added support for IBM DS8700 for 7.3.5.1, 8.0.1 and 8.0.2 RC2 Fabric and Stretch MetroCluster with N62xx platforms Added support for IBM XIV for 7.3.5.1, 8.0.1 and 8.0.2 RC2 Fabric and Stretch MetroCluster with N62xx platforms Added support for EMC CX4 firmware v04.30.000.5.511 Added support for Brocade switch firmware v6.4.2 Added support for Cisco switch firmware v5.0(4c) Clarified array models supported for HP EVA and HP XP with ONTAP 7.3.x Stretch Metrocluster Added support for HP XP 20000/24000 with legacy platforms and 7.3.x Fabric MetroCluster Replaced instances of HP XP 20K/24K with 20000/24000 Added clarification requiring two independent fabrics for all installations in switch footnotes Added support for N62xx platforms for 3PAR T/F class arrays for 8.0.2 RC1 Added support for IBM DS8700 firmware v75.15.67.0</p>

**IBM N series Gateway Support Matrix
News and Recent Revisions**

14-Apr-11	<p>Added support for HDS VSP for 7.3.5.1 and 8.0.1 Fabric and Stretch MetroCluster with N60x0 and N7x00 platforms</p> <p>Added support for HP EVA x400 for 8.0.1 Fabric and Stretch MetroCluster with N62xx platforms</p> <p>Added support for HDS AMS 2x00 for 7.3.5.1 and 8.0.1 Fabric and Stretch MetroCluster with N62xx platforms</p> <p>Added support for HDS USP-V, USP-VM for 7.3.5.1 and 8.0.1 Fabric and Stretch MetroCluster with N62xx platforms</p> <p>Added support for HP XP 20K/24K for 7.3.5.1 and 8.0.1 Fabric and Stretch MetroCluster with N62xx platforms</p> <p>Added support for SUN STK 9990V for 7.3.5.1 and 8.0.1 Fabric and Stretch MetroCluster with N62xx platforms</p> <p>Added support for EMC VMAX firmware v5875</p> <p>Added support for HDS AMS 2x00 firmware v0897/H</p> <p>Added support for HP 3PAR firmware v2.3.1 MU3</p> <p>Added support for HDS VSP firmware v70-01-62</p> <p>Added support for HDS USP-V, USP-VM firmware v60-07-57 and v60-07-58</p> <p>Added support for Cisco 4G switch MDS 9222i (IBM 2054-E01) with firmware v5.0(4b)</p> <p>Added support for Brocade switch firmware v6.3.2b2</p>
14-Mar-11	<p>Revised switch coverage for Stretch MetroCluster 7.3.x and 8.0.x</p> <p>Updated ISL support coverage same as Filer MC for Fabric and Stretch MC sections</p> <p>Added support for EMC CX4 for 7.3.x Fabric and Stretch MC with N60x0 and N7x00 controllers</p> <p>Added support for IBM DS5020 and DS3950 firmware v07.70.38.00</p> <p>Added support for IBM DS5100 and DS5300 firmware v07.70.38.00</p> <p>Added support for Cisco switch firmware v4.2(7d) and v5.0(4b)</p> <p>Added support for Brocade switch firmware v6.4.1b</p> <p>Added support for HDS USP-V/VM firmware v60-07-55 and v60-07-56</p> <p>Added support for IBM XIV firmware v10.2.4</p> <p>Added support for HDS VSP firmware v70-01-29</p> <p>Added support for EMC CX4 firmware v04.30.000.5.509</p> <p>Removed RAID related notes from EMC CX arrays under 7.3.x section</p> <p>Corrected formatting for root volume limits for N7x00 platforms</p>
15-Feb-11	<p>Added support for ONTAP release 7.3.5.1 GA</p> <p>Added support for Sun STK 9990V for 7.3.x and 8.0 Fabric and Stretch MetroCluster</p> <p>Added IBM XIV array support for 7.3.5.1 Dedicated SAN MetroCluster</p> <p>Added support for HDS VSP storage on 7.3.4, 7.3.5.1 and 8.0.1</p> <p>Added support for Brocade switch firmware v6.2.2e and v6.4.1a for 7.2.x, 7.3.x and 8.0.x</p> <p>Added support for AMS 21xx array firmware version 0897/C</p> <p>Added support for AMS 200/500/1K array firmware version 0786/G</p> <p>Merged firmware support for HDS OEM'ed arrays to reference HDS arrays</p> <p>Added support for EMC CX4 firmware 04.30.000.5.508</p> <p>Added support for IBM DS8700 firmware 75.15.59.0</p> <p>Added support for Fujitsu DX arrays firmware V20L60</p> <p>Corrected minimum root volume size for N62xx (same as Filer) for 7.3.x</p> <p>Revised Fabric and Stretch MetroCluster notes for 7.3.x and 8.0.x</p>

[See Change History for previous revisions.](#)

EMC Storage with Data ONTAP 8.0 7-Mode					
Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Models: CLARiiON CX4-120, CX4-240, CX4-480, CX4-960 (Restrictions on supported fabrics. See notes.)					
Microcode FW	N7900	Y	Y		
04.30.000.5.511	N7700				
04.30.000.5.509	N6270		Y		
04.30.000.5.508	N6240				
04.30.000.5.507	N6210				
04.29.000.5.014	N6070	Y	Y		
04.29.000.5.013	N6060				
04.29.000.5.006	N6040				
04.29.000.5.003	N5600	Y	Y		
04.28.000.5.706	N5300				
Notes:1, 8, 9					
Models: CLARiiON CX3-20, CX3-40, CX3-80					
Microcode FW	N7900	Y	Y		
03.26.xxx.5.031	N7700				
03.26.xxx.5.029	N7800	Y	Y		
03.26.xxx.5.026	N7600				
3.26.xxx.5.025	N5600				
- Notes 1, 3	N6270		Y		
	N6240				
	N6210				
	N6070	Y	Y		
	N6060				
	N6040				
	N5300	Y	Y		
Models: CLARiiON CX 300, 500, 700 series					
Microcode FW	N7900	Y	Y		
02.26.xxx.5.031	N7700				
02.26.xxx.5.028	N7800	Y	Y		
02.26.xxx.5.026	N7600				
02.26.xxx.5.025	N5600				
Notes 1, 3	N6070	Y	Y		
	N6060				
	N6040				
	N5300	Y	Y		

IBM N series Gateway Support Matrix – EMC-8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Models: V-MAX SE, V-MAX (Restrictions on supported fabrics. See notes.)					
Microcode FW: 5875 5874 See Notes: 4, 5, 6, 10, 11	N7900		Y		
	N7700				
	N6270		Y		
	N6240				
	N6210				
	N6070		Y		
	N6060 N6040				
N5600 N5300		Y			
Models: Symmetrix DMX3, DMX4					
Microcode FW 5772 5773 Notes 3, 4, 5, 6	N7900	Y	Y		
	N7700				
	N7800	Y	Y		
	N7600				
	N5600				
	N6270		Y		
	N6240 N6210				
	N6070	Y	Y		
	N6060 N6040				
N5300	Y	Y			

IBM N series Gateway Support Matrix – EMC-8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
NOTES:					
1. "xxx" field in FW version is the CLARiiON Model Number being used					
2. Deleted					
3. N7600 and N7800 require the use of 4Gb Initiators. The onboard initiators are not supported for connecting to 3rd party arrays.					
4. Every SymmDev presented to the Gateway must have the attribute "SCSI3_persist_reserv" set, and must be for Host Type "Open Systems.					
5. All array ports used to present storage to the Gateway must have the following attributes set: Common Serial Number, SCSI-3 command set, SPC-2 standard inquiry, Unique World Wide Name. We strongly recommend not sharing array ports between Gateway and n					
6. Potential of incompatible port requirements when sharing ports between Gateway and non-Gateway clients. Each host connecting to the DMX has requirements for different port attribute settings, which can result in an impossible-to-implement configuration. If ports cannot be dedicated to the Gateway, confirm with the customer that all other hosts using that port are compatible with our requirements. See the Gateway documentation for more detailed information.					
7. Deleted					
8. Deleted					
9. Supported with EMC 4G & 8G FC host interface cards.					
10. Use Implementation Guide for EMC Symmetrix Storage, and follow configuration requirements and restrictions for DMX-4.					
11. Deleted.					

Fujitsu Eternus Storage with Data ONTAP 8.0 7-Mode					
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Fujitsu ETERNUS DX8000 (DX8400, DX8700) Fujitsu ETERNUS DX400 (DX410, DX440)					
Microcode FW:	N7900		Y		
V20L70	N7700		Y		
V20L60	N6270		Y		
V20L50	N6240				
V20L43	N6210				
See notes: 1, 2, 3	N6070		Y		
	N6060		Y		
	N6040		Y		
	N5600 N5300		Y		
NOTES:					
1. Use Implementation Guide for Fujitsu Eternus Storage, and follow "Host Response Profile parameter settings specification 2" for the Eternus 8000,					
2. Use of Fujitsu Disk Encryption feature supported for these models.					
3. Use of Fujitsu SSD storage is supported for DX8000 and DX400 models only					

HDS and Hitachi SANRISE Storage with Data ONTAP 8.0 7-Mode					
	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Storage Array					
Models: Tagmastore Adaptable Modular Storage AMS Model 2100, 2300, 2500					
Microcode FW	N7900	Y	Y		
08A0/J	N7700	Y	Y		
08A0/G	N6270		Y		
0897/H	N6240				
0897/C	N6210				
0893/G	N6070	Y	Y		
0893/E	N6060	Y	Y		
0890/H	N6040	Y	Y		
0890/B	N5600	Y	Y		
0885/D	N5300	Y	Y		
0885/A					
0880/A					
0872/B					
0865/E					
0860/C					
See note 2. For HDP support, see notes 4 and 5					
Models: Tagmastore Adaptable Modular Storage AMS Model 200, 500, 1000					
Microcode FW	N7900	Y	Y		
0786/H	N7700				
0786/G	N7800	Y	Y		
0786/C	N7600				
0783/G	N5600				
0783/D	N6270		Y		
0783/A	N6240				
0782/E	N6210				
0782/B	N6070	Y	Y		
	N6040				
See Note 3	N6060	Y	Y		
	N5300	Y	Y		

IBM N series Gateway Support Matrix – HDS–8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Model: VSP (Virtual Storage Platform)					
Microcode FW: 70-02-06	N7900 N7700		Y		
70-01-67	N6270		Y		
70-01-63	N6240				
70-01-62	N6210				
70-01-29	N6070		Y		
70-01-28	N6060				
70-01-03	N6040				
- External storage is supported - See Note 1 - See note 3 - For HDP support, see note 4 - See note 6					
Models: TagmaStore USP-V, USP-VM					
Microcode FW 60-08-02	N7900 N7700	Y	Y		
60-07-61	N7800				
60-07-58	N7600				
60-07-57	N5600				
60-07-56	N5300				
60-07-55	N6270		Y		
60-07-53	N6240				
60-07-52	N6210				
60-07-33	N6070	Y	Y		
60-07-32	N6060				
60-07-00	N6040				
60-06-12					
60-06-10					
60-06-06					
60-06-05					
60-05-16					
60-05-15					
60-05-14					
60-05-10-00					
60-04-15-00					
60-04-14-00					
60-02-48-00/12					
- See Note 1, 3					

IBM N series Gateway Support Matrix – HDS–8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Models: TagmaStore USP Model 1100, 600, 100 NSC Model 55					
Microcode FW	N7900	Y	Y		
50-09-98	N7700				
50-09-96	N7800	Y	Y		
50-09-95	N7600				
50-09-92	N5600	Y	Y		
50-09-90	N6270		Y		
50-09-86	N6240				
50-09-85	N6210				
50-09-83	N6070	Y	Y		
50-09-78	N6060				
50-09-07	N6040				
See Note 1, 3	N5300	Y	Y		
NOTES:					
1. External storage attached behind these array models can be performance sensitive. Configuration must comply with HDS and IBM N series best practices to assure good performance.					
2. Must follow published instructions for configuring the HDS AMS 200/500/1000 storage arrays.					
3. N7600 and N7800 require the use of 4Gb Initiators. The onboard initiators are not supported for connecting to 3rd party arrays.					
4. Over provisioning “Dynamic Provisioning Pools” (DP Pools) that provide LUNs to a gateway system is prohibited. Never assign more Logical Unit capacity than the total capacity of the DP Pool. Please consult your Hitachi documentation or the support provider for your array for additional information. If you are unsure how to prevent over provisioning of the DP Pool, then use standard RAID group type when creating Logical Units.					
5. Use of HDP in any MetroCluster configurations supported. Must comply with footnote #4, and all other MetroCluster restrictions.					
6. For VSP configuration information please consult the USP sections of the Gateway Implementation Guide for Hitachi Storage.					

HP Storage with Data ONTAP 8.0 7-Mode					
Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
EVA 8400 (Restrictions on supported fabrics. See notes)					
Microcode FW XCS 09534000 See notes: 3, 4, 6, 7	N7900		Y		
	N7700				
	N6270		Y		
	N6240				
	N6210				
	N6070		Y		
	N6060				
N6040					
N5600			Y		
N5300					
EVA 6400 (Restrictions on supported fabrics. See notes)					
Microcode FW XCS 09534000 See notes: 3, 4, 6, 7	N7900		Y		
	N7700				
	N6270		Y		
	N6240				
	N6210				
	N6070		Y		
	N6060				
N6040					
N5600			Y		
N5300					
EVA 4400 (Restrictions on supported fabrics. See notes)					
Microcode FW XCS 09534000 See notes: 3, 4, 6, 7	N7900		Y		
	N7700				
	N6270		Y		
	N6240				
	N6210				
	N6070		Y		
	N6060				
N6040					
N5600			Y		
N5300					

IBM N series Gateway Support Matrix – HP-8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
EVA 8000					
Microcode FW 6.240 6.220 See notes 3, 4	N7900	Y	Y		
	N7700				
	N7800	Y	Y		
	N7600				
	N5600				
	N5300				
	N6070	Y	Y		
N6060					
N6040					
EVA 4000 / 6000					
Microcode FW 6.240 6.220 See notes 3, 4, 5	N7900	Y	Y		
	N7700				
	N7800	Y	Y		
	N7600				
	N5600				
	N5300				
	N6070	Y	Y		
N6060					
N6040					
EVA 8100					
Microcode FW 6.240 6.220 See notes 3, 4, 5	N7900	Y	Y		
	N7700				
	N7800	Y	Y		
	N7600				
	N6070	Y	Y		
	N6060				
	N6040				
N5600	Y	Y			
N5300					
EVA 4100 / 6100					
Microcode FW 6.240 6.220 See notes 3, 4, 5	N7900	Y	Y		
	N7700				
	N7800	Y	Y		
	N7600				
	N6070	Y	Y		
	N6060				
	N6040				
N5600	Y	Y			
N5300					

IBM N series Gateway Support Matrix – HP-8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Model P9500 (HDS VSP)					
Microcode FW: May use any version of firmware listed Starting at FW version 70-01-62, for the equivalent HDS model assuming that HP has chosen to distribute that version of firmware. See Note 1	N7900		Y		
	N7700				
	N6270 N6240 N6210		Y		
	N6070 N6060 N6040		Y		
Model XP24000 / XP20000 (HDS USP-V)					
May use any version of firmware listed for the equivalent HDS model, assuming that HP has chosen to distribute that version of firmware. - See Note 1, 5	N7900	Y	Y		
	N7700				
	N7800 N7600 N5600 N5300				
	N6270 N6240 N6210		Y		
	N6070 N6060 N6040	Y	Y		

IBM N series Gateway Support Matrix – HP-8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Model XP12000, XP10000 (HDS USP, NSC)					
May use any version of firmware listed for the equivalent HDS model, assuming that HP has chosen to distribute that version of firmware. - See Note 1, 5	N7900	Y	Y		
	N7700				
	N7800	Y	Y		
	N7600				
	N6270		Y		
	N6240				
	N6210				
N6070	Y	Y			
N6060					
N6040					
N5600	Y	Y			
N5300					
NOTES:					
1. External storage attached behind these array models can be performance sensitive. Configuration must comply with HDS and IBM N series best practices to assure good performance.					
3. Make sure that switch FW used is on HP support matrix as well as this N series gateway support matrix.					
4. Non-disruptive upgrade of array microcode is NOT supported					
5. N7600 and N7800 require the use of 4Gb Initiators. The onboard initiators are not supported for connecting to 3rd party arrays.					
6. Deleted.					
7. Must follow published instructions for configuring HP EVA Storage.					

IBM Storage with Data ONTAP 8.0 7-Mode					
Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
IBM Model XIV (Type 2810)					
Microcode FW:	N7900		Y		
10.2.4a	N7700				
10.2.4	N6270		Y		
10.2.2a	N6210				
10.2.2	N6240				
Notes: 8	N6040		Y		
	N6060				
	N6070				
	N5300		Y		
N5600					
DS5100, DS5300					
Restrictions on supported fabrics, see NOTES. Only supported with expansion enclosures EXP810 and EXP5000					
IBM LIC Level:	N7900	Y	Y		
07.70.38.00	N7700				
07.70.23.00	N6270		Y		
07.60.40.00	N6240				
07.60.28.00	N6210				
07.60.13.05	N6040	Y	Y		
07.50.13.00	N6060				
07.50.12.00	N6070				
07.36.17.00	N5300	Y	Y		
See Notes: 1, 3, 4	N5600				
DS5020 and DS3950					
Restrictions on supported fabrics, see NOTES					
LIC Level	N7900		Y		
07.70.38.00	N7700				
07.70.23.00	N6270		Y		
07.60.40.00	N6240				
07.60.28.00	N6210				
07.60.13.05	N6040, N6060, N6070		Y		
See Notes 1, 3, 5	N5300, N5600				

IBM N series Gateway Support Matrix – IBM-8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
DS8800 (Model 951, 95E)					
Microcode FW: 86.10.139.0 See Note 7	N7900		Y		
	N7700				
	N6270		Y		
	N6240				
	N6210				
	N6070		Y		
	N6260				
	N6240				
Model DS8700 (model 941 and 94E) – Restrictions on supported fabrics. See notes.					
Microcode FW: 75.15.67.0 75.15.59.0 75.15.41.0 75.1.145.1 75.1.145.0 75.0.177.0 See notes : 6, 7	N7900		Y		
	N7700				
	N6270		Y		
	N6240				
	N6210				
	N6070		Y		
	N6060				
	N6040				
	N5300		Y		
	N5600				
DS8100 (Model 921, 931), DS8300 (model 922, 932, and Model 9A2, 9B2 - LPAR) (FibreChannel)					
IBM LIC Level 64.33.29.0 64.33.20.0 64.33.13.0 64.30.100.0 64.30.87.0 64.21.18.0 64.20.139.0 64.1.16.3 See note 2	N7900	Y	Y		
	N7700				
	N6270		Y		
	N6240				
	N6210				
	N6070	Y	Y		
	N6060				
	N6040				
	N5300	Y	Y		
	N5600				

IBM N series Gateway Support Matrix – IBM-8

Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
DS4800 (FC + SATA)					
IBM LIC Level	N7900	Y	Y		
07.60.52.00	N7700				
07.60.40.00	N7800	Y	Y		
07.60.28.00	N7600				
07.50.13.00	N6070	Y	Y		
07.36.17.00	N6060				
07.15.10.01	N6040				
See note: 2, 3	N5600	Y	Y		
	N5300				
DS4700					
DS4200 (SATA)					
IBM LIC Level	N7900	Y	Y		
07.60.52.00	N7700				
07.60.40.00	N7800	Y	Y		
07.60.28.00	N7600				
07.50.13.00	N6070	Y	Y		
07.36.17.00	N6060				
07.15.10.01	N6040				
See note: 2, 3	N5600	Y	Y		
	N5300				
Notes:					
1. Deleted					
2. N7600 and N7800 require the use of 4Gb Initiators. The onboard initiators are not supported for connecting to 3rd party arrays.					
3. Non Disruptive Upgrade of Storage Array Firmware is not supported					
4. Supported with IBM 4Gb and 8Gb host interface cards.					
5. Use Implementation Guide for IBM Storage and follow instructions for DS5100/DS5300					
6. Deleted					
7. Use Implementation Guide for IBM Storage and follow instructions for DS8100/DS8300					
8. Non-disruptive upgrade of the storage array is supported for Gateway as long as the current version is not earlier than microcode version 10.2.0a. Both the current version and the target version must be listed on this support matrix, and must be supported by IBM for non-disruptive upgrade of the array.					

Sun Microsystems Storage with Data ONTAP 8.0 7-Mode					
Storage Array	IBM N series Gateway HA-pair or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Models: StorageTek (StorEdge) 9990 (HDS USP) StorageTek (StorEdge) 9985 (HDS NSC55)					
May use any version of firmware listed for the equivalent HDS model, assuming that SUN has chosen to distribute that version of firmware - See Note 1, 2	N7900	Y	Y		
	N7700				
	N7800	Y	Y		
	N7600				
	N6270		Y		
	N6240				
	N6210				
	N6070	Y	Y		
N6060					
N6040					
N5600	Y	Y			
N5300					
Models: StorageTek (StorEdge) 9990V (HDS USP-V)					
May use any version of firmware listed for the equivalent HDS model, assuming that SUN has chosen to distribute that version of firmware - See Note 1, 2	N7900	Y	Y		
	N7700				
	N7800				
	N7600				
	N6270		Y		
	N6240				
	N6210				
	N6070	Y	Y		
N6060					
N6040					
N5600	Y	Y			
N5300					
NOTES:					
1. External storage attached behind these array models can be performance sensitive. Configuration must comply with HDS and N series best practices to assure good performance.					
2. N7600 and N7800 require the use of 4Gb Initiators. The onboard initiators are not supported for connecting to 3rd party arrays.					

3PAR Storage with Data ONTAP 8.0 7-Mode					
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions			
		8.0	8.0.1 8.0.2		
Models: InServ® Storage Server models T400, T800, F200, F400					
Microcode FW:	N7900		Y		
2.3.1 MU3	N7700				
2.3.1 MU2	N6270		8.0.2 only		
2.3.1 MU1	N6240				
See Notes 1, 2	N6210				
	N6070		Y		
	N6060				
	N6040				
	N5600		Y		
	N5300				
Models: InServ® Storage Server Models S400, S800					
Microcode FW:	N7900		Y		
2.3.1 MU3	N7700				
2.3.1 MU2	N6070		Y		
2.3.1 MU1	N6060				
	N6040				
	N5600		Y		
	N5300				
Models: InServ® Storage Server Model E200					
Microcode FW:	N7900		Y		
2.3.1 MU3	N7700				
2.3.1 MU2	N6070		Y		
2.3.1 MU1	N6060				
	N6040				
	N5600		Y		
	N5300				
NOTES:					
1. Deleted.					
2. Use Implementation Guide for 3PAR InServ and follow instructions for S400/S800, including correct setting for Host Persona from 3PAR documentation					

FibreChannel Switch Support with Data ONTAP 8.0 7-Mode					
Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	8.0	8.0.1 8.0.2	
Brocade Switches					
8Gbps Switches					
Brocade DCX Backbone (includes DCX-4S) (Note 2, 4)		8G, 48 port	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	
Brocade 5300 (Note 2, 4)		Director with 8G 48-port blade	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	
Brocade 5100 (Note 2, 4)		Director with 8G 24-port blade	6.1.1a, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	6.1.1a, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	
Brocade 300 (Note 2, 4)		Director with mixed 4G/8G blade	6.1.1a, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	6.1.1a, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	8.0	8.0.1 8.0.2	
4Gbps Switches					
Brocade SilkWorm 48000 (Note 2, 3)	IBM 2109 Model M48	4Gb, 256-port	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	
Brocade 7500 (Note 2)	IBM 2005 Model R18	4Gb, 18 port	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.3.1c, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.3.1c, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	
Brocade 5000 (Note 2)	IBM 2005 Model B5K	4Gb, 32 port	6.0.0b, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	6.0.0b, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	
Brocade SilkWorm 4900 (Note 2)	IBM 2005 Model B64	4Gb,64-port	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.3.1c, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.3.1c, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	
Brocade SilkWorm 4100 (Note 2)	IBM 2005 Model B32	4Gb, 32-port	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.3.1c, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	
Brocade SilkWorm 200E (Note 2)	IBM 2005 Model B16	4Gb, 16-port	6.0.0b, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e	6.0.0b, 6.1.2a, 6.1.2c, 6.1.2b, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e	

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	8.0	8.0.1 8.0.2	
Cisco Switches					
8Gbps Switches					
Cisco MDS 9148 (note 2, 5)		8G, 48 port	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
Cisco MDS 9513, 9509, 9506 (note 2, 5)		Director with 8G 48-port blade	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
Cisco MDS 9513, 9509, 9506 (note 2, 5)		Director with 8G 24-port blade	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
Cisco MDS 9513, 9509, 9506 (note 2, 5)		Director with mixed 4G/8G blade	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
4Gbps Switches					
Cisco MDS 9222i (note 2)	IBM 2054 Model E01	4G, 66-port	5.0(4b), 5.0(4c)	5.0(4b), 5.0(4c)	
Cisco MDS 9513 (Note 2)	IBM 2054 Model E11	Director -4Gb 528 port (Note S9)	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
Cisco MDS 9509 (Note 2)	IBM 2054 Model E07 IBM 2062 Models D07 / T07	Director -4Gb, 336-port (Note S9)	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
Cisco MDS 9506 (Note 2)	IBM 2054 Model E04 IBM 2062 Models D04 / T04	Director -4Gb, 192-port (Note S9)	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
Cisco MDS 9124 (Note 2)	IBM 2053-424	4Gb, 24 port	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	4.1(1c), 4.1(3a), 4.2(1a) 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	
NOTES:					
1. Any supported Supervisor is acceptable with the use of 4G blades					
2. For all switches: NPIV (N_Port ID Virtualization), Media Encryption, and Inter-VSAN routing cannot be used in the data path between Gateway initiator ports and storage array target ports. For Cisco switches, features listed above can be used on ports not used by any Gateway traffic or in zones not including any Gateway initiators. All deployments require the use of two or more independent redundant fabrics. Virtual fabrics within a single chassis do not meet this requirement.					
3. The 8Gb FC Module is not supported with the Brocade 48000					
4. Use of Brocade-approved 4G SFP or 8G SFP's is supported					
5. Use of Cisco-approved 4G SFP or 8G SFP is required					

**Gateway MetroCluster Support
with Data ONTAP 8.0 7-Mode**

Standard Metrocluster configurations

Dedicated SAN Fabric only – See Fabric MetroCluster notes for details

These configurations do not require a RPQ.

Gateway Model	Data ONTAP version(s)	Switches	Storage
N6270 N6240 N6210	8.0.1 8.0.2	Brocade 5100, 300 with switch FW 6.1.1a, 6.3.1c, 6.3.2a, 6.3.2b2 Brocade 5000, 200E with switch FW 6.0.0b	EMC CLARiiON CX4 HDS AMS 2100, 2300, 2500 HDS USP-V, USP-VM HDS VSP IBM DS8700 IBM XIV HP EVA 4400, 6400, 8400 HP P9500 HP XP 20000/24000 SUN STK 9990V
N7900 N7700 N6070 N6060 N6040	8.0.1 8.0.2	Brocade 5100, 300 with switch FW 6.1.1a, 6.3.1c, 6.3.2a, 6.3.2b2 Brocade 5000, 200E with switch FW 6.0.0b	IBM DS8700 HP EVA 4400, 6400, 8400 Fujitsu Eternus DX8000, DX400 Sun STK 9990V IBM XIV EMC CLARiiON CX4 HDS VSP HP P9500
N7900 N7700 N6070 N6060 N6040 N5600 N5300	8.0 8.0.1 8.0.2	Brocade 5100, 300 with switch FW 6.1.1a, 6.3.1c, 6.3.2a, 6.3.2b2	HDS AMS 2100, 2300, 2500 HDS USP-V and USP-VM HP XP 20000/24000 Sun STK 9990V
N7900 N7700 N6070 N6060 N6040 N5600 N5300	8.0 8.0.1 8.0.2	Brocade 5000, 200E with switch FW 6.0.0b	

Fabric MetroCluster Notes
Configurations must adhere to the Best Practices as described in the Data ONTAP® Gateway Systems MetroCluster Guide. Please note the following restrictions on MetroCluster configurations:
1. Only switches and switch firmware listed in the table above will be supported.
2. N series native disk shelf disk drives are not supported with MetroClusters.
3. Fabrics must meet all of the following topology restrictions: 3.1. Every MetroCluster deployment will have redundant fabrics. 3.2. Each fabric will have exactly two switches, with a single non-trunked ISL connecting the switches. 3.3. Each fabric will be dedicated to the traffic for a single MetroCluster – no other devices may be connected to the MetroCluster fabric. 3.4. Each fabric will be configured to prohibit probing of the FCVI ports by the Fabric nameserver.
4. Storage must be symmetric (e.g. same storage on both sides). For storage which is not symmetric, but is similar, please file a RPQ.
5. Follow all notes and restrictions for switches documented on the switch Matrix.
6. The Absolute Maximum distance with Fabric MetroClusters is 100KM between sites, Maximum distance will vary based on the ISL speed and switch model, please refer the table "Maximum distance supported with Fabric MetroCluster" on the N series Interop web page: www.ibm.com/systems/storage/network/interophome.html
7. Max Lun support 7.1. Data ONTAP 8.0 max LUN count is lesser of either 672 or platform limit 7.2. Data ONTAP 8.0.1, 8.0.2 max LUN count is lesser of either 840 or platform limit
8. For FOS 6.3.1c Brocade has imposed the following ISL distance limitations: • At 8 Gb/sec the maximum link length is 58 km.
9. Special instructions for N62xx gateway Controllers: 9.1. You must use an add-on HBA to connect to storage. 9.2. N6210 gateway configurations are limited to connect to a single storage array per site with a fixed config, Separate port pairs should be used to connect local and remote arrays.

Stretch MetroCluster configurations			
For stretch MetroClusters, the following storage arrays are supported. Refer to array section of the support matrix to determine supported models and versions of array firmware			
N6270 N6240 N6210	8.0.1 8.0.2	N/A (Stretch MetroCluster)	EMC CLARiiON CX4 HDS AMS 2100, 2300, 2500 HDS USP-V, USP-VM HDS VSP IBM DS8700 IBM XIV HP EVA 4400, 6400, 8400 HP P9500 HP XP 20000/24000 SUN STK 9990V
N7900 N7700 N6070 N6060 N6040	8.0.1 8.0.2	N/A (Stretch MetroCluster)	HP EVA 4400, 6400, 8400 IBM DS8700 Fujitsu Eternus DX8000, DX400 Sun STK 9990V IBM XIV EMC CLARiiON CX4 HDS VSP HP P9500
N7900 N7700 N7800 N7600 N6070 N6060 N6040 N5600 N5300	8.0 8.0.1 8.0.2	N/A (Stretch MetroCluster)	HDS AMS 2100, 2300, 2500 HDS USP-V and USP-VM HP XP 20000/24000 Sun STK 9990V Note that all other rules for MetroCluster configurations must be followed; otherwise, a RPQ is required.
Stretch MetroCluster Notes			
Configurations must adhere to the Best Practices as described in the Data ONTAP® Gateway Systems MetroCluster Guide. Please note the following restrictions on MetroCluster configurations:			
1. Switch Support for Backend Connectivity. 1.1 Please refer to Gateway Dedicated SAN Fabric MetroCluster Switch Support with Data ONTAP 8.0.x 7-Mode. 1.2 Follow all notes and restrictions for switches documented on the switch Matrix of 8.0.x 7-Mode.			
2. Storage must be symmetric (e.g. same storage on both sides). For storage which is not symmetric, but is similar, please file a RPQ.			
3. N series native disk shelf disk drives are not supported with Stretch MetroClusters.			
4. Data ONTAP 8.0.x max LUN count as per the platform limit			
5. Maximum distance with Fabric MetroClusters is 100KM between sites, Maximum distance will vary based on the ISL speed and switch model, please refer the table "Maximum distance supported with Fabric MetroCluster" on the N series Interop web page: www.ibm.com/systems/storage/network/interophome.html			
6. Special instructions for N62xx gateway Controllers: 6.1 You must use an add-on HBA to connect to storage. 6.2 N6210 gateway configurations are limited to connect to a single storage array per site with a fixed config, Separate port pairs should be used to connect local and remote arrays			

EMC Storage with Data ONTAP 7.x								
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models: CLARiiON CX4-120, CX4-240, CX4-480, CX4-960 (Restrictions on supported fabrics. See notes.)								
Microcode FW	N7900						Y	Y
04.30.000.5.511	N7700							
04.30.000.5.509	N7800						Y	Y
04.30.000.5.508	N7600							
04.30.000.5.507	N5600							
04.29.000.5.014	N6270							Y
04.29.000.5.013	N6240							
04.29.000.5.006	N6210							
04.29.000.5.003	N6070						Y	Y
04.28.000.5.706	N6060							
04.28.000.5.504	N6040							
04.28.000.5.501	N5300						Y	Y
	N5500						Y	Y
Notes:1, 8, 9	N5200							
Models: CLARiiON CX3-20, CX3-40, CX3-80								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
03.26.xxx.5.031	N7700							
03.26.xxx.5.029	N7800	Y	Y	Y	Y	Y	Y	Y
03.26.xxx.5.026	N7600							
3.26.xxx.5.025	N5600							
3.26.xxx.5.020	N6270							Y
3.26.xxx.5.010	N6240							
3.24.xxx.5.016	N6210							
3.24.xxx.5.011	N6070			Y	Y	Y	Y	Y
3.22.xxx.5.005	N6040							
	N6060				Y		Y	Y
- Notes 1, 3	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
	N5200							

IBM N series Gateway Support Matrix – EMC

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models:								
CLARiiON CX 300, 500, 700 series								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
02.26.xxx.5.031	N7700							
02.26.xxx.5.028	N7800	Y	Y	Y	Y	Y	Y	Y
02.26.xxx.5.026	N7600							
02.26.xxx.5.025	N5600							
02.19.xxx.5.038	N6070			Y	Y	Y	Y	Y
02.19.xxx.5.030	N6040							
	N6060				Y		Y	Y
Notes 1, 3	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
	N5200							
Models:								
EMC V-MAX SE, V-MAX (Restrictions on supported fabrics. See notes.)								
Microcode FW:	N7900						Y	Y
5875	N7700						Y	Y
5874	N6270							Y
	N6240							
See notes: 4, 5, 6, 10, 11	N6210							
	N6070						Y	Y
	N6060						Y	Y
	N6040						Y	Y
	N5600						Y	Y
	N5300						Y	Y
Models:								
Symmetrix DMX 800, 1000, 2000, 3000, DMX3, DMX4								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
5671, 5771	N7700							
5672, 5772	N7800		Y	Y	Y	Y	Y	Y
5773	N7600							
	N5600							
Notes 3, 4, 5, 6	N6270							Y
	N6240							
	N6210							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060				Y		Y	Y
	N5300		Y	Y	Y	Y	Y	Y
	N5500		Y	Y	Y	Y	Y	Y
	N5200							

IBM N series Gateway Support Matrix – EMC

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
NOTES:								
1. "xxx" field in FW version is the Clariion Model Number being used								
2. Deleted								
3. N7800 and N7600 require the use of 4Gb Initiators. The onboard 2 Gb initiators are not supported for connecting to 3rd party arrays.								
4. Every SymmDev presented to the Gateway must have the attribute "SCSI3_persist_reserv" set, and must be for Host Type "Open Systems."								
5. All array ports used to present storage to the Gateway must have the following attributes set: Common Serial Number, SCSI-3 command set, SPC-2 standard inquiry, Unique World Wide Name. We strongly recommend not sharing array ports between Gateway and non-Gateway clients.								
6. Potential of incompatible port requirements when sharing ports between Gateway and non-Gateway clients. Each host connecting to the DMX has requirements for different port attribute settings, which can result in an impossible-to-implement configuration. If ports cannot be dedicated to the Gateway, confirm with the customer that all other hosts using that port are compatible with our requirements. See the Gateway documentation for more detailed information.								
7. Deleted								
8. Use Note 11.								
9. Supported with EMC 4G & 8G FC host interface cards.								
10. Use Implementation Guide for EMC Symmetrix Storage, and follow configuration requirements and restrictions for DMX-4.								
11. Supported with Brocade 4G & 8G fabrics from this support matrix, with listed versions of firmware. Supported with Cisco 4G & 8G fabrics from this support matrix, with listed versions of firmware.								

Fujitsu Eternus Storage with Data ONTAP 7.x								
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Fujitsu ETERNUS DX8000 (DX8400, DX8700) Fujitsu ETERNUS DX400 (DX410, DX440)								
Microcode FW:	N7900						7.3.3	Y
V20L70	N7700						and later	
V20L60	N6270							Y
V20L50	N6240							
V20L43	N6210							
See notes: 1, 2, 4, 5	N6070						7.3.3	Y
	N6060						and later	
	N6040							
	N5600						7.3.3	Y
	N5300						and later	
Fujitsu ETERNUS 8000 (M700, M900, M1100) Fujitsu ETERNUS 4000 (M300, M500)								
Microcode FW:	N7900		Y	Y	Y	Y	Y	Y
V11L80	N7700							
V11L71	N7800	Y	Y	Y	Y	Y	Y	Y
V11L52	N7600							
V11L12	N5600							
V10L53	N6070			Y	Y	Y	Y	Y
See note: 3	N6040							
	N6060					Y	Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
	N5200							

IBM N series Gateway Support Matrix – Fujitsu

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Fujitsu ETERNUS 3000 (M500, M700)								
Microcode FW: V10L53	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N5600							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060					Y	Y	Y
N5300	Y	Y	Y	Y	Y	Y	Y	
N5500	Y	Y	Y	Y	Y	Y	Y	
N5200								
Fujitsu ETERNUS 6000 (M500, M700, M900, M1100)								
FW: V31L50-0000 V31L40-0000 V30L94-2500	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N5600							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060					Y	Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
N5200								
NOTES:								
1. Use Implementation Guide for Fujitsu Eternus Storage, and follow "Host Response Profile parameter settings specification 2" for the Eternus 8000,								
2. Supported with Brocade 4G, Brocade 8G, and Cisco 4G switches on this support matrix, with firmware versions listed on matrix.								
3. For firmware versions V11L52 and later, use Host Response Profile parameter settings specification 2 from the Implementation Guide for Fujitsu Eternus Storage. For firmware versions earlier than V11L52, use specification 1 in the Implementation Guide.								
4. Use of Fujitsu Disk Encryption feature supported for these models.								
5. Use of Fujitsu SSD storage is supported for DX8000 and DX400 models only, ONTAP 7.3.5.1 and later.								

HDS and Hitachi SANRISE Storage with Data ONTAP 7.x								
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models: Tagmastore Adaptable Modular Storage AMS Model 2100, 2300, 2500								
Microcode FW	N7900						Y	Y
08A0/J	N7700						Y	Y
08A0/G	N6270							Y
08A0/B	N6240							
0897/H	N6210							
0897/C	N6070						Y	Y
0893/G	N6060						Y	Y
0893/E	N6040						Y	Y
0890/H	N5600						Y	Y
0890/B	N5300						Y	Y
0885/D								
0885/A								
0880/A								
0872/B								
0865/E								
0860/C								
0850/D								
See note 7. For HDP support, see notes 8 and 9								

IBM N series Gateway Support Matrix – HDS

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models: Tagmastore Adaptable Modular Storage AMS Model 200, 500, 1000								
Microcode FW 0786/H	N7900 N7700		Y	Y	Y	Y	Y	Y
0786/G	N7800	Y	Y	Y	Y	Y	Y	Y
0786/C	N7600							
0783/G	N5600							
0783/D	N6270							Y
0783/A	N6240							
0782/E	N6210							
0782/B	N6070			Y	Y	Y	Y	Y
0781/A	N6040							
0780/A	N6060				Y		Y	Y
0775/A	N5300	Y	Y	Y	Y	Y	Y	Y
0773/D	N5500	Y	Y	Y	Y	Y	Y	Y
0772/D	N5200							
0772/A								
0770/G								
0770/C								
0760/B								
0752/A								
Model: VSP (Virtual Storage Platform)								
Microcode FW: 70-02-06	N7900 N7700						7.3.4 only	Y
70-01-67	N6270							Y
70-01-63	N6210							
70-01-62	N6240							
70-01-29	N6070						7.3.4 only	Y
70-01-28	N6060							
70-01-03	N6040							
- External storage is supported - See Note 3								
- For HDP support, see notes 8								
- See Note 10								

IBM N series Gateway Support Matrix – HDS

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1			7.2.6.1		7.3.2	
		7.2.2	7.2.4	7.2.5.1	7.2.7	7.3	7.3.3	7.3.5.1
		7.2.3				7.3.4	7.3.6 RC1	
Models: TagmaStore USP-V, USP-VM								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
60-08-02	N7700							
60-07-61	N7800							
60-07-58	N7600							
60-07-57	N5600							
60-07-56	N5300							
60-07-55	N5500							
60-07-53	N5200							
60-07-52	N6270							Y
60-07-33	N6210							
60-07-32	N6240							
60-07-00	N6070		Y	Y	Y	Y	Y	Y
60-06-12	N6040							
60-06-10	N6060				Y		Y	Y
60-06-06								
60-06-05								
60-05-16								
60-05-15								
60-05-14								
60-05-10-00								
60-04-15-00								
60-04-14-00								
60-04-04-00								
60-03-29-00								
60-03-27-00								
60-03-06-00								
60-02-48-00/12								
60-02-29								
60-02-06								
60-01-72								
60-01-69								
- External storage is supported: - See Note 3								

IBM N series Gateway Support Matrix – HDS

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1			7.2.6.1		7.3.2	
		7.2.2	7.2.4	7.2.5.1	7.2.7	7.3	7.3.3	7.3.5.1
		7.2.3				7.3.4	7.3.6 RC1	
Models: TagmaStore								
USP Model 1100, 600, 100								
NSC Model 55								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
50-09-98	N7700							
50-09-96	N7800	Y	Y	Y	Y	Y	Y	Y
50-09-95	N7600							
50-09-92	N5600	Y	Y	Y	Y	Y	Y	Y
50-09-90	N6270							Y
50-09-86	N6240							
50-09-85	N6210							
50-09-83	N6070			Y	Y	Y	Y	Y
50-09-81	N6040							
50-09-78	N6060				Y		Y	Y
50-09-74	N5300	Y	Y	Y	Y	Y	Y	Y
50-09-72	N5500	Y	Y	Y	Y	Y	Y	Y
50-09-71	N5200							
50-09-54								
50-09-40								
50-09-15								
50-09-06								
50-08-06								
50-07-72								
50-07-67								
50-07-64								
- See Note 1, 3								
Models: Lightning 9980V/9970V								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
21-14-55	N7700							
21-14-54	N7800	Y	Y	Y	Y	Y	Y	Y
21-14-51	N7600							
21-14-48	N5600	Y	Y	Y	Y	Y	Y	Y
21-14-47	N6070			Y	Y	Y	Y	Y
21-14-45	N6040							
21-14-43	N6060				Y		Y	Y
21-14-39	N5300	Y	Y	Y	Y	Y	Y	Y
21-14-38	N5500	Y	Y	Y	Y	Y	Y	Y
21-14-36	N5200							
21-14-33								
21-14-24								
21-14-20								
- System mode								
254 on								

IBM N series Gateway Support Matrix – HDS

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models: Lightning 9960V/9910								
Microcode FW 01-19-99-00/10 01-19-99 - System mode 254 on	N7900		Y	Y		Y	Y	Y
	N7700							
	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6060							
	N6040				Y		Y	Y
	N5600	Y	Y	Y	Y	Y	Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
N5500	Y	Y	Y	Y	Y	Y	Y	
N5200								
Model: Thunder 9570V								
Microcode: 065F/J 065F/H 065F/G 065F/G 065F/E 065F/D 065F/C 065F/B 065F 065E/A 065C/R 065C/G 065C/C 065B/S 065B/R - All versions prior to B/R not supported! - Mixed disks- See Note 5 - No_RSV_Conf mode enabled - Mixed disks- See Note 5 - See Note 6	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060				Y		Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
	N5200							

IBM N series Gateway Support Matrix – HDS

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1			7.2.6.1		7.3.2	
		7.2.2	7.2.4	7.2.5.1	7.2.7	7.3	7.3.3	7.3.5.1
Models: Thunder 9580 / 9585V Thunder 9520V (SATA)								
Microcode:	N7900		Y	Y	Y	Y	Y	Y
165F/J	N7700							
165F/H	N7800	Y	Y	Y	Y	Y	Y	Y
165F/J	N7600							
165F/H	N6070			Y	Y	Y	Y	Y
165F/G	N6040							
165F/E	N6060				Y		Y	Y
165F/D	N5600	Y	Y	Y	Y	Y	Y	Y
165F/C	N5300	Y	Y	Y	Y	Y	Y	Y
165F/B	N5500	Y	Y	Y	Y	Y	Y	Y
165F	N5200							
165E/A								
165C/R								
165C/G								
165C/C								
165B/S								
165B/R								
- All versions prior to B/R no longer supported!								
- Mixed disks- See Note 5								
- No_RSV_Conf mode enabled								
- Note 6								

IBM N series Gateway Support Matrix – HDS

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1			7.2.6.1		7.3.2	
		7.2.2	7.2.4	7.2.5.1	7.2.7	7.3	7.3.3	7.3.5.1
		7.2.3					7.3.4	7.3.6 RC1
NOTES:								
1. For any configuration not listed above, please file a RPQ to request qualification and support.								
2. You can deploy Fibre Channel and SATA drives behind the same IBM N series Gateway system. You cannot, however, mix LUNs from SATA disks and Fibre Channel disks in the same aggregate, even if they are from the same series and the same vendor. Before setting up this type of configuration, consult your authorized reseller to plan the best implementation for your environment."								
3. External storage attached behind USP can be performance sensitive. Configuration must comply with HDS and IBM best practices to assure good performance.								
4. When connecting to a McData 6140/6064, use G_PORT setting for connection between AMS and switch.								
5. Configuring mixed FC and SATA disks in 95xx behind one Gateway requires Data ONTAP 7.1.1 or later.								
6. FW versions x65D/x are not supported because of known issues.								
7. Must follow published instructions for configuring the HDS AMS 200/500/1000 storage arrays.								
8. Over provisioning "Dynamic Provisioning Pools" (DP Pools) that provide LUNs to a gateway system is prohibited. Never assign more Logical Unit capacity than the total capacity of the DP Pool. Please consult your Hitachi documentation or the support provider for your array for additional information. If you are unsure how to prevent over provisioning of the DP Pool, then use standard RAID group type when creating Logical Units								
9. Use of HDP in any MetroCluster configurations supported. Must comply with footnote #8, and all other MetroCluster restrictions.								
10. For VSP configuration information please consult the USP sections of the Gateway Implementation Guide for Hitachi Storage								

HP Storage with Data ONTAP 7.x								
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
EVA 8400 (Restrictions on supported fabrics. See notes.)								
Microcode FW:	N7900						Y	Y
XCS 09534000	N7700							
XCS 09522000	N6270							Y
XCS 09501200	N6240							
See notes 5, 6, 8,9	N6210							
	N6070						Y	Y
	N6060							
	N6040							
	N7800						Y	Y
	N7600							
	N5600							
	N5300							
EVA 6400 (Restrictions on supported fabrics. See notes.)								
Microcode FW:	N7900						7.3.4 only	Y
XCS 09534000	N7700							
XCS 09522000	N6270							Y
See notes 5, 6, 8, 9	N6240							
	N6210							
	N6070						7.3.4 only	Y
	N6060							
	N6040							
	N7800						7.3.4 only	Y
	N7600							
	N5600							
	N5300							

IBM N series Gateway Support Matrix – HP

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
EVA 4400 (Restrictions on supported fabrics. See notes.)								
Microcode FW	N7900						Y	Y
XCS 09534000	N7700							
XCS 09522000	N6270							Y
XCS 09006000	N6240							
See notes 5, 6, 8 9	N6210							
	N6070						Y	Y
	N6060							
	N6040							
	N7800						Y	Y
	N7600							
	N5600							
	N5300							
EVA 8000								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
6.240	N7700							
6.220	N7800	Y	Y	Y	Y	Y	Y	Y
6.200	N7600							
6.110	N5600							
6.000	N5300							
See notes 4,5,6	N5500							
	N5200							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060				Y		Y	Y
EVA 4000 / 6000								
Microcode FW	N7900		Y	Y	Y	Y	Y	Y
6.240	N7700							
6.220	N7800	Y	Y	Y	Y	Y	Y	Y
6.200	N7600							
6.110	N5600							
6.000	N5300							
See notes 4,5,6	N5500							
	N5200							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060				Y		Y	Y

IBM N series Gateway Support Matrix – HP

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
EVA 8100								
Microcode FW 6.240 6.220 6.200 6.110 See notes 4,5,6,7	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800		Y	Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060				Y		Y	Y
	N5600 N5300		Y	Y	Y	Y	Y	Y
EVA 4100 / 6100								
Microcode FW 6.240 6.220 6.200 6.110 See notes 4,5,6,7	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800		Y	Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060				Y		Y	Y
	N5600 N5300		Y	Y	Y	Y	Y	Y
EVA 3000 / 5000								
Microcode FW 4.100 See notes: 5,6,7	N7900			Y	Y	Y	Y	Y
	N7700							
	N7800			Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060				Y		Y	Y
N5600 N5300			Y	Y	Y	Y	Y	

IBM N series Gateway Support Matrix – HP

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Model P9500 (HDS VSP)								
Microcode FW:	N7900							Y
	N7700							Y
May use any version of firmware listed	N6270							Y
Starting at FW version 70-01-62, for the equivalent HDS model assuming that HP has chosen to distribute that version of firmware.	N6240							
	N6210							
	N6070							Y
	N6060							
	N6040							
See Note 3								
Model XP24000 / XP20000 (HDS USP-V)								
May use any version of firmware listed for the equivalent HDS model, assuming that HP has chosen to distribute that version of firmware.	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800							
	N7600							
	N5600							
	N5300							
	N5500							
	N5200							
	N6270							Y
	N6240							
	N6210							
- External storage is supported:	N6070				Y		Y	Y
	N6040							
- See Note 3	N6060			Y	Y	Y	Y	Y

IBM N series Gateway Support Matrix – HP

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Model XP12000, XP10000 (HDS USP, NSC)								
May use any version of firmware listed for the equivalent HDS model, assuming that HP has chosen to distribute that version of firmware. External storage is supported: See Note 3	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N6270							Y
	N6240							
	N6210							
	N6070			Y	Y	Y	Y	Y
	N6040				Y		Y	Y
	N6060				Y		Y	Y
N5600	Y	Y	Y	Y	Y	Y	Y	
N5300	Y	Y	Y	Y	Y	Y	Y	
N5500	Y	Y	Y	Y	Y	Y	Y	
N5200								
Model XP1024 / XP128 (HDS Lightning)								
Microcode FW 21-14-33 21-14-24 System mode 254 on	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6040				Y		Y	Y
	N6060				Y		Y	Y
	N5600	Y	Y	Y	Y	Y	Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
N5200								
Model XP512 / XP48 (HDS Lightning)								
Microcode FW 01-19-99 System mode 254 on	N7900		Y	Y	Y	Y	Y	Y
	N7700							
	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6040				Y		Y	Y
	N6060				Y		Y	Y
	N5600	Y	Y	Y	Y	Y	Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
N5200								

IBM N series Gateway Support Matrix – HP

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
NOTES:								
1. Deleted								
2. You can deploy Fibre Channel and SATA drives behind the same IBM N series Gateway system. You cannot, however, mix LUNs from SATA disks and Fibre Channel disks in the same aggregate, even if they are from the same series and the same vendor. Before setting up this type of configuration, consult your authorized reseller to plan the best implementation for your environment.								
3. External storage attached behind USP can be performance sensitive. Configuration must comply with HDS and IBM N series best practices to assure good performance.								
4. EVA FW 6.100 is not supported due to interoperability issues.								
5. Make sure that switch FW used is on HP support matrix as well as this IBM Gateway support matrix.								
6. Non-disruptive upgrade of array microcode is NOT supported.								
7. N7600/N7800 cannot connect to this storage array using onboard initiators. The PCIe 2 port Disk HBA (FC1014) must be used to connect to this storage array. The PCIe Quad-port Disk HBA								
8. Supported with Brocade 4G and 8G fabrics, firmware 6.2.0f or 6.2.1								
9. Must follow published instructions for configuring HP EVA Storage								

IBM Storage with Data ONTAP 7.x

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1			7.2.6.1		7.3.2	
		7.2.2	7.2.4	7.2.5.1	7.2.7	7.3	7.3.3	7.3.5.1
		7.2.3				7.3.4	7.3.6 RC1	
XIV (MT 2810) Restrictions on supported fabrics. See notes.								
Microcode FW:	N7700, N7900						7.3.3	Y
10.2.4a	N6040, N6060, N6070						and later	
10.2.4	N5300, N5600							
10.2.2a	N6270							Y
10.2.2	N6240							
10.2.1b	N6210							
10.2.1								
10.2.0.a								
See notes: 11, 12, 16								
DS5100, DS5300								
Restrictions on supported fabrics, see Notes								
Only supported with expansion enclosures EXP810 and EXP5000								
LIC Level	N5300, N5600						Y	Y
07.70.38.00	N6210, N6240							Y
07.70.23.00	N6040, N6060, N6070						Y	Y
07.60.40.00	N7700, N7900						Y	Y
07.60.28.00								
07.60.13.05								
07.50.13.00								
07.50.12.00								
07.36.17.00								
07.30.21.00								
See Notes 4, 10, 13								
DS5020 and DS3950								
Restrictions on supported fabrics, see Notes.								
LIC Level	N5300, N5600						7.3.4	Y
07.70.38.00							only	
07.70.23.00	N6210, N6240, N6270							Y
07.60.40.00								
07.60.28.00	N6040, N6060, N6070						7.3.4	Y
07.60.13.05							only	
	N7700, N7900						7.3.4	Y
See Notes 4, 10, 15								

IBM N series Gateway Support Matrix – IBM

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
DS8800 (Model 951, 95E)								
Microcode FW: 86.10.139.0 See Notes 12, 14	N7700, N7900							Y
	N6270, N6240, N6210							Y
	N6070, N6060, N6040							Y
DS8700 (Model 941, 94E)								
Microcode FW: 75.15.67.0 75.15.59.0 75.15.41.0 75.1.145.1 75.1.145.0 75.0.177.0 See Notes 12, 14	N7900, N7700						7.3.4 only	Y
	N6210, N6240, N6270							Y
	N6070, N6060, N6040						7.3.4 only	Y
	N5600, N5300						7.3.4 only	Y
DS8100 (Model 921, 931), DS8300 (model 922, 932, and Model 9A2, 9B2 - LPAR)								
LIC Level	N7900		Y	Y	Y	Y	Y	Y
64.33.29.0	N7700							
64.33.20.0	N7800	Y	Y	Y	Y	Y	Y	Y
64.33.13.0	N7600							
64.30.100.0	N6270							Y
64.30.87.0	N6240							
64.30.47.0	N6210							
64.21.28.0	N6070			Y	Y	Y	Y	Y
64.21.18.0	N6040							
64.20.139.0	N6060				Y		Y	Y
64.1.16.3	N5600	Y	Y	Y	Y	Y	Y	Y
64.0.175.0 (7.3.0)	N5300			Y	Y	Y	Y	Y
63.1.46.0	N5500	Y	Y	Y	Y	Y	Y	Y
63.1.32.3	N5200							
63.0.106.2	N5300	Y	Y	Y			Y	Y
62.42.83.0	N5600							
62.42.77.0								
6.2.400.76								
6.2.400.64								
6.2.200.104								
6.2.200.96								
6.1.740.27								
6.1.740.20								

IBM N series Gateway Support Matrix – IBM

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
DS4800 (FC + SATA)								
LIC Level	N7900		Y	Y	Y	Y	Y	Y
07.60.52.00	N7700							
07.60.40.00	N7800			Y	Y	Y	Y	Y
07.60.28.00	N7600							
07.50.13.00	N6070	Y	Y	Y	Y	Y	Y	Y
07.36.17.00	N6040							
7.15.10.01	N6060				Y		Y	Y
7.15.07	N5600	Y	Y	Y	Y	Y	Y	Y
7.10.23	N5300	Y	Y	Y	Y	Y	Y	Y
6.60.08.00	N5500	Y	Y	Y	Y	Y	Y	Y
6.60.02.00	N5200							
6.23.05.00								
6.16.92.00								
6.16.88.00								
6.16.82.00								
6.15.24.00								
See Note: 4								
DS4700, DS4200 (FC)								
LIC Level:	N7900		Y	Y	Y	Y	Y	Y
07.60.52.00	N7700							
07.60.40.00	N7800	Y	Y	Y	Y	Y	Y	Y
07.60.28.00	N7600							
07.50.13.00	N6070			Y	Y	Y	Y	Y
07.36.17.00	N6040							
7.15.10.01	N6060				Y		Y	Y
7.15.07	N5600	Y	Y	Y	Y	Y	Y	Y
7.10.23	N5300	Y	Y	Y	Y	Y	Y	Y
6.60.08.00	N5500	Y	Y	Y	Y	Y	Y	Y
6.60.02.00	N5200							
6.23.05.00								
6.16.92.00								
See Note: 4								

IBM N series Gateway Support Matrix – IBM

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
DS4500, DS4300, DS4300 Turbo (FC and SATA)								
LIC Level	N7900		Y	Y	Y	Y	Y	Y
6.60.22.00	N7700							
6.60.17.00	N7800	Y	Y	Y	Y	Y	Y	Y
6.60.08.00	N7600							
6.60.02.00	N6070			Y	Y	Y	Y	Y
6.23.05.00	N6040							
6.12.56.00	N6060			Y	Y		Y	Y
6.12.40.00	N5600	Y	Y	Y	Y	Y	Y	Y
6.12.03.00	N5300	Y	Y	Y	Y	Y	Y	Y
- See Note 4,5	N5500 N5200	Y	Y	Y	Y	Y	Y	Y
DS4400 (FC + SATA)								
LIC Level	N7900		Y	Y	Y	Y	Y	Y
6.60.22.00	N7700							
6.60.17.00	N7800	Y	Y	Y	Y	Y	Y	Y
6.60.08.00	N7600							
6.60.02.00	N6070			Y	Y	Y	Y	Y
6.23.05.00	N6040							
6.12.56.00	N6060			Y	Y		Y	Y
6.12.40.00	N5600	Y	Y	Y	Y	Y	Y	Y
6.12.03.00	N5300	Y	Y	Y	Y	Y	Y	Y
- See Note 4,5	N5500 N5200	Y	Y	Y	Y	Y	Y	Y
DS4100								
LIC Level	N7900		Y	Y	Y	Y	Y	Y
6.12.03.00	N7700							
- See Note 3,4	N7800	Y	Y	Y	Y	Y	Y	Y
	N7600							
	N6070			Y	Y	Y	Y	Y
	N6040							
	N6060			Y	Y		Y	Y
	N5600	Y	Y	Y	Y	Y	Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500	Y	Y	Y	Y	Y	Y	Y
	N5200							

IBM N series Gateway Support Matrix – IBM

	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Storage Array								
SAN Volume Controller (SVC)								
LIC Level 4.3, 5.1 See note 8, 9 (RPQ required, limited configurations)	N7700, N7900 N7600, N7800 N6040, N6060, N6070 N5300, N5600 N5200, N5500					RPQ	RPQ	RPQ
V4.1.1.5 (7.2.4 or 7.2.5.1 only)	N7900 N7700		Y	Y	Y	RPQ	RPQ	RPQ
V4.1.1.4 (7.2.4 or 7.2.5.1 only)	N7800 N7600 N5600	Y	Y	Y	Y	RPQ	RPQ	RPQ
V4.1.1.0 V4.1.0.1	N6070 N6040			Y	Y	RPQ	RPQ	RPQ
-See Notes: 8	N6060 N5300 N5500 N5200			Y	Y	RPQ	RPQ	RPQ
		Y	Y	Y	Y	RPQ	RPQ	RPQ
		Y	Y	Y	Y	RPQ	RPQ	RPQ
ESS 800, ESS 800 Turbo								
LIC level 2.4.4.112	N7900 N7700		Y	Y	Y	Y	Y	Y
2.4.4.45	N7800	Y	Y	Y	Y	Y	Y	Y
2.4.3.79	N7600			Y	Y	Y	Y	Y
2.4.0.164	N6070 N6040			Y	Y	Y	Y	Y
2.2.0.677	N6060 N5600				Y		Y	Y
	N5300	Y	Y	Y	Y	Y	Y	Y
	N5500 N5200	Y	Y	Y	Y	Y	Y	Y

IBM N series Gateway Support Matrix – IBM

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.1.1 7.2.2 7.2.3	7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Notes:								
1. For any configuration not listed above, please file a RPQ to request qualification and support.								
2. You can deploy Fibre Channel and SATA drives behind the same N-series system. You cannot, however, mix LUNs from SATA disks and LUNs from Fibre Channel disks in the same aggregate, even if they are from the same series and the same vendor. Before setting up this type of configuration, consult your authorized reseller to plan the best implementation for your environment.								
3. Firmware version 6.12.03 must be used. Later versions are not compatible with Gateway storage systems.								
4. Non Disruptive Upgrade of Storage Array Firmware is not supported.								
5. deleted								
6. deleted								
7. deleted								
8. If you are planning on using an IBM SAN Volume Controller (SVC) in conjunction with an IBM N series gateway, you are strongly encouraged to use the information, tools and services available from IBM to ensure that your SVC implementation (and that of the disk storage systems behind the SVC) are properly designed and configured to ensure the maximum performance and availability. The N series gateways are capable of generating a substantial I/O workload on the SVC and the disk systems behind the SVC. Careful planning of the SVC configuration is recommended to ensure a successful SVC and N series gateway implementation. Information, tools and services available from IBM for SVC include: - formal product publications and redbooks - capacity and performance sizing tools and - professional implementation services.								
9. SVC 4.3/5.1 available for limited configurations via RPQ, existing RPQ customers only. • Data ONTAP 7.3.2+ • Clustered configurations only • Model 8G4 SVC nodes								
10. Use footnote 12								
11. Use Implementation Guide for IBM XIV Storage.								
12. Supported with Brocade 4G & 8G fabrics from this support matrix, firmware 6.1.2a or later. Supported with Cisco 4G fabrics from this support matrix, firmware 4.1(3a) or later.								
13. Supported with IBM 4G & 8G host interface cards.								
14. Use Implementation Guide for IBM Storage and follow instructions for DS8100/DS8300								
15. Use Implementation Guide for IBM Storage and follow instructions for DS5100/DS5300								
16. Non-disruptive upgrade of the storage array is supported for Gateway as long as the current version is not earlier than microcode version 10.2.0a. Both the current version and the target version must be listed on this support matrix, and must be supported by IBM for non-disruptive upgrade of the array.								

Sun Microsystems Storage with Data ONTAP 7.x								
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions						
		7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1	
Models: StorageTek (StorEdge) 9990 (HDS USP) StorageTek (StorEdge) 9985 (HDS NSC55)								
May use any version of firmware listed for the equivalent HDS model, assuming that SUN has chosen to distribute that version of firmware - External storage is supported: - See Note 3	N7900 N7700	Y	Y	Y	Y	Y	Y	
	N7800 N7600	Y	Y	Y	Y	Y	Y	
	N6270 N6240 N6210						Y	
	N6070 N6040		Y	Y	Y	Y	Y	
	N6060			Y		Y	Y	
	N5600 N5300	Y	Y	Y	Y	Y	Y	
	N5500 N5200	Y	Y	Y	Y	Y	Y	
	Models: StorageTek (StorEdge) 9990V (HDS USP-V)							
May use any version of firmware listed for the equivalent HDS model, assuming that SUN has chosen to distribute that version of firmware - External storage is supported: - See Note 3	N7099 N7700 N7800 N7600 N5600 N5300 N5500 N5200			Y	Y	Y	Y	
	N6270 N6240 N6210						Y	
	N6070 N6040			Y	Y	Y	Y	
	N6060					Y	Y	

IBM N series Gateway Support Matrix – Sun

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions					
		7.2.4	7.2.5.1	7.2.6.1 7.2.7	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models: StorageTek (StorEdge) 9980 (HDS Lightning 9980)							
Microcode FW 21-14-43 21-14-38 21-14-36 21-14-33 21-14-24 System mode 254 on	N7900	Y	Y	Y	Y	Y	Y
	N7700						
	N7800	Y	Y	Y	Y	Y	Y
	N7600						
	N6240						Y
	N6210						
	N6070		Y	Y	Y	Y	Y
	N6040			Y		Y	Y
	N6060			Y		Y	Y
	N5600 N5300	Y	Y	Y	Y	Y	Y
N5500 N5200	Y	Y	Y	Y	Y	Y	
Model: StorageTek (StorEdge) 9970 (HDS Thunder 9570V)							
Microcode FW: 065F/C 065F/B 065F 065E/A 065C/R 065C/G - All versions prior to B/R not supported. - See Note 4. - No_RSV_Conf mode enabled	N7900	Y	Y	Y	Y	Y	Y
	N7700						
	N7800	Y	Y	Y	Y	Y	Y
	N7600						
	N6070		Y	Y	Y	Y	Y
	N6040			Y		Y	Y
	N6060			Y		Y	Y
	N5600 N5300	Y	Y	Y	Y	Y	Y
	N5500 N5200	Y	Y	Y	Y	Y	Y
	NOTES:						
1. For any configuration not listed above, please file a RPQ to request qualification and support.							
2. You can deploy Fibre Channel and SATA drives behind the same Gateway system. You cannot, however, mix LUNs from SATA disks and Fibre Channel disks in the same aggregate, even if they are from the same series and the same vendor. Before setting up this type of configuration, consult your authorized reseller to plan the best implementation for your environment.							
3. External storage attached behind USP can be performance sensitive. Configuration must comply with HDS and IBM N series best practices to assure good performance.							
4. FW versions 065D/x are not supported because of known issues.							

3PAR Storage with Data ONTAP 7.x							
Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions					
		7.2.4	7.2.5.1	7.2.6.1	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models: InServ® Storage Server models T400, T800, F200, F400							
Microcode FW:	N7900					7.3.4	Y
2.3.1 MU3	N7700					only	
2.3.1 MU2	N6270						7.3.6 RC1
2.3.1 MU1	N6240						only
See Notes 2, 3	N6210						
	N6070					7.3.4	Y
	N6060					only	
	N6040						
	N5600					7.3.4	Y
	N5300					only	
Models: InServ® Storage Server Models S400, S800							
Microcode FW	N7900	Y	Y	Y	Y	Y	Y
2.3.1 MU3	N7700						
2.3.1 MU2	N7800	Y	Y	Y	Y	Y	Y
2.3.1 MU1	N7600						
2.3.1	N6070		Y	Y	Y	Y	Y
2.2.4 MU4	N6040						
(2.2.4.144)	N6060			Y		Y	Y
	N5600	Y	Y	Y	Y	Y	Y
2.2.4 MU2	N5300						
(2.2.4.114)	N5500	Y	Y	Y	Y	Y	Y
	N5200						
2.2.4 MU1 (2.2.4.94)							
2.2.3 GA (2.2.3.148)							
2.2.2 MU5 (2.2.2.158)							
2.2.2 MU4 2.2.2.154 - see note 1							

IBM N series Gateway Support Matrix – 3PAR

Storage Array	IBM N series Gateway cluster or single head models	Data ONTAP versions					
		7.2.4	7.2.5.1	7.2.6.1	7.3	7.3.2 7.3.3 7.3.4	7.3.5.1 7.3.6 RC1
Models: InServ® Storage Server Model E200							
Microcode FW	N7900	Y	Y	Y	Y	Y	Y
2.3.1 MU3	N7700						
2.3.1 MU2	N7800	Y	Y	Y	Y	Y	Y
2.3.1 MU1	N7600						
2.3.1	N6070		Y	Y	Y	Y	Y
	N6040						
	N6060			Y		Y	Y
2.2.4 MU4 (2.2.4.144)	N5600	Y	Y	Y	Y	Y	Y
	N5300						
2.2.4 MU2 (2.2.4.114)	N5500	Y		Y		Y	Y
	N5200						
2.2.4 MU1 (2.2.4.94)							
2.2.3 GA (2.2.3.148)							
2.2.2 MU5 (2.2.2.158)							
2.2.2 MU4 2.2.2.154 - see note 1							
NOTES:							
1. Support for firmware 2.2.4 GA (2.2.4.78) was removed at the request of the storage array vendor.							
2. Supported with Brocade 4G & 8G fabrics from this support matrix, with listed versions of firmware. Supported with Cisco 4G fabrics from this support matrix, with listed versions of firmware.							
3. Use Implementation Guide for 3PAR InServ and follow instructions for S400/S800, including correct setting for Host Persona from 3PAR documentation							

FibreChannel Switch Support with Data ONTAP 7.x					
Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade Switches					
8Gbps Switches					
Brocade DCX Backbone (includes DCX-4S) (Note S12)				6.1.1b, 6.1.1c, 6.1.2 , 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0f, , 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	6.1.1b, 6.1.1c, 6.1.2 , 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0f, , 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0
Brocade 5300 (Note S12)			6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a 7.2.6.1 and 7.2.7 only	6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a	6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade 5100 (Note S12)			6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0 7.2.6.1 and 7.2.7 only	6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2 , 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2 , 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0
Brocade 300 (Note S12)			6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0 7.2.6.1 and 7.2.7 only	6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2 , 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0	6.1.0b, 6.1.0g, 6.1.0j, 6.1.1b, 6.1.1c, 6.1.2 , 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2, 7.0.0

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
4Gbps Switches					
Brocade SilkWorm 48000 (Note S11)	IBM 2109 Model M48	4Gb, 256-port	5.1.0, 5.2.0a, 5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.0.1b, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2c, 6.2.2d, 6.2.2e, 6.2.2f, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2c, 6.2.2d, 6.2.2e, 6.2.2f, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2c, 6.2.2d, 6.2.2e, 6.2.2f, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade 7500	IBM 2005 Model R18	4Gb, 18 port	5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a,	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade 5000	IBM 2005 Model B5K	4Gb, 32 port	5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a,	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade SilkWorm 4900	IBM 2005 Model B64	4Gb,64-port	5.1.0, 5.2.0a, 5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0. 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1, 6.4.1a,	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade SilkWorm 4100	IBM 2005 Model B32	4Gb, 32-port	5.0.1d, 5.1.0, 5.2.0a, 5.2.1, 5.2.1b 5.2.2a, 5.2.3, 5.3.0a, 5.3.0b 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0. 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.2, 6.3.2a, 6.3.2b, 6.4.0a, 6.4.0c, 6.4.1,	, 5.3.0a, 5.3.0b 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0. 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2	, 5.3.0a, 5.3.0b 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0. 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d, 6.2.2e, 6.3.0, 6.3.0b, 6.3.0d, 6.3.1a, 6.3.1b, 6.3.1c, 6.3.2, 6.3.2a, 6.3.2b, 6.3.2b2, 6.4.0a, 6.4.0c, 6.4.1, 6.4.1a, 6.4.1b, 6.4.2
Brocade SilkWorm 4020	for IBM BladeCenter	4Gb, 20-port blade	5.0.2, 5.0.5a, 5.0.5e, 5.0.5f, 5.2.3		
Brocade SilkWorm 4012	for IBM BladeCenter	4Gb, 16-port blade	5.05a, 5.2.3, 5.0.5e, 5.0.5f		

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade SilkWorm 200E	IBM 2005 Model B16	4Gb, 16-port	5.1.0, 5.2.0a, 5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d	5.3.0a 5.3.0b, 5.3.0d, 5.3.0e, 5.3.1, 5.3.1a, 5.3.1b, 5.3.2, 5.3.2b, 5.3.2c, 6.0.0, 6.0.0b, 6.0.0c, 6.0.1, 6.0.1a, 6.1.0, 6.1.0c, 6.1.0e, 6.1.0g, 6.1.0j, 6.1.1, 6.1.1a, 6.1.1b, 6.1.1c, 6.1.2, 6.1.2a, 6.1.2b, 6.1.2c, 6.2.0c, 6.2.0f, 6.2.1, 6.2.1b, 6.2.2, 6.2.2a, 6.2.2b, 6.2.2d
2Gpbs Switches					
Brocade SilkWorm 24000	IBM 2109 Model M14	2Gb, 128-port	5.0.5c, 5.0.5e, 5.0.5f, 5.1.0, 5.2.0a, 5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1, 6.1.1a	6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1, 6.1.1a, 6.1.1b	6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1, 6.1.1a, 6.1.1b
Brocade SilkWorm 12000	IBM 2109 Model M12	2Gb, 64-port	5.0.5c, 5.0.5e, 5.0.5f 5.0.1d, 5.0.3a	5.0.5e, 5.0.5f	5.0.5e, 5.0.5f

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Brocade SilkWorm 3900	IBM 2109 Model F32	2Gb, 32-port	5.0.1d 5.0.5c, 5.0.5e, 5.0.5f, 5.1.0, 5.2.0a, 5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1. 6.1.1a	6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1. 6.1.1a, 6.1.1b	6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1. 6.1.1a, 6.1.1b
Brocade SilkWorm 3850	IBM 2005 Model H16	2Gb, 16-port	5.0.1d 5.0.3a, 5.0.5a 5.0.5c, 5.0.5e, 5.0.5f, 5.1.0, 5.2.0a, 5.2.1, 5.2.1b, 5.2.2a, 5.2.3, 5.3.0a, 5.3.1b, 5.3.0b, 5.3.0d, 5.3.1, 5.3.1a, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1. 6.1.1a		
Brocade SilkWorm 3800	IBM 2109 Model F16	2Gb, 16-port	3.2.0, 3.2.0b, 3.2.1b		
Brocade SilkWorm 3250	IBM 2005 Model H08	2Gb, 8-port	5.0.3a 5.0.5a, 5.0.5c 5.0.5e, 5.0.5f, 5.1.0, 5.2.0a, 5.2.1, 5.2.1b 5.2.2a, 5.2.3, 5.3.0a, 5.3.0b 5.3.0d, 5.3.1, 5.3.1a, 5.3.1b, 6.0.1, 6.0.1a, 6.1.0, 6.1.0b, 6.1.0c, 6.1.0e, 6.1.1. 6.1.1a		
Brocade SilkWorm 3200	IBM 3534 Model F08	2Gb, 8-port	3.2.0, 3.2.0b, 3.2.1b		
Brocade SilkWorm 3016	for IBM BladeCenter	2Gb, 16-port blade	5.05a, 5.0.5c 5.0.5e, 5.0.5f		
Brocade SilkWorm 3014	for Dell BladeCenter	2Gb, 16 port blade	5.05a, 5.0.5c 5.0.5e, 5.0.5f		
1Gbps Switches					
Brocade SilkWorm 2800	IBM 2109 Model S16	1Gb, 16-port	2.6.2d		

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
McDATA Switches					
McDATA Sphereon 4300 (Note S5)	IBM 2031 Model 212 IBM 2026 Model E12	2Gb, 12-port	8.00		
McDATA Sphereon 4400 (Note S5)	ISAN16M-2	4Gb, 16-port	9.02.01, 9.06 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02
McDATA Sphereon 4500 (Note S5)	IBM 2031 Model 224 IBM 2026 Model 224	2Gb, 24-port	7.0, 8.00 8.01, 9.00, 9.01, 9.06 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00
McDATA Sphereon 4700 (Note S5)	IBM SAN32M-2	2Gb, 32-port	8.02, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02
McDATA Intrepid 6064 (Note S5)	IBM 2032 Model 064	4Gb, 64-port	9.01, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.01, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.01, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02
		2Gb, 64-port	8.00, 8.01, 9.00, 9.01, 9.02.01, 9.06 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02 (Note S7)	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02 (Note S7)	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02 (Note S7)

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
McDATA Intrepid 6140 (Note S5)	IBM 2032 Model 140 IBM 2027 Model 140	4Gb, 140-port	9.00, 9.01, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.00, 9.01, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02	9.00, 9.01, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02
		2Gb, 140-port	8.00, 8.01, 9.00, 9.01, 9.02.01, 9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02 (Note S7)	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02 (Note S7)	9.06, 9.06.02, 9.07.00, 9.07.01, 9.08.00, 9.08.01, 9.09.00, 9.09.02 (Note S7)
Cisco Switches					
8Gbps Switches					
Cisco MDS 9148 (note S10, S13)		8G, 48 port		5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)
Cisco MDS 9513, 9509, 9506 (note S10, S13)		Director with 8G 48-port blade		5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)
Cisco MDS 9513, 9509, 9506 (note S10, S13)		Director with 8G 24-port blade		5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)
Cisco MDS 9513, 9509, 9506 (note S10, S13)		Director with mixed 4G/8G blade		5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
4Gbps Switches					
Cisco MDS 9222i (note S10)	IBM 2054-E01	4G, 66-port		5.0(4b), 5.0(4c)	5.0(4b), 5.0(4c)
Cisco MDS 9513 (Note S10)	IBM 2054 Model E11	Director -4Gb 528 port (Note S9)	3.2(1a), 3.2(2c) 3.2(3),3.2(3a), 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3),3.2(3a), 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3),3.2(3a), 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)
Cisco MDS 9509 (Note S10)	IBM 2054 Model E07 IBM 2062 Models D07 / T07	Director -4Gb, 336-port (Note S9)	3.2(1a), 3.2(2c) 3.2(3), 3.2(3a) , 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3), 3.2(3a) , 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3), 3.2(3a) , 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)
		Director -2Gb, 224-port (Note S8)	2.1(2b), 3.0(1), 3.0(2), 3.0(2a), 3.1(1), 3.1(2), 3.1(3), 3.1(3a) 3.1(4), 3.2(1a), 3.2(2c), 3.2(3), 3.2(3a), 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3), 3.2(3a) , 3.3(1a) 3.3(1c), 3.3(20), 3.3(3), 3.3(4), 3.3(5), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3), 3.2(3a) , 3.3(1a) 3.3(1c), 3.3(20), 3.3(3), 3.3(4), 3.3(5), 4.1(1c)

IBM N series Gateway Support Matrix – FCP Switch

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
Cisco MDS 9506 (Note S10)	IBM 2054 Model E04 IBM 2062 Models D04 / T04	Director -4Gb, 192-port (Note S9)	3.2(1a), 3.2(2c) 3.2(3) 3.2(3a), 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3) 3.2(3a), 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3) 3.2(3a), 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)
		Director -2Gb, 128-port (Note S8)	2.1(2b), 3.0(1), 3.0(2), 3.0(2a), 3.1(1), 3.1(2), 3.1(3), 3.1(3a) 3.1(4), 3.2(1a), 3.2(2c), 3.2(3) 3.2(3a) 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3), 3.2(3a), 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3), 3.2(3a), 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c)
Cisco MDS 9124 (Note S10)	IBM 2053-424	4Gb, 24 port	3.0(2a), 3.1(2), 3.1(3), 3.1(3a) 3.1(4), 3.2(1a), 3.2(2c) 3.2(3) 3.2(3a), 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3) 3.2(3a), 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)	3.2(1a), 3.2(2c) 3.2(3) 3.2(3a), 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c), 4.1(3), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7a), 4.2(7d), 4.2(7e), 5.0(1a), 5.0(4), 5.0(4b), 5.0(4c)

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
2Gbps Switches					
Cisco MDS 9020 (Note S10)			2.1(2), 2.1(3)		
Cisco MDS 9120 (Note S10)	IBM 2061 Model 020	2Gb, 20-port	2.1(2b), 3.0(1), 3.0(2), 3.0(2a), 3.1(1), 3.1(4), 3.2(1a), 3.2(2c), 3.2(3) 3.2(3a) 3.3(1a), 3.3(1c), 3,3(2), 3.3(3), 4.1(1c)		
Cisco MDS 9140 (Note S10)	IBM 2061 Model 040	2Gb, 40-port	2.1(2b), 3.0(1), 3.0(2), 3.0(2a), 3.1(1), 3.1(4), 3.2(1a), 3.2(2c), 3.2(3) 3.2(3a) 3.3(1a), 3.3(1c), 3,3(2), 3.3(3), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3) 3.2(3a) 3.3(1a), 3.3(1c), 3,3(2), 3.3(3), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3) 3.2(3a) 3.3(1a), 3.3(1c), 3,3(2), 3.3(3), 4.1(1c)
Cisco MDS 9216 Cisco MDS 9216A Cisco MDS 9216i (Note S10)	IBM 2062 Model D01 IBM 2062 Model D1A IBM 2062 Model D1H	2Gb, 16-48-port	3.0(1), 3.0(2), 3.0(2a), 3.1(1), 3.1(4), 3.2(1a), 3.2(2c) 3.2(3) 3.2(3a) 3.3(1a) 3.3(1c), 3.3(2), 3.3(3), 4.1(1c)	3.2(1a), 3.2(2c) 3.2(3) 3.2(3a) 3.3(1a) 3.3(1c), 3,3(2), 3.3(3), 4.1(1c)	3.2(1a), 3.2(2c) 3.2(3) 3.2(3a) 3.3(1a) 3.3(1c), 3,3(2), 3.3(3), 4.1(1c)
Cisco MDS 9506 (Note S8, S10)	IBM 2062 Models D04 / T04	Multilayer Director -2Gb, 128-port	2.1(2b), 3.0(1), 3.0(2), 3.0(2a), 3.1(1), 3.1(2), 3.1(3), 3.1(3a) 3.1(4), 3.2(1a), 3.2(2c), 3.2(3) 3.3(1a), 3.3(1c), 3,3(2), 3.3(3), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3) 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c)	3.2(1a), 3.2(2c), 3.2(3) 3.3(1a), 3.3(1c), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 4.1(1c)
Cisco MDS 9509 (Note S8, S10)	IBM 2062 Models D07 / T07	Multilayer Director -2Gb, 224-port			

Gateway to Storage array connectivity only					
Switch Model Name			FC Switch FW versions		
			Data ONTAP versions		
Vendor Model Name	IBM Machine Type and Model Number	Switch Description	7.2.5.1 7.2.6.1 7.2.7	7.3.1.1 7.3.1.1L1 7.3.2, 7.3.3	7.3.4 7.3.5.1 7.3.6 RC1
NOTES:					
S1: Submit a RPQ if you need switches/firmware not currently qualified.					
S2: IBM Fxx arrays are not qualified with Brocade switches. Please submit a RPQ if needed.					
S3: Customers should obtain OSMS license from McDATA for connectivity using McDATA switches. This license should be enabled on all McDATA switches in the data path between the IBM N series Gateway system and the array. This is bundled with 6.02 FW. The default use of OSMS can be overridden with the ONTAP command "setenv fc-no-mgmt? true" If OSMS is not configured, all LUN names will be 16 digit hexadecimal WWNs, as the alias names supported by OSMS will not be present.					
S4: Brocade 3200/3800: There is an issue with firmware upgrade on Brocade 3200/3800 from 3.1.1x to 3.2.0 where it changes the numbering of the ports. This can be corrected by reconfiguring the fabric parameter of the switches where "Switch PID Format: (0..2) [0]" need to be set to "1". This will resolve the zoning issue if port based zoning is used.					
S5: The default port setting on McData switches are "Gx" ports. Port setting on McDATA switches need to be set as "F" port for IBM N series Gateway connectivity.					
S6: When you use multiple ISLs on a Cisco fabric, make sure to change the vsan setting to Source/Destination load balancing for the VI connection. By default, Cisco uses an advanced source/dest/exchange method, which works with IBM N series Gateway connections to storage subsystems but not with the IB cluster interconnect in active/active configurations.					
S7: When connecting to a McData 6140/6064, use the G_PORT setting (the default) for connection between AMS 200/500/1000 and switch.					
S8: Cisco MDS 9506 and 9509 1/2 Gbps switches support these blade types: DS-X9016 (1/2 Gbps) & DS-X9032 (1/2 Gbps) Any supported Supervisor is acceptable					
S9: Cisco MDS 9506, 9509, 9513, 1/2/4 Gbps switches support these blade types: DS-X9016 (1/2 Gbps), DS-X9032 (1/2 Gbps), DS-X9124 (1/2/4 Gbps), DS-X9128 (1/2/4 Gbps) Any supported Supervisor is acceptable					
S10. For all switches: NPIV (N_Port ID Virtualization), Media Encryption, and Inter-VSAN routing cannot be used in the data path between Gateway initiator ports and storage array target ports. For Cisco switches, features listed above can be used on ports not used by any Gateway traffic or in zones not including any Gateway initiators. All deployments require the use of two or more independant redundant fabrics. Virtual fabrics within a single chassis do not meet this requirement.					
S11: The 8Gb FC Module is not supported with the Brocade 48000.					
S12: Use of Brocade-approved 4G SFP or 8G SFP's is supported					
S13. Use of Cisco-approved 4G SFP or 8G SFP is required					

**Gateway Dedicated SAN MetroCluster
for Data ONTAP 7.3.x**

Dedicated SAN Fabric only – See Fabric Metrocluster notes for details

These configurations do not require RPQ approval

Gateway Model	Data ONTAP version(s)	Switches	Storage - Use any version of array firmware supported for this version of ONTAP
N7900 N7700 N6070 N6060 N6040	7.3.5.1 7.3.6 RC1	Brocade 5100, 300 with switch FW 6.1.1a, 6.3.1c, 6.3.2a, 6.3.2b2 Brocade 5000, 200E with switch FW 6.0.0b	IBM DS8700 IBM XIV HP EVA 4400, 6400, 8400 HP XP 20000/24000 EMC CLARiiON CX4 HDS VSP HP P9500
N6270 N6240 N6210	7.3.5.1 7.3.6 RC1	Brocade 5100, 300 with switch FW 6.1.1a, 6.3.1c, 6.3.2a, 6.3.2b2 Brocade 5000, 200E with switch FW 6.0.0b	EMC CLARiiON CX4 HDS AMS 2100, 2300, 2500 HDS USP-V, USP-VM HDS VSP IBM DS8700 IBM XIV HP EVA 4400, 6400, 8400 HP P9500 HP XP 20000/24000 SUN STK 9990V
N7900 N7700 N6070 N6060 N6040 N5600 N5300	7.3.4 7.3.5.1 7.3.6 RC1	Brocade 5100, 300 with switch FW 6.1.1a, 6.3.1c, 6.3.2a, 6.3.2b2 Brocade 5000, 200E with switch FW 6.0.0b	HDS AMS 2100, 2300, 2500 HDS TagmaStore USP and NSC Model 55 HDS USP-V and USP-VM IBM DS4700, DS4800 IBM DS8100, DS8300 EMC CLARiiON CX3-20/40/80 Fujitsu Eternus DX8000, DX400 Sun STK 9990V

Dedicated SAN - Fabric MetroCluster Notes

Configurations must adhere to the Best Practices as described in the Data ONTAP® Gateway Systems MetroCluster Guide. Please note the following restrictions on MetroCluster configurations:

1. Only switches and switch firmware listed in the table above will be supported.
2. N series native disk shelf drives are not supported with MetroClusters.
3. Fabrics must meet **all** of the following topology restrictions:
 - 3.1. Every MetroCluster deployment will have redundant fabrics.
 - 3.2. Each fabric will have exactly two switches, with a single non-trunked ISL connecting the switches.
 - 3.3. Each fabric will be dedicated to the traffic for a single MetroCluster – no other devices may be connected to the MetroCluster fabric.
 - 3.4. Each fabric will be configured to prohibit probing of the FCVI ports by the Fabric nameserver.
4. Storage must be symmetric (e.g. same storage on both sides). For storage which is not symmetric, but is similar, please file a RPQ.

5. Follow all notes and restrictions for switches documented on the switch Matrix.
6. The Maximum distance with Fabric MetroClusters is 100KM between sites, Maximum distance will vary based on the ISL speed and switch model, please refer the table "Maximum distance supported with Fabric MetroCluster" on the N series Interop web page: www.ibm.com/systems/storage/network/interophome.html
7. Max Lun support 7.1. Data ONTAP 7.3.4 max LUN count is lesser of either 672 or platform limit 7.2. Data ONTAP 7.3.5.1, 7.3.6 RC1 max LUN count is lesser of either 840 or platform limit
8. For FOS 6.3.1c Brocade has imposed the following ISL distance limitations: • At 8 Gb/sec the maximum link length is 58 km.
9. Special instructions for N62xx gateway Controllers: 9.1. You must use an add-on HBA to connect to storage. 9.2. N6210 configurations are limited to connect to a single storage array per site with a fixed config, Separate port pairs should be used to connect local and remote arrays

**Gateway Shared SAN MetroCluster
for Data ONTAP 7.3.x**

Shared SAN Fabric only – See Fabric MetroCluster notes for details

These configurations do not require RPQ approval

Gateway Model	Data ONTAP version(s)	Switches	Storage - Use any version of array firmware supported for this version of ONTAP
N7900 N7700 N6070 N6060 N6040 N5600 N5300	7.3.1.1 7.3.2 7.3.3 7.3.4 7.3.5.1 7.3.6 RC1	Brocade 5100, 300 Maximum ISL speed 4Gb – may use 4Gb or 8 Gb SFP With switch FW 6.1.0b, 6.1.1c, 6.2.0f, 6.2.1, 6.2.2, 6.3.1c, 6.3.2a, 6.3.2b2	HDS AMS 2100, 2300, 2500 HDS TagmaStore USP and NSC Model 55 HDS Lightning 9980V/9970V HDS Lightning 9960V/9910
N7900 N7700 N7800 N7600 N6070 N6040 N5600 N5300	7.3, 7.3.1.1 7.3.2 7.3.3 7.3.4 7.3.5.1 7.3.6. RC1	Brocade 48000, 7500, 5000, 4900, 4100, 200E with switch FW 5.2.1, 5.3.0a 5.2.2a, 5.3.1, 6.0.0b, 6.1.0b, 6.1.0g, 6.1.1c, 6.2.0f, 6.2.1, 6.2.2	HDS USP-V and USP-VM IBM DS4700, DS4800 IBM DS8100, DS8300 EMC CLARiiON CX3-20/40/80
N6060	7.3.1.1 7.3.2 7.3.3 7.3.4 7.3.5.1 7.3.6 RC1		3PAR InServ® S400, S800, E200
N7900 N7700 N7800 N7600 N6070 N6040 N5600 N5300	7.3, 7.3.1.1 7.3.2 7.3.3 7.3.4 7.3.5.1 7.3.6 RC1	Cisco MDS 9506, 9509, 9513, 9124 with switch FW 3.2(2c), 3.2(3) 3.3(1a), 3.3(1c), 4.1(1c), 4.2(1a), 4.2(3), 5.0(1a)	
N6060	7.3.1.1 7.3.2 7.3.3 7.3.4 7.3.5.1 7.3.6 RC1		
N7900 N7700 N7800 N7600 N6070 N6040 N5600 N5300	7.3	McDATA 6140 FW v9.02.01, 9.06.02	

Shared SAN - Fabric MetroCluster Notes
Configurations must adhere to the Best Practices as described in the Data ONTAP® Gateway Systems MetroCluster Guide. For configurations which do not adhere to the Best Practices or to the previous table of components, please file an RPQ.
Please note the following restrictions on MetroCluster configurations:
1. These legacy configurations will only be supported in the 7.3.x stream for existing deployments. They will not be carried forward to ONTAP 8 or future releases or platforms. We highly recommend that for all new deployments be designed to use configurations that are supported under the "Dedicated SAN" Fabric MetroCluster section, so they will be supported in ONTAP 8.
2. Storage must be symmetric (e.g. same storage on both sides). For storage which is not symmetric, but is similar, please file a RPQ that will be evaluated.
3. Fabric MetroCluster deployments require that the SAN be configured to prohibit probing of the FCVI port by the Fabric Nameserver. See the N series gateway release notes for ONTAP 7.2.4 for more information. (However, this restriction applies to Fabric MetroCluster for all versions of ONTAP, and is not limited to 7.2.4)
4. All Fabric MetroClusters configurations must ensure that FC-VI traffic is delivered in order. Verify with the switch vendor for the proper settings to guarantee in-order-delivery.
5. Fabric MetroCluster implemented on SAN Fabrics using more than one ISL between any pair of switches in the data path for the FCVI adapter require a RPQ (with a SAN topology diagram included). In order to be approved, the customer must be agree to set the following fabric configuration options: (1) guaranteed in-order-delivery must be enabled, and (2) routing algorithm must be "port-based" (SiD/DiD) and not "exchange-based" (SiD/DiD/OXiD) or "round-robin". When you use multiple ISLs on a Cisco fabric, make sure to change the vsan setting to Source/Destination load balancing for the VI connection.
6. Follow all notes and restrictions for switches documented on the switch Matrix.
7. The Maximum distance with Fabric MetroClusters is 30KM between sites.
8. N series native disk shelf drives are not supported with MetroClusters.

Stretch MetroCluster			
Gateway Model	Data ONTAP version(s)	Switches	Storage - Use any version of array firmware supported for this version of ONTAP
N7900 N7700 N6070 N6060 N6040 N5600 N5300	7.3.4 7.3.5.1 7.3.6 RC1	N/A (Stretch MetroCluster)	Fujitsu Eternus DX8000, DX400 Sun STK 9990V
N7900 N7700 N6070 N6060 N6040	7.3.5.1 7.3.6 RC1	N/A (Stretch MetroCluster)	IBM DS8700 IBM XIV HP EVA 4400, 6400, 8400 EMC CLARiiON CX4 HDS VSP HP P9500
N6270 N6240 N6210	7.3.5.1 7.3.6 RC1	N/A (Stretch MetroCluster)	EMC CLARiiON CX4 HDS AMS 2100, 2300, 2500 HDS USP-V, USP-VM HDS VSP IBM DS8700 IBM XIV HP EVA 4400, 6400, 8400 HP P9500 HP XP 20000/24000 SUN STK 9990V
N7900 N7700 N7800 N7600 N6070 N6040 N5600 N5300	7.3, 7.3.1.1 7.3.2 7.3.3 7.3.4 7.3.5.1 7.3.6 RC1	N/A (Stretch MetroCluster)	For stretch MetroClusters, the following storage arrays are supported. Refer to array section of the support matrix to determine supported models and versions of array firmware. HDS (AMS, USP, USP-V, USP-VM Lightning, Thunder) EMC (CX, CX3, CX4, DMX, DMX3, DMX4) HP (EVA, XP)
N6060	7.3.1.1 7.3.2 7.3.3 7.3.4 7.3.5.1 7.3.6 RC1	N/A (Stretch MetroCluster)	IBM (DS8100, DS8300, ESS800, DS4300, DS4500, DS4700, DS4800) 3PAR (InServ®) Note that all other rules for MetroCluster configurations must be followed; otherwise, a RPQ is required.
Stretch MetroCluster Notes			
Configurations must adhere to the Best Practices as described in the Data ONTAP® Gateway Systems MetroCluster Guide. Please note the following restrictions on MetroCluster configurations:			
1. Switch Support for Backend Connectivity 1.1 Please refer to Gateway Dedicated SAN Fabric MetroCluster Switch Support with Data ONTAP 7.3.x. 1.2 Follow all notes and restrictions for switches documented on the switch Matrix of 7.3.x			
2. Storage must be symmetric (e.g. same storage on both sides). For storage which is not symmetric, but is similar, please file an RPQ.			
3. Native disk drives are not supported with MetroClusters.			
4. Special Instructions for N62xx Controllers: 4.1 You must use an add-on HBA to connect to storage. 4.2 N6210 configurations are limited to connect to a single storage array per site with a fixed config, Separate port pairs should be used to connect local and remote arrays			
5. Data ONTAP 7.3.5.1 max LUN count as per the platform limit.			
6. Maximum distance supported with Stretch MetroCluster will vary depending on the ISL Speed, please refer the table "Maximum distance supported with Stretch MetroCluster" on the N series Interop web page: www.ibm.com/systems/storage/network/interophome.html			

IBM N series Gateway Connectivity		
Feature/Functions Supported	Data ONTAP versions	Comments
Special Instructions for N62xx Gateway Controllers		
N62xx gateway on-board storage ports	All	The two onboard Fibre Channel ports (labeled "0c" and "0d") are not on independent busses and thus do not provide for storage redundancy. Some port failures could cause the system to panic. To configure redundant port pairs, use a Fibre Channel HBA in an available expansion slot.
N6210 gateway restricted storage configuration	All	N6210 configurations are limited to connect to a single storage array. The storage array must then present all LUNs in a single LUN group.
Direct Attach configurations		
Note: N62xx Gateway Controllers NOT SUPPORTED for Direct Attach		
3PAR	7.2.2 or later	All array models Supported
Fujitsu	Not supported	None of these array models are approved for direct-attach
HDS	All	99xxV/99xx, 95xxV models approved for direct-attach
	All	All supported AMS models are approved for direct-attach
HP	All	All supported XP array models approved for direct-attach
	Not supported	None of the EVA array models are approved for direct-attach
IBM	All	ESS models 750, 800, and 800-Turbo approved for direct-attach
	Not supported	ESS F10, F20 models not approved for direct-attach All DS8000 models not approved for direct-attach XIV not approved for direct-attach
	7.3.2 or later	All DS5xxx models are approved for direct-attach
	7.1H2 or later	All supported DS4xxx models approved for direct-attach
Texas Memory Systems	Not Supported	None of these array models are approved for direct-attach
Sun		Follow restrictions for the corresponding HDS model
Switch Topologies– NOTE: excludes Fabric MetroCluster deployments		
Switch Connectivity		Dedicated or shared between SAN, NAS & Tape
Switch Cascading (hops)		Up to 2 levels (1)
Network Mesh topology (hops)		Up to 2 levels (1)
Extended Distance (ISL)		Up to 30km
- Single Mode Fibre (ISL)		RPQ required for Metroclusters at this time.
- DWDM		RPQ required for Metroclusters at this time.
IBM N series Gateway to Host Connectivity		
		See SAN matrix FCP host support

IBM N series Gateway Support Matrix – Connectivity

Feature/Functions Supported	Data ONTAP versions	Comments																					
LUN Size																							
<p>Minimum and Maximum LUN Size:</p> <p>This is the minimum and maximum size LUN that storage array can present to N series Gateway.</p>	All	<table border="0"> <thead> <tr> <th data-bbox="740 300 1094 331">Data ONTAP</th> <th data-bbox="1094 300 1295 331">Minimum</th> <th data-bbox="1295 300 1479 331">Maximum</th> </tr> </thead> <tbody> <tr> <td data-bbox="740 369 1094 401">8.0 and later</td> <td data-bbox="1094 369 1295 401">1 GB</td> <td data-bbox="1295 369 1479 401">2 TB</td> </tr> <tr> <td data-bbox="740 401 1094 432">7.3.3 and later (7.3 family):</td> <td data-bbox="1094 401 1295 432">1 GB</td> <td data-bbox="1295 401 1479 432">2 TB</td> </tr> <tr> <td data-bbox="740 432 1094 464">7.3, 7.3.1.x, 7.3.2.x:</td> <td data-bbox="1094 432 1295 464">1 GB</td> <td data-bbox="1295 432 1479 464">1 TB</td> </tr> <tr> <td data-bbox="740 464 1094 495">7.2.4, 7.2.5, 7.2.6.x, 7.2.7.x:</td> <td data-bbox="1094 464 1295 495">1 GB</td> <td data-bbox="1295 464 1479 495">1 TB</td> </tr> <tr> <td data-bbox="740 495 1094 527">Data ONTAP 7.2.3:</td> <td data-bbox="1094 495 1295 527">1 GB</td> <td data-bbox="1295 495 1479 527">750 GB</td> </tr> <tr> <td data-bbox="740 527 1094 558">Prior to Data ONTAP 7.2.3:</td> <td data-bbox="1094 527 1295 558">1 GB</td> <td data-bbox="1295 527 1479 558">500 GB</td> </tr> </tbody> </table> <p>The Data ONTAP definition of a GB is that one GB is equal to 1000 x 1024 x 1024 bytes.</p> <p>Note: Other company's definition of GB/TB might vary. See the Gateway Implementation Guide for your vendor for information about the equivalent minimum and maximum sizes according to your vendor's calculations.</p>	Data ONTAP	Minimum	Maximum	8.0 and later	1 GB	2 TB	7.3.3 and later (7.3 family):	1 GB	2 TB	7.3, 7.3.1.x, 7.3.2.x:	1 GB	1 TB	7.2.4, 7.2.5, 7.2.6.x, 7.2.7.x:	1 GB	1 TB	Data ONTAP 7.2.3:	1 GB	750 GB	Prior to Data ONTAP 7.2.3:	1 GB	500 GB
Data ONTAP	Minimum	Maximum																					
8.0 and later	1 GB	2 TB																					
7.3.3 and later (7.3 family):	1 GB	2 TB																					
7.3, 7.3.1.x, 7.3.2.x:	1 GB	1 TB																					
7.2.4, 7.2.5, 7.2.6.x, 7.2.7.x:	1 GB	1 TB																					
Data ONTAP 7.2.3:	1 GB	750 GB																					
Prior to Data ONTAP 7.2.3:	1 GB	500 GB																					
LUN Connectivity																							
<p>LUN ownership per IBM N series Gateway:</p> <p>Max.# of LUNs from all attached Storage Arrays that can be managed by Gateway.</p>	All	<p>Max # Unique back end storage array LUNS per Single/Cluster system</p> <p>N7900 (1176/1176) N7700 (840/840) N7800 (672/672) -> (1008/1008) with 7.2.3 N7600 (672/672) -> (840/840) with 7.2.3 N6270 (960/960) N6240 (600/600) N6210 (480/480) N6070 (840/840) N6060 (672/672) N6040 (420/420) N5600 (504/504) N5500 (336/336) N5300 (252/252) -> (336/336) with 7.2.4 N5200 (168/168)</p>																					

IBM N series Gateway Support Matrix – Connectivity

Feature/Functions Supported	Data ONTAP versions	Comments
IBM N series Gateway Neighborhoods		
Maximum number of LUNs visible in a IBM N series Gateway Neighborhood	All	N5200 - 336 N5500 - 672 N5300 - 504 N5600 - 1008 N6040 - 1008 N6060 - 1008 N6070 - 1008 N7600 - 1008 N7800 - 1008 N7700 - 1008 N7900 - 1176
	7.3.5.1, 7.3.6 RC1 8.0.1 7-mode 8.0.2 7-mode	N6210 - 1008 N6240 - 1008 N6270 - 1008
<p>Neighborhoods allow up to 6 Gateway controllers (single or clustered) to see the same back-end LUNs on storage arrays at one time. The "LUN connectivity" section above shows the maximum number of LUNs that can a single or clustered system can control. This section shows the maximum number of (the same) LUNs that can be visible to each single or clustered system in the neighborhood.</p> <p>(1) If you have a mixed neighborhood, then the smallest limit applies to all nodes in the neighborhood.</p> <p>(2) A Gateway neighborhood is limited to 6 Gateway systems (can be standalone or clustered or a combination).</p> <p>(3) Some arrays are limited in how many LUNs they can present in a single neighborhood. See the implementation guide for the specific array.</p> <p>(4) The N3700 cannot be in a neighborhood with any other platform.</p> <p>(5) Neighborhoods are not supported for MetroCluster configurations.</p>		

IBM N series Gateway Support Matrix – Connectivity

Feature/Functions Supported	Data ONTAP versions	Comments
FCP Properties		
Shared FC Ports	All	Yes
Other Properties:	All	<ul style="list-style-type: none"> - All FC host interfaces - All RAID Array Disk interfaces - All Disk Capacity - All Disk Rotational Speeds
Connectivity (See Note 1)		
FC for host access, FC for storage access, FC for tape access, Networking (NICs)	All	Refer to the N series Hardware and Service Guide available on the N series Support web.
Tape Connectivity		
Connectivity	Direct or SAN Attached Same functionality as similar Filer models.	See Tape matrix on N series Support web.
Tape Libraries	Same as Filer models	
Tape Drives	Same as Filer models	
Networking Connectivity (See Note 1)		
Single Port Fibre NIC		Same count as similar filer model
Dual Port Fibre NIC		
Single Port Copper NIC		
Dual Port Copper NIC		
Quad Port Copper NIC		
IPSec Hardware Acceleration		
Other Networking Connectivity (See Note 1)		
SnapMirror - FC		Same count as similar filer model

IBM N series Gateway Support Matrix – Connectivity

Feature/Functions Supported	Data ONTAP versions	Comments
Multiple Array Connectivity		
Multiple Gateway systems to a single array	All	Not supported with N6210 controllers - for all other supported controllers, see guidelines for creating volumes in: Gateway Systems Planning Guide.
Multiple arrays from one vendor, one family to a single Gateway system	7.1 - 7.3	Not supported with N6210 controllers - for all other supported controllers, see guidelines for creating volumes in: Gateway Systems Planning Guide.
	8.0.x	
Multiple vendor arrays behind a single Gateway System.	7.1 - 7.3	Not supported with N6210 controllers - for all other supported controllers, arrays from multiple vendors multiple families, and FC-SATA intermix for a single Gateway system. IBM Professional Services are strongly recommended to ensure application needs are met with the mixed array family and/or mixed FC/SATA configurations.
	8.0.x	Not supported with N6210 controllers - for all other supported controllers, arrays from multiple vendors multiple families, and FC-SATA intermix for a single Gateway system. IBM Professional Services are strongly recommended to ensure application needs are met with the mixed array family and/or mixed FC/SATA configurations.
RAID Array Feature Support		
RAID Type	All	LUNs can be of type RAID-5 or RAID1 or RAID 1+0 but some RAID format should be used in the supported array.
RAID configuration	All	LUNS should be the same size so we can combine them into an aggregate.

IBM N series Gateway Support Matrix – Connectivity

Feature/Functions Supported	Data ONTAP versions	Comments
Native Disk Support		
Controllers: N7900, N7700 N7800, N7600 N6240, N6210 N6070, N6060, N6040 N5600, N5300 N5500, N5200	7.3 and later, including 8.x if controller is supported in that release (N6060 - 7.3.1.1)	Follow all rules for configuring disk shelves as filer platforms You cannot share initiators between disk shelves and 3rd party storage array LUNs. Refer to the System Configuration Guide and follow the equivalent filer system for more details.
N6210, N6240, N6270	7.3.5.1, 7.3.6 RC1 8.0.1, 8.0.2	Not supported for any Gateway MetroCluster. Disk Shelves: EXN1000, EXN2000, EXN3000, EXN3500, EXN4000
4-Array Port Model		
HDS (all models) IBM DS4xxx and DS8xxx HP EVA 8000/8100 3PAR EMC DMX EMC CLARiiON	7.3	With the basic 4-array port model, the array LUNs are mapped to four ports on the storage array, where two ports are on one array controller and two ports are on a different array controller. Each array LUN group is accessed through only two array ports. Each Gateway port pair accesses a different storage array LUN group. All other arrays are limited to a maximum of 2 ports to the array per Gateway controller.
Fujitsu ETERNUS DX8000	7.3.3	
NOTES:		
Note (1): N3700 does not have any slots for optional cards therefore these items are not supported for N3700.		

IBM N series Gateway Capacities				
Data ONTAP versions supported	IBM N series Gateway	Max Raw Connected Capacity Single / Cluster in TB	Recommended Minimum Capacity in GB	Absolute Minimum Capacity in GB
8.0.1 7-Mode and later	N6270	1920 / 1920 TB	1969 GB	1182 GB
	N6240	1200 / 1200 TB	1013 GB	608 GB
	N6210	960 / 960 TB	506 GB	304 GB
8.0 7-Mode and later	N7900	2352 / 2352 TB	3925 GB	2295 GB
	N7700	1680 / 1680 TB	1857 GB	1114 GB
	N7800	2016 / 2016 TB	3925 GB	2295 GB
	N7600	1680 /1680 TB	1857 GB	1114 GB
	N6070	1680 /1680 TB	2025 GB	1215 GB
	N6060	1344 /1344 TB	1125 GB	675 GB
	N6040	840 / 840 TB	507 GB	304 GB
	N5600	1008 / 1008 TB	957 GB	574 GB
	N5300	672 /672 TB	507 GB	304 GB
7.3, 7.3.1.1 7.3.2, 7.3.3 7.3.4 7.3.5.1 7.3.6 RC1 N6060 7.3.1.1+ N62xx 7.3.5.1+	N7900	1176 / 1176 TB	3925 GB	2295 GB
	N7700	840 / 840 TB	1857 GB	1114 GB
	N7800	1008 / 1008 TB	3925 GB	2295 GB
	N7600	840 / 840 TB	1857 GB	1114 GB
	N6240	600 / 600 TB	1013 GB	608 GB
	N6210	480 / 480 TB	506 GB	304 GB
	N6070	840 / 840 TB	2025 GB	1215 GB
	N6060	672 / 672 TB	1125 GB	675 GB
	N6040	420 / 420 TB	507 GB	304 GB
	N5600	504 / 504 TB	957 GB	574 GB
	N5500	168 / 168 TB	507 GB	304 GB
	N5300	336 / 336 TB	507 GB	304 GB
	N5200	84 / 84 TB	282 GB	170 GB
	7.2.4 7.2.5.1 7.2.6.1 7.2.7 N6060 7.2.6.1+	N7900	1176 / 1176 TB	3925 GB
N7700		840 / 840 TB	1857 GB	1114 GB
N7800		1008 / 1008 TB	3925 GB	2295 GB
N7600		840 / 840 TB	1857 GB	1114 GB
N6070		840 / 840 TB	2025 GB	1215 GB
N6060		672 / 672 TB	1125 GB	675 GB
N6040		420 / 420 TB	507 GB	304 GB
N5600		504 / 504 TB	957 GB	574 GB
N5500		168 / 168 TB	507 GB	304 GB
N5300		336 / 336 TB	507 GB	304 GB
N5200		84 / 84 TB	282 GB	170 GB

IBM N series Gateway Capacities				
7.2.3	N7800	504 / 504 TB	3925 GB	2295 GB
	N7600	420 / 420 TB	1857 GB	1114 GB
	N5600	252 / 252 TB	957 GB	574 GB
	N5500	168 / 168 TB	507 GB	304 GB
	N5300	126 / 126 TB	507 GB	304 GB
	N5200	84 / 84 TB	282 GB	170 GB
7.2.1	N7800	336 / 336 TB	3925 GB	2295 GB
7.2.2	N7600	336 / 336 TB	1857 GB	1114 GB
	N5600	252 / 252 TB	957 GB	574 GB
	N5500	96 / 96 TB	507 GB	304 GB
	N5300	126 / 126 TB	507 GB	304 GB
7.2	N7800	336 / 336 TB	3925 GB	2295 GB
	N7600	336 / 336 TB	1857 GB	1114 GB
	N5500	96 / 96 TB	507 GB	304 GB
	N5200	84 / 84 TB	282 GB	170 GB
7.1.1	N5500	96 / 96 TB	507 GB	304 GB
	N5200	84 / 84 TB	282 GB	170 GB
7.1 / 7.1.0.1	N5500	80 / 80 TB	507 GB	304 GB
	N5200	48 / 48 TB	282 GB	170 GB
NOTES:				
1. The capacity limits specified here are as seen from IBM N series Gateway system perspective. 1 TB = 1000 x 1000 x 1024 x 1024 Bytes Use vendor definition for TB to determine corresponding raw storage requirement on the array.				
2. Recommended Minimum Capacity enables a core dump. Absolute Minimum Capacity may not enable a core dump.				
4. Maximum raw connected capacity should only be used with archive work-loads. For heavy production loads, reduce maximum by 50%.				

IBM N series Gateway Capacities				
Root Volume Limits				
		Prior to 8.0	Starting in 8.0.x	
Minimum root volume size	N3700	10 GB		
	N5200	12 GB		
	N5500	16 GB		
	N5300	16 GB	160 GB	
	N5600	23 GB	230 GB	
	N6040	16 GB	160 GB	
	N6060	23 GB	230 GB	
	N6070	37 GB	250 GB	
	N6210	10 GB	151 GB	
	N6240	15 GB	205 GB	
	N6270	30 GB	300 GB	
	N7600	37 GB	250 GB	
	N7800	69 GB	250 GB	
	N7700	37 GB	250 GB	
	N7900	69 GB	250 GB	
	<p>There can be volumes or aggregates other than the root volume whose sizes, when combined, meet the total system capacity requirement.</p> <p>Note: It is strongly recommended that you do not set the size of a root volume below the minimum. The reason is that you want to ensure that there is sufficient space in the root volume for system files, log files, and core files. If a system problem occurs, you need to provide these files to Technical Support.</p>			
Minimum size of the array LUN needed for the root volume	N3700	16 GB		
	N5200	20 GB		
	N5500	25 GB		
	N5300	25 GB	256 GB	
	N5600	37 GB	368 GB	
	N6040	25 GB	256 GB	
	N6060	37 GB	368 GB	
	N6070	60 GB	400 GB	
	N6210	16 GB	160 GB	
	N6240	24 GB	240 GB	
	N6270	48 GB	480 GB	
	N7600	60 GB	400 GB	
	N7800	111 GB	400 GB	
	N7700	60 GB	400 GB	
	N7900	111 GB	400 GB	
	<p>The minimum size of the array LUN needed for the root volume, which is larger than the Data ONTAP minimum root volume size, ensures that there is sufficient space in the root volume for system files, log files, and core files.</p>			

IBM N series Gateway Capacities

RAID Group Limits for Array LUNs

Maximum number of RAID groups in an aggregate	400 (same as for a Filer system)
Maximum RAID group size	14 array LUNs for releases prior to Data ONTAP 8.0 26 array LUNs for Data ONTAP 8.0
Minimum RAID group size	1 array LUN
Default RAID group size	8 array LUNs

Minimum size of a Spare Core Array LUN

N5200	3 GB
N5500	4 GB
N5300	6 GB
N5600	11 GB
N6040	6 GB
N6060	12 GB
N6070	21 GB
N6210	6 GB
N6240	11 GB
N6270	20 GB
N7600	21 GB
N7800	43 GB
N7700	21 GB
N7900	43 GB

Notes:

1. If the `cf.takeover.on_panic` option is enabled, you must have a spare core LUN that meets the minimum spare core LUN size shown in this table. If this option is enabled and no spare LUN is available, no core dump file is produced on failure.
2. When the `cf.takeover.on_panic` option is set to on, the time between the initial failure and when service is fully restored is shorter because an active/active configuration can fail over in less time than it takes for a N series gateway system to recover from a panic. However, the subsequent giveback causes another brief outage. If service disruption is an issue (for example, if you have CIFS clients), you might not want to incur the initial takeover.
3. The `cf.takeover.on_panic` option is enabled by default in the following situations: on N3700 models, when FCP is licensed, and when iSCSI is licensed

<h2 style="margin: 0;">IBM N series Gateway Capacities</h2>

Minimum Aggregate Size for each Gateway Controller	
N5200	5 GB
N5500	5 GB
N5300	5 GB
N5600	10 GB
N6040	5 GB
N6060	20 GB
N6070	20 GB
N6210	5 GB
N6240	10 GB
N6270	20 GB
N7600	20 GB
N7800	40 GB
N7700	20 GB
N7900	40 GB

IBM N series Gateway Software Support			
	Feature/Functions Supported	Data ONTAP versions	Comments
ONTAP Protocols Supported			
1	NAS - NFS, CIFS, HTTP, FTP, WebDAV	All	
2	iSCSI - Hosts Supported	Same as Filers	
3	FCP - Hosts Supported	Same as Filers	
4	VLD	Not Supported	
5	DAFS	Not Supported	
N series Software			
6	Clustered Failover	All	
7	Neighborhoods	All	A neighborhood can include up to six IBM N series Gateway systems, which can be standalone systems, or clusters. Metroclusters are not supported in Neighborhoods.
8	Snapshot	All	
9	SnapRestore	All	
10	FlexVol	ONTAP 7.1H2 and later	
11	FlexClone	ONTAP 7.1H2 and later	
12	FlexCache	ONTAP 7.1H2 and later	
13	SnapMirror Asynchronous Data Replication over FC	All (See Note 2)	
14	SnapMirror Asynchronous Data Replication over IP	All	
15	SnapMirror Semi-Synchronous and Synchronous Data Replication over FC	ONTAP 7.1H2 and later See Note 2	
16	SnapMirror Semi-Synchronous and Synchronous Data Replication over IP	ONTAP 7.1H2 and later	
17	SnapVault - Primary	All	
18	SnapVault - Secondary	All	
19	Open Systems SnapVault	v2.1.1 ONTAP 7.1H2 and later	
20	MultiStore	All	
21	SnapLock Enterprise	Same as filer	
22	LockVault Enterprise	Same as filer	
23	LockVault Compliance	No	cannot guarantee no change, when independent access to the storage array exists behind IBM N series Gateway.

IBM N series Gateway Support Matrix – Software

	Feature/Functions Supported	Data ONTAP versions	Comments
24	SnapDrive for Windows	ONTAP 7.1H2 - v3.0R2, V3.1 ONTAP 7.1H2 and higher - v3.1.1, v3.1.1R1	
25	SnapDrive for UNIX	ONTAP 7.1H2 and later - v1.2, v2.0	
26	SnapManager for Exchange 5.5	Not Supported	
27	SnapManager for Exchange	ONTAP 7.1H2 - v3.0 SnapDrive 3.0R2 v3.1 SnapDrive 3.0R1, 3.1 ONTAP 7.1H2 and later - v3.1 SnapDrive 3.1.x	
28	SnapManager for Oracle	ONTAP 7.1H2 and later	
29	SnapManager for SQL Server - one per IBM N series Gateway system, Site License (multiple SQL servers)	ONTAP 7.1H2 - v1.0 SanpDrive 3.0R2, 3.1 ONTAP 7.1H2 and later - v1.0, v1.5 SnapDrive 3.1.x	
30	SnapManager for SQL - one per SQL Server	ONTAP 7.1H2 - v1.0 SanpDrive 3.0R2, 3.1 ONTAP 7.1H2 and later - v1.0, v1.5 SnapDrive 3.1.x	
31	SnapManager for Lotus Domino	ONTAP 7.1H2 - v1.01R1 SnapDrive 3.0R2 ONTAP 7.1H2 and later - Not Supported	Note: This product has been EOA
32	Single Mailbox Recovery	ONTAP 7.1H2 - v1.1 or later ONTAP 7.0 and later - v2.0 or later	
33	SnapValidator	ONTAP 7.1H2 and later	
34	DFM	ONTAP 7.1H2 and later - DFM v2.3 or later ONTAP 7.1H2 and later - DFM v3.1 or later	
	DFM Storage Management and Business Continuance Management Options	All	
	DFM Storage Resource Management Option	ONTAP 7.1H2 and later	
	DFM SAN Management Option	ONTAP 7.1H2 and later	
	DFM NetCache Management, Distribution Management option	Not supported	
35	SAN Manager	ONTAP 7.1H2 and later	
36	Virtual File Manager (VFM)	ONTAP 7.1H2 v3.0, v4.0, v5.0R1 ONTAP 7.1H2 v3.0, v4.0, v5.0R1, v5.5 ONTAP 7.1H2 and later - v3.0, v4.0, v5.0R1, v5.5R1	
37	SecureAdmin	ONTAP 7.x - Bundled in Data ONTAP	Requires Export Compliance
38	ApplianceWatch for Tivoli Enterprise	All - v1.1	
39	ApplianceWatch for HP	All - v1.2	
40	SnapMover	ONTAP 7.1H2 and later	

IBM N series Gateway Support Matrix – Software

	Feature/Functions Supported	Data ONTAP versions	Comments
41	SyncMirror	ONTAP 7.1H2 and later (See note 2)	
42	MetroCluster	ONTAP 7.1H2 and later (See note 2)	See MetroCluster page of this document for RPQ requirements to support Metrocluster.
43	Disk Sanitization	Not Applicable	
44	SnapLock Compliance - with 3rd party arrays	Not Supported	Cannot guarantee no change, when independent access to the storage array exists behind Gateway
	- with N series Disks	Same as filer	With the introduction of N series Disks
45	RAID DP - with 3rd party arrays	Not Supported	Relies on RAID from 3rd party arrays.
	- with N series Disks	Same as filer	With the introduction of N series Disks
3rd-Party Anti-Virus Software Compatibility (See Note 3)			
46	McAfee NetShield for NetApp	ONTAP 7.1H2 and later	
47	Trend Micro Server Protect for NetApp	ONTAP 7.1H2 and later	
48	Symantec AntiVirus for NetApp	ONTAP 7.1H2 and later	
IBM Software Compatibility			
49	FlashCopy	Not Supported	
50	Peer-to-Peer Remote Copy	Not Supported	
51	Peer-to-Peer Remote Copy XD	Not Supported	
52	Metro Mirror	Not Supported	
53	Global Copy	Not Supported	
54	Storage Administration / Storage Provisioning tools	All	Used to provision LUNs on IBM storage
NOTES:			
Note (1): N3700 does not have any slots for optional cards therefore these items are not supported for N3700.			
Note (2): Not supported for N3700.			
Note (3): For other Antivirus vendors and specific versions, see the N series interop matrix for CIFS (Windows): http://www.ibm.com/systems/storage/network/interophome.html			

IBM N series Gateway Support Matrix Change History	
	For most recent revisions, see News and Recent Revisions.
10-Jan-11	<p>Added support for ONTAP release 8.0.1 GA</p> <p>Added support for N62xx in MetroCluster for 8.0.1 GA</p> <p>Added support for HDS AMS 2xxx firmware 0893/G</p> <p>Added support for IBM DS8100, DS300 firmware 64.33.13.0</p> <p>Added support for IBM DS8700 firmware 75.15.41.0</p> <p>Added support for EMC CX4 firmware 04.29.000.5.014</p> <p>Added support for 3PAR firmware 2.3.1 MU2</p> <p>Added support for HDS 95xx array firmware x65F/J</p> <p>Added support for HDS USP-V, VM firmware 60-07-53</p> <p>Added SSD storage support for Fujitsu DX8000 and DX400 arrays</p> <p>Added Fujitsu DX8000 and DX400 for 8.0.x Fabric MetroCluster</p> <p>Added HP XP20K/24K for 8.0.x Fabric MetroCluster</p> <p>Added SUN STK 9990V for 8.0.x Fabric and Stretch MetroCluster</p> <p>Added IBM XIV for 8.0.x Fabric and Stretch MetroCluster</p> <p>Added support for IBM DS8100, DS8300 firmware 64.33.20.0</p> <p>Added EMC CX4 for 8.0.x Fabric and Stretch MetroCluster</p> <p>Added N62xx platforms for IBM XIV array for 8.0.1 GA</p>

**IBM N series Gateway Support Matrix
Change History**

14-Dec-10	<p>Added support for Brocade switch firmware v6.3.1c for 8.0.x Added support for Brocade switch firmware v6.3.2a for 8.0.x Added support for Brocade switch firmware v6.3.1c for 7.3.x Added support for Brocade switch firmware v6.3.2a for 7.3.x Added MetroCluster support for IBM DS8700 for legacy platform Removed Cisco from Shared SAN Fabric MetroCluster Added support for ONTAP release 7.3.5 GA Added MetroCluster support for HP EVA x400 for legacy platform Added support for ONTAP 7.3.4 for Stretch MetroCluster Added support for new N62xx controllers with 7.3.5 GA Added support for ONTAP 7.3.5 GA for Stretch MetroCluster Added support for Cisco switch firmware v4.2(3) for 7.3.x Shared SAN MetroCluster Revised statements on Max LUN count supported for Dedicated SAN Fabric MetroCluster Revised list of supported arrays for 8.0.x Stretch MetroCluster Removed Max ISL speed limitation for Dedicated SAN MetroCluster Added MetroCluster support for HP EVA x400 for legacy platform Removed switch port sharing mis-statements in Connectivity section Added support for 8G interface cards for IBM arrays in 8.0.x Added support for HDS AMS firmware 0786/C Revised notes related to Brocade and Cisco 4G/8G switches Added support for Brocade firmware v6.4.1 Added support for Brocade firmware v6.3.2b Added support for IBM DS5020 array firmware 07.70.23.00 Added support for IBM DS5100 array firmware 07.70.23.00 Added support for HDS USP-V/VM array firmware 60-07-52 Added support for HDP for HDS AMS 2x00 in 8.0.x Corrected errors in N62xx recommended and absolute minimum capacities Added footnote for IBM XIV support for NDU Added support for IBM DS8700 array firmware 75.1.145.1 Added IBM XIV array support in 8.0.x Added support for IBM XIV array firmware 10.2.2 and 10.2.2a Added support for EMC CX4 array firmware 04.29.000.5.013 Added support for EMC CX4 array firmware 04.30.000.5.507</p>
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**IBM N series Gateway Support Matrix
Change History**

<p>17-Nov-10</p>	<p>Revised Native Disk Support statement in Connectivity section Added support for Fujitsu DX8000 and DX400 array in MetroCluster Revised notes for 3PAR arrays to include Cisco 8G switches Removed TMS RamSan 500 support from the support matrix Added support for Brocade switch firmware v6.3.2a Added support for Brocade switch firmware v6.2.2d Added support for new microcode 60-07-33-00 on HDS USP-V and USP-VM Added support for new microcode 07.60.40.00 on IBM DS5020 and DS3950 Added support for Cisco switch firmware v5.0(4) Added support for Brocade switch firmware v6.4.0c Added support for new microcode 0893/E for HDS AMS 2x00 Removed Cisco firmware v4.2(7a) from 8G switches Added support for new microcode 07.60.40.00 on IBM DS5100 Added support for new microcode 07.60.40.00 on IBM DS4800, DS4700, DS4200 Added restrictions for use of advanced array features Added support for IBM DS3950 array for 8.0.x Removed array firmware versions from MetroCluster sections of the matrix Modified EMC CX notes to include 8Gb FC host interface cards for 8.0.x</p>
<p>19-Oct-10</p>	<p>Restructure of ONTAP 7.3.x MetroCluster section Added support for Cisco 8G switch platforms Added support for new firmware for IBM DS8100 and DS8300 Added support for Fujitsu Eternus array with ONTAP 8.0.x 7-mode Added support for HDP with AMS 2xxx platforms in MetroCluster configs Added support for HDS 9500/9585 arrays for firmware x65F/H Added support for EMC VMAX array with ONTAP 8.0.x 7-mode Added support for IBM DS5020 array with ONTAP 8.0.x 7-mode Added support for 3PAR arrays with ONTAP 8.0.x 7-mode Added support for IBM DS8700 array with ONTAP 8.0.x 7-mode Added support for HP EVA arrays with ONTAP 8.0.x 7-mode Added support for HP XP24000/20000 microcode 60-07-00 Added support for HDS Tagmastore firmware 50-09-98 Removed restriction for AMS 2x00 arrays on use of HDS "High Density Storage Expansion Tray" Added support for IBM DS5100 firmware 07.60.28.00 Added support for IBM DS3950 array as equivalent to DS5020 array Added support for HDS USP-V/VM firmware 60-07-32 Added support for Cisco firmware 4.2(7a) for several switches Added support for HDS AMS 2xxx firmware 0890/H Clarify the HDP note for HDS AMS 2xxx arrays</p>

IBM N series Gateway Support Matrix Change History	
12-Aug-10	<p>Expanded support of Brocade DCX Backbone to include Brocade DCX-4S</p> <p>Added support for IBM DS5020 array (equiv DS3950 via RPQ)</p> <p>Added support for IBM DS8700 array</p> <p>Added support for new 3PAR models T400, T800, F200, F400</p> <p>Added support for Brocade firmware 6.4.0a for several switches</p> <p>Added support for Brocade firmware 6.3.2 for several switches</p> <p>Add restriction for AMS 2100/2300/2500 on use of HDS "High Density Storage Expansion Tray"</p> <p>Added support for EMC CLARiiON firmware 02.26.xxx.5.031 on CX300/500/700</p> <p>Added support for IBM XIV (Type 2810) firmware 10.2.1b and 10.2.1</p> <p>Added support for HDS AMS 2100/2300/2500 firmware 0890/B</p> <p>Added support for HDP on HDS AMS 2100/2300/2500</p> <p>Added support for HDS USP-V firmware 60-07-00</p> <p>Added support for Fujitsu firmware V20L50 for Fujitsu DX8000 and DX400</p> <p>Added support for HP EVA firmware XCS 09534000 for EVA 8400/6400/4400</p> <p>Added support for 3PAR firmware 2.3.1 MU1 for S400, S800 and E200</p> <p>Added support for Data ONTAP 8.0 7-Mode (new section)</p>
2-Jul-10	<p>Added support for 2TB LUNs</p> <p>Added support for HP EVA 6400</p> <p>Added support for Data ONTAP 7.3.4</p> <p>Added support for HDS AMS firmware 0885/D</p> <p>Added support for HDS AMS firmware 0783/G</p> <p>Added support for HDS Tagmastore USP firmware 50-09-96</p> <p>Added support for IBM DS4x00 firmware 07.60.28.00</p> <p>Added support for EMC Clariion CX3 firmware 03.26.xxx.5.031</p> <p>Added support for EMC Clariion CX4 firmware 04.29.000.5.006</p> <p>Added note for IBM DS5100 and DS5300</p> <p>Added support for Brocade firmware 6.3.1b for several switches.</p> <p>Added support for Cisco firmware 3.3(5) for several switches</p> <p>Expanded Fabric support for HP EVA</p> <p>Revised model list for Gateway Neighborhoods</p> <p>Revised listed firmware levels for Brocade 200E switches</p>
25-May-10	<p>Added support for EMC VMAX</p> <p>Added support for IBM XIV</p> <p>Added support for 8G FC Host Cards in CLARiiON CX-4</p> <p>Added support for 8G FC Host Cards in IBM DS5100, DS5300</p> <p>Added support for HDS firmware 60-06-12 60-06-10 on USP-V</p> <p>Added support for HDS firmware 50-09-95 on USP/NSC</p> <p>Added support for HDS firmware 21-14-55 on Lightning 9980V/9970V</p> <p>Added support for HDS firmware 60-06-10 on XP24000/20000</p> <p>Added support for 3PAR firmware 2.3.1</p> <p>Added support for Brocade firmware 6.2.2b, 6.3.0d, 6.3.1a on several switches</p> <p>Added support for Cisco firmware 4.2(3a) and 5.0(1a) on several switches</p> <p>Added support for Fujitsu Disk Encryption on DX8000 and DX400</p>
30-Apr-10	<p>Added support for IBM firmware 64.21.28.0 on DS8100 and DS8300</p> <p>Added support for IBM firmware 07.60.28.00 on DS5100, DS5300, DS4800, DS4700, DS4200</p>

IBM N series Gateway Support Matrix Change History	
18-Mar-10	<p>Added Support for Fujitsu Eternus DX8000 (DX8400, DX8700) and DX400 (DX410, DX440)</p> <p>Added Support for Fujitsu firmware V11L80 and V11L71 on 8000 and 4000</p> <p>Added support for Data ONTAP 7.3.3</p> <p>Added support for EMC firmware 02.26.xxx.5.028 on CX 300/500/700</p> <p>Added support for EMC firmware 03.26.xxx.5.029 on CX3</p> <p>Added support for HDS firmware 0885/A on AMS 2100, 2300, 2500</p> <p>Added support for HDS firmware 0783/D on AMS 200, 500, 1000</p> <p>Added support for HDS firmware 60-06-06, 60-06-05 and 60-05-16 on USP-V and USP-VM</p> <p>Added support for HDS firmware 50-09-92 on USP/NSC</p> <p>Added support for HDS firmware 21-14-54 on Lightning 9980V/9970V</p> <p>Added support for IBM firmware 07.60.13.05 on DS5100 and DS5300</p> <p>Added support for Sun firmware 60-05-15 on 9990V</p> <p>Added support for Brocade firmware 6.2.2a on several switches</p> <p>Added support for Cisco firmware 4.2(3) on several switches</p> <p>Added support for 2 TB LUNs</p>
15-Jan-10	<p>Added support for Data ONTAP 7.2.7</p> <p>Added support for EMC firmware 02.26.xxx.5.026 and 04.29.000.5.003 on the CLARiON</p> <p>Added support for HDS firmware 0880/A for the AMS 2x000</p> <p>Added support for HDS firmware 60-05-15 and 60-05-14 for the USP-V</p> <p>Added support for HDS firmware 50-09-90 for the USP/NSC</p> <p>Added support for HDS firmware 21-14-51 for the Lightning</p> <p>Added support for HP firmware XCS 09522000 for the EVA 4400 and 8400</p> <p>Added support for HP firmware 50-09-86 and 50-09-83 for the XP 12000/10000</p> <p>Added support for IBM firmware 07.50.13.00 for the DS5100 and DS5300</p> <p>Added support for IBM firmware 07.50.13.00 for the DS 4200, 4700, and 4800</p> <p>Added support for IBM firmware 64.30.87.0 and 64.21.18.0 for the DS 8100 and 8300</p> <p>Added support for Brocade firmware 6.1.2c, 6.2.1b, 6.2.2, 6.3.0b on several switches</p> <p>Added support for Cisco firmware 4.2(1a) for the MDS 9513, 9509, 9506, and 9124</p>
28-Oct-09	<p>Updated support for Data ONTAP 7.3.2</p> <p>Added support for the HP EVA 4400 /8400</p> <p>Added support for HDS firmware 0872/B for AMS 2x00</p> <p>Added support for IBM XIV via RPQ</p> <p>Updated Native Disk support for EXN only</p> <p>Added IBM firmware 64.21.18.0 for DS8100, DS8300</p> <p>Added support for HDS firmware 065F/G for the Thunder 9570, 9580, 9585V, 9520V</p> <p>Added support for HDS firmware 0783/A for the AMS 200, 500, 1000</p> <p>Added support for Brocade firmware 6.1.2b, 6.2.1, 6.3.0 on several switches</p>

IBM N series Gateway Support Matrix Change History	
11-Sep-09	<p>Added support for Data ONTAP 7.3.2 RC1</p> <p>Added HDS firmware 0865/E for AMS 2x00</p> <p>Added HDS firmware 0782/E for AMS 200, 500, 1000</p> <p>Added HDS firmware 60-05-10-00 for USP-V and USP-VM</p> <p>Added HDS firmware 50-09-86 for USP 1100, 600, 100 and NSC 55</p> <p>Added IBM firmware 07.50.12.00 for DS5100, DS5300</p> <p>Added IBM firmware 07.36.17.00 for DS4800, DS4700, DS4200</p> <p>Added IBM firmware 6.60.22.00 for DS4500, DS4300, DS4300 Turbo</p> <p>Added IBM firmware 64.20.139.0 for DS8100, DS8300</p> <p>Added Sun firmware 50-09-78 for STK 9990 / 9985</p> <p>Added Sun firmware 60-04-15-00 for STK 9990V</p>
29-Jul-09	<p>Added support for ONTAP 7.3.1.1L1</p> <p>Added EMC Firmware 04.28.000.5.706 for CLARiION CX4</p> <p>Expanded switch coverage for EMC CX4 (footnote #8: Brocade 4G and 8G, Cisco 4G FW)</p> <p>Added support for HDS AMS 2100</p> <p>Added "footnote 7" to HDS AMS 2x000 support section</p> <p>Added HDS Firmware 60-04-15-00 to HDS TagmaStore USP-V</p> <p>Added HDS Firmware 50-09-85 to HDS TagmaStore USP/NSC</p> <p>Added HDS Firmware 065F/E to HDS Thunder 9570V</p> <p>Added HDS Firmware 165F/E to HDS Thunder 9580 / 9585V / 9520V</p> <p>Added HP Firmware 6.220 for HP EVA 8000, 4000/6000, 8100, 4100/6100</p> <p>Added IBM Firmware 07.36.17.00 for IBM DS5100, DS5300</p> <p>Revised note #10 in IBM section to clarify DS5100/DS5300 switch support envelope</p> <p>Added 3PAR Firmware 2.2.4 MU4 (2.2.4.144) for models S400, S800, E200</p> <p>Added 8G SFP's to Brocade fabrics</p> <p>Added Brocade Firmware 6.1.2a on DCX backbone</p> <p>Added Brocade Firmware 6.1.2a on 8G switches</p> <p>Added Brocade Firmware 6.1.2a on 4G switches</p> <p>Added Brocade Firmware 5.3.2b on 4G switches</p> <p>Revised MetroCluster section to permit use of 8G SFP's</p> <p>Added HDS TagmaStore USP 50-09-85 Firmware for non-PVR Fabric MetroCluster</p> <p>Added HDS USP-V USP-M 60-04-15-00 Firmware for non-PVR Fabric MetroCluster</p> <p>Added EMC CX3 3.26.xxx.5.025 Firmware for non-PVR Fabric MetroCluster</p> <p>Added 3PAR Firmware nomenclature for non-PVR Fabric MetroCluster</p> <p>Added HDS AMS 2x00 support for non-PVR Fabric MetroCluster</p>

IBM N series Gateway Support Matrix Change History	
15-Jun-09	<p>Added EMC Firmware 04.28.000.5.504 for CLARiiON CX4 Added EMC Firmware 03.26.xxx.5.025 for CLARiiON CX3 Added EMC Firmware 02.26.xxx.5.025 for CLARiiON CX300/500/700 Added HDS AMS 2300, 2500 with Data ONTAP 7.3.1.1 Added HDS Firmware 50-09-83 for TagmaStore USP/NSC Added IBM Firmware 64.30.47.0 for DS8000 Added IBM Firmware 64.20.139.0 for DS8000 Added IBM Firmware 64.1.16.3 for DS8000 Added IBM Firmware 63.1.46.0 for DS8000 Added IBM Firmware 7.15.10.01 for DS4800 Added IBM Firmware 7.15.10.01 for DS4700/4200 Added IBM Firmware 06.60.17.00 for DS4500/4300/4300 Turbo Revised note for 3PAR storage to include F200 and F400 models Added new TMS Firmware 3.4.3 for RamSan 500 Added new Brocade Firmware 6.2.0f for 4Gb switches 48000, 7500, 5000, 4900, 4100, 200e Added new Brocade Firmware 6.2.0f for 8Gb switches 5300, 5100, 300 Added new Brocade Firmware 6.2.0f for DCX Backbone Added new McData FW 09.09.02 for switches 6140 (2G/4G), 6064 (2G/4G), 4700, 4500, 4400 Added new Cisco Firmware 4.1(3a) for switches MDS 9513 (4G), 9509 (4G), 9506 (4G), 9124 Added new Cisco Firmware 3.3(3) for all Cisco switches Revise wording in MetroCluster (non-RPQ) to “HDS TagmaStore USP” from “HDS TagmaStore” Add HDS Firmware USP 50-09-83 to non-RPQ MetroCluster section Add IBM Firmware DS4700/4800 7.15.10.01 to non-RQP MetroCluster section Add IBM Firmware DS8000 64.1.16.3 and 63.1.46.0 to non-PVR MetroCluster section Revised Brocade Firmware 6.2.0f for 5100, 300 for MetroCluster section Revised Brocade FW 6.2.0f for 48000, 7500, 5000, 4900, 4100, 200e for MetroCluster section</p>
1-May-09	<p>Added support for Data ONTAP 7.3.1.1 and removed 7.3.1. Added support for the EMC DMX4 with Data ONTAP 7.3.x Added support for Fujitsu firmware V31L50-0000 for the Eternus 6000 Added support for HDS firmware 0782/B for the AMS 200, 500, 1000 Added support for HDS firmware 60-04-14-00 for the USP-V and USP-VM Added support for Brocade firmware 6.1.0j, 6.1.2, 6.2.0c on several 4&8Gb switches Added support for Brocade firmware 6.1.2 on the DCX Added support for Cisco fabrics with the EMC CLARiiON CX4 Added support for the SUN StorageTek 9990V (HDS USP-V) Removed support for 3PAR firmware 2.2.4.78 at Vendor’s request</p>
14-Apr-09	<p>Added IBM firmware 7.36.14.01 for IBM DS4700/4800, DS5100/5300 Added IBM firmware 64.1.16.2, 64.0.175.0, 63.1.46.0 for IBM DS8100/8300</p>

IBM N series Gateway Support Matrix Change History	
24-Mar-09	<p>Added support for CLARiiON CX4</p> <p>Added EMC firmware 5773 for the DMX</p> <p>Added HDS firmware 60-04-04-00 and 60-03-29-00 for the USP-V</p> <p>Added HDS firmware 21-14-48 for the Lightning 9980/9970</p> <p>Added HP firmware 6.200 for the EVA 8000, 8100, 4000/6000, 4100/6100</p> <p>Added 3PAR firmware 2.2.4.114 for InServ S400, S800, E200</p> <p>Added support for CISCO 4Gb Fabrics with the IBM DS5100/5300</p> <p>Added Brocade firmware 5.3.2, 6.1.0g, and 6.1.1c on several switches</p> <p>Added Cisco firmware 4.1(3) on several switches</p> <p>Added several firmware revisions to MetroCluster configurations</p>
31-Jan-09	<p>Added support for Data ONTAP 7.3.1</p> <p>Added N6060</p> <p>Added CLARiiON firmware 03.26.xxx.5.020 for the CX3</p> <p>Added HDS firmware 50-09-81 for the USP</p> <p>Added HDS firmware 21-14-47 for Lightning 9980V and 9970V</p> <p>Added Fujitsu firmware V11L52 fro Eternus 8000 and Eternus 4000</p> <p>Added support of IBM DS5100 and DS5300 arrays.</p> <p>Added Brocade firmware 6.1.1b for several 4Gb switches.</p> <p>Added Support for Brocade 8Gb switches 300, 5100, 5300, DCX with 4Gb SFP's.</p> <p>Added Support for the Texas Memory Systems RamSan 500</p> <p>Added Cisco firmware 3.3(2) for several switches.</p> <p>Added McData firmware 9.09.00 for several switches.</p> <p>Changed support for HP EVA 3000/5000 from 7.3 to 7.3.1</p>
11-Jan-09	<p>Added support for Data ONTAP 7.2.6.1 and removed 7.2.6</p> <p>Added 3PAR firmware 2.2.4.94 on the S400, S800 and E200 including MetroClusters</p> <p>Added HDS firmware 0781/A for Tagmastore AMS (200, 500, 1000)</p> <p>Added Cisco firmware 4.1(1c) for several switches, inc</p>
5-Dec-08	<p>Added McData firmware 9.08.00 and 9.08.01 on several switches</p> <p>Added Brocade firmware 5.3.0e, 6.1.0e, 6.1.1a on several switches</p> <p>Added 3PAR firmware 2.2.4.80 on the S400, S800 and E200</p> <p>Added HDS firmware 60-03-27-00 on the USP-V and USP-VM including MetroClusters.</p> <p>Added HP firmware 60-02-48-00/12 on the XP24000 and XP20000</p> <p>Added IBM firmware 63.1.32.3 on the DS8100 and DS8300 including MetroClusters</p> <p>Added Sun firmware 50-09-74 on the 9990 and 9985</p> <p>Added HDS firmware 21-14-45 on the Lightning 9980/9970 for MetroClusters</p> <p>Added HDS firmware 50-09-78 for the TagmaStore including MetroClusters</p>
19-Nov-08	<p>Removed FOS 6.x FW versions from Brocade 2Gbps switches</p>
24-Oct-08	<p>Added Support for Data ONTAP 7.2.6.</p> <p>Added FCP Switch Note S11: The 8Gb FC Modules are not supported in the Brocade 48000</p>

IBM N series Gateway Support Matrix Change History	
10-Oct-08	<p>Added support for HDS firmware 0780/A on the Tagmastore AMS 200, 500, 1000</p> <p>Added support for HDS firmware 60-03-06-00 on the USP-V, USP-VM</p> <p>Added support for HDS firmware 50-09-74 on the Tagmastore USP 1100, 600, 100, NSC-55</p> <p>Added support for HDS firmware 21-14-45 on the Lightning 9980V/9970V</p> <p>Added support for HDS firmware 065F/D on the Thunder 9570V</p> <p>Added support for HDS firmware 165F/D on the Thunder 9580, 9585V, 9520V</p> <p>Added support for IBM firmware 7.15.07 on the DS4800, DS4700, DS4200</p> <p>Added support for IBM firmware 06.60.17.0 on the DS4500, DS4300</p> <p>Added support for IBM firmware 63.1.32.3, 63.1.46.0, 64.0.175.0 on the DS8000</p> <p>Added support for Brocade firmware 5.3.1b, 6.1.0b, 6.1.0c, 6.1.1 on several switches</p> <p>Added support for Cisco firmware 3.3(1c) on several switches</p> <p>Added support for MetroCluster with the following firmware revisions:</p> <ul style="list-style-type: none"> HDS Tagmastore 50-09-74 HDS USP-V and USP-VM 60-03-06-00 IBM DS4800, DS4700 7.15.07 Brocade switch FW 6.0.0b Cisco switch FW 3.3(1c) <p>Added DS4100 FW 06.12.56.00 (Contact IBM Support)</p> <p>Added Note 4 for IBM storage: Non Disruptive Upgrade of Storage Array Firmware is not supported.</p>
10-Sep-08	Added N6040 and N6070
7-Aug-08	<p>Added support for Data ONTAP 7.3.0 GA</p> <p>Added support for HDS firmware 50-09-72 on the Tagmastore USP / NSC55</p> <p>Added support for HDS firmware 60-02-48-00/12 on the USP-V and USP-VM</p> <p>Added support for HDS firmware 01-19-99-00/10 on the Lightning 9960V/9910</p> <p>Added support for MetroCluster with the following firmwares:</p> <ul style="list-style-type: none"> HDS Tagmastore 50-09-72 HDS USP-V and USP-VM 60-02-48-00/12 IBM DS8000 63.0.106.2 IBM DS4800, DS4700 7.10.23 <p>Added support for SVC 4.3 with RPQ</p>
15-Jul-08	<p>Added support for Data ONTAP 7.1.3 and 7.2.5.1</p> <p>Added support for Brocade firmware 5.3.1a, 6.0.1 and 6.0.1a on several switches</p> <p>Added support for IBM firmware 63.0.106.2 on DS8100 and DS8300</p> <p>Added support for IBM firmware 7.10.23 for DS4xxx arrays</p> <p>Removed support for IBM SVC 4.2</p>

IBM N series Gateway Support Matrix Change History	
12-Jun-08	<p>Added support for Data ONTAP 7.2.5.1.</p> <p>Added support for the HP EVA 3000 / 5000 storage arrays</p> <p>Added support for McData firmware 9.07.00 and 9.07.01 on several switches</p> <p>Added support for Cisco firmware 3.3(1a) on several switches</p> <p>Added support for Brocade firmware 6.1.0 on several switches</p> <p>Added support for IBM firmware 6.60.08.00 on DS4xxx arrays</p> <p>Added support for HDS firmware 21-14-43 on 9980V/9970V Lightning</p> <p>Added support for HDS firmware 0775/A on AMS 200, 500, 1000</p> <p>Added support for HDS firmware 50-09-71 on Tagmastore USP / NSC55</p> <p>Added support for HDS firmware 60-02-29 on USP-V, USP-VM</p> <p>Removed listings for FC initiators and added reference to Hardware and Service Guide</p> <p>Added root volume limits</p> <p>Added RAID group limits for array LUNs</p> <p>Added minimum size of a spare core array LUN</p> <p>Added reference to Hardware and Service Guide for HBA and NIC support</p>
29-Apr-08	<p>Correction: Direct Attach for IBM DS8000 removed from Supported row, remains on Not Supported row.</p>
4-Apr-08	<p>Added support for HDS firmware 0773/D on AMS 200, 500, 1000</p> <p>Added support for HDS firmware 60-02-06 on USP-V, USP-VM</p> <p>Added support for HDS firmware 21-14-39 on 9980V/9970V Lightning</p> <p>Added support for HDS firmware 065F/C on Thunder 9570V</p> <p>Added support for HDS firmware 165F/C on Thunder 9580 / 9585V / 9520V</p> <p>Added support for Brocade firmware 5.3.1, 6.0.0b and 6.0.0c on several switches</p> <p>Added support for Cisco 3.2(3a) on several switches</p> <p>Removed support for 7.2.3 MetroClusters</p> <p>Specified 7.2.4P5 for MetroClusters instead of 7.2.4</p> <p>Added support for HDS USP-V and USP-VM on Fabric and Stretch MetroClusters</p> <p>Added support for HDS firmware 21-14-39 on 9980V/9970V Lightning on MetroClusters</p> <p>Added support for Brocade firmware 5.3.1 on MetroClusters</p>
28-Mar-08	<p>Added Support for DOT 7.3 RC1. Note: This is not a GA release.</p> <p>Added Support for IBM SVC V4.2 with DOT 7.3 RC1</p>
24-Mar-08	<p>Added support for HDS USP-VM</p> <p>Added support for HP EVA 4100/6100/8100</p> <p>Added support for Brocade firmware 5.3.0b and 5.3.0d</p> <p>Added support for Cisco firmware 3.2(3)</p> <p>Added support for IBM firmware 06.60.02.00 on DS4800, 4700, 4200, 4500, 4300</p> <p>Added support for CLARiiON firmware 3.26.xxx.5.010 on CX3-20, CX3-40, CX3-80</p> <p>Added support for Fujitsu firmware V31L40-0000 on Eternus 6000</p> <p>Added note for HP EVA 4000/6000/8000 “Non-disruptive upgrade of array microcode is NOT supported – Gateway requires an outage”</p> <p>Added support for 3PAR firmware 2.2.3.148 with Fabric MetroClusters</p> <p>Added note to MetroClusters “Follow all notes and restrictions for switches documented on the switch matrix”</p> <p>Added support for Brocade FW 6.0.0 on 48000, 7500, 5000, 4900, 4100, 200e on DOT 7.2.4.</p> <p>Added support for HDS USP firmware 50-09-54</p> <p>Added support for Sun StorageTek firmware 50-90-54</p>

IBM N series Gateway Support Matrix – Change History

IBM N series Gateway Support Matrix Change History	
20-Feb-08	Added N7700 and N7900
21-Jan-08	<p>Added new firmware 3.24.xxx.5.016 for CLARiiON CX3-20, CX3-40 and CX3-80.</p> <p>Added support for firmware 2.2.3.148 on 3PAR arrays.</p> <p>Added firmware 3.2(2c) and 3.1(4) for majority of Cisco switches</p> <p>Added firmware 9.06.02 for McDATA switches 4400, 4500, 4700, 6140, 6040</p> <p>Added note: For Cisco switches: Media Encryption and Inter-VSAN routing are not supported for use in the data path between Gateway initiator ports and storage arrays.</p> <p>Removed support for the Brocade 24000 in standard Metrocluster configurations.</p> <p>Added Brocade firmware 5.2.2a to MetroCluster configurations</p> <p>Added IBM DS8000 family to Metro Cluster configurations</p> <p>Added FW 5.2.3 for Brocade switches</p> <p>Added V4.1.1.5 for the IBM SAN Volume Controller</p>
3-Dec-07	<p>Added ONTAP 7.2.4 support</p> <p>Add 1 TB LUN size with 7.2.4</p> <p>Increased capacities with 7.2.4</p> <p>Clarified Fujitsu model numbers</p> <p>Added V11L12 for Fujitsu ETERNUS 8000/4000</p> <p>Added EMC DMX with ONTAP 7.2.4</p> <p>Added HDS USP-V and HP XP24000/20000 with ONTAP 7.2.4</p> <p>Added 3.24.xxx.5.011 to EMC CX3</p> <p>Added 0772/D to HDS AMS</p> <p>Added 21-14-38 to HDS 9980V/9970V and Sun StorEdge 9980</p> <p>Added 50-09-07 to HP XP12000</p> <p>Added 50-09-40 to HDS USP and Sun StorEdge 99xx</p> <p>Added 065F/B and 165F/B to HDS 95xx and Sun StorEdge 9970</p> <p>Added DS4000 06.60.02.00</p> <p>Added DS8000 62.42.77.0 and 62.42.83.0</p> <p>Added McDATA 9.06.00</p> <p>Added Cisco 3.2(1a)</p> <p>Added Brocade 5.0.5e, 5.0.5f, 5.2.2a, 5.3.0a</p> <p>Added configurations to the MetroCluster matrix</p>
12-Nov-07	Added DS4100
4-Oct-07	<p>3PAR: new FW: 2.2.2.158 for E200, S400, S800 only on ONTAP 7.2.2 and 7.2.3</p> <p>HDS 9570V: new FW: 065F</p> <p>Sun StoreEdge 9970 new FW: 065F & 065E/A</p> <p>HDS 9580 / 9585V / 9520V: new FW: 165F</p> <p>HDS 9980V / 9970V: new FW 21-14-36</p> <p>Sun StorEdge 9980 new FW 21-14-36</p> <p>HDS USP/NSC: new FW 50-09-15</p> <p>Sun StoreEdge 9900 and 9985 new FW 50-09-15</p> <p>HDS AMS 200, 500, 1000: new FW 0772/A</p> <p>Brocade 24000 / 3900 / 3850 / 3250: new FW: 5.2.0a, 5.2.1, and 5.2.1b</p> <p>Cisco MDS 9506 & 9509 FW support for 2Gb connections is made consistent for both IBM models.</p> <p>IBM DS8100 / DS8300, new FW: 6.1.740.27</p> <p>IBM DS4300 / DS4500: new FW: 6.23.05</p>
21-Sep-07	Updated MetroCluster Brocade FW to 5.2.1b

IBM N series Gateway Support Matrix Change History	
17-Aug-07	<p>Added HP EVA 4000 / EVA 6000 / EVA 8000 to the support matrix.</p> <p>All new Metrocluster systems require ONTAP 7.2.3 software</p> <p>Direct Attach support listings for HP EVA and Fujitsu added – not supported</p> <p>Direct Attach support listings for HP XP and 3PAR added – is supported.</p> <p>Added Stretch Metrocluster configurations to the Standard Metrocluster config page.</p> <p>Added Cisco Switch FW 3.1(3) and 3.1(3a) for 4Gb switches</p> <p>Added HP XP1024 FW 21-14-33 support</p>
3-Aug-07	<p>Added FW 165E/A and 065E/A to the HDS and Sun 95xx arrays</p> <p>Added FW 6.12.56.00 to the IBM DS4300/DS4500 and DS4400 arrays</p> <p>Removed note for HDS and Sun 95xx arrays that FW later than C/R is not supported.</p> <p>Added note that HDS FW 065D/ and 165D/ are not supported because of known issues.</p>
16-Jul-07	<p>Added ONTAP 7.2.3 support</p> <p>Added STANDARD Metrocluster configurations</p> <p>Added McData 4400 and 4700 with 7.2.3 with 9.02.01</p> <p>Added Brocade 48000, 7500, 5000, 4900, 4100, and 200E – FW version 5.2.1b</p>
29-Jun-07	<p>Added 3PAR support page</p> <p>Added N5300 to DMX for ONTAP 7.2.1.1, 7.2.2</p> <p>Added HP XP10000/XP12000 FW 50-08-05</p> <p>Added McDATA 6140, 6064 (4gb and 2gb versions), FW 9.02.01</p>
21-Jun-07	<p>Added Sun Support Matrix Page with HDS storage array models</p> <p>Added EMC DMX support (with RPQ) to the matrix.</p> <p>Added Note: HDS Thunder FW versions later than 065C/R or 165C/R not supported.</p> <p>Added Support Policy Statements</p> <p>Added IBM SVC with N7800 support</p> <p>Note: IBM SVC ver 4.2 is not supported.</p> <p>Added IBM DS8xxx FW 6.2.400.76 & FW 6.1.740.20 support</p> <p>Dropped IBM DS4800 7.0.5 and 7.1.1 support with N7800 and N7600</p> <p>Added IBM DS4800 7.0.6 , 7.1.2, 7.1.2.1 support with N5200, and N5500</p> <p>Added IBM DS4400 FW 6.12.40 support</p> <p>Dropped IBM DS4400 restriction on FW later than 6.12.03</p> <p>Added IBM DS4200/DS4700/DS4800 FW 6.23.05.00 support</p> <p>Added Cisco MDS 9513 & MDS 9124 4Gbps switch support and new MDS 95xx IBM models</p> <p>Added Cisco 95xx Blade types supported with ONTAP 7.x</p> <p>Added HDS FW 770/G to AMS support</p> <p>Added HDS FW 21-14-33-00 to the HDS 9970/9980</p> <p>Added FW 50-09-06 to HDS/USP, Sun/USP support</p> <p>Created new Capacities page with minimum & recommended LUN size info</p> <p>Dropped Connectivity page IBM DS8000 direct support</p> <p>Moved some configuration information to new Connectivity page</p>
12-Apr-07	<p>Added ONTAP 7.1.2.1 support</p> <p>Added IBM DS4200 support</p>

IBM N series Gateway Support Matrix – Change History

IBM N series Gateway Support Matrix Change History	
30-Mar-07	<p>Added ONTAP 7.2.2 support</p> <p>Added Brocade FW 5.2.1, 5.0.5a, 5.0.5c to certain switch models</p> <p>Added McDATA FW 9.01 to certain switch models</p> <p>Added Cisco FW 3.1(1) to all switch models</p> <p>Added IBM ESS 800 FW 2.4.4.112</p> <p>modified note 3 on configuration guidance for USP with external storage</p>
9-Mar-07	<p>Added ONTAP 7.1.2</p> <p>Added HDS AMS FW version 0770/C</p> <p>External storage behind HDS USP is again supported - with a note about careful configuration requirements.</p> <p>Note added: DWDM with Metrocluster requires RPQ for support</p>
23-Feb-07	<p>Added Fujitsu Eternus 3000/4000/6000/8000 array support</p> <p>Added SVC FW V4.1.1.0</p> <p>Added HDS USP FW 50-08-06</p> <p>IBM removed note 3 (FW version restriction) from IBM DS4300/DS4500</p> <p>IBM removed note 6 because 4Gbps is now supported on IBM DS8000</p>
15-Feb-07	<p>Added IBM DS8000 FW 6.1.730.21</p> <p>Added IBM DS8000 Models 931, 932, 9B2</p> <p>Added DS4300/DS4500 FW 06.12.40.00</p> <p>Added HDS AMS FW 760/B</p> <p>Removed support for External disks behind HDS USP storage, due to support problems.</p> <p>Added IBM SVC Storage as supported Array type.</p> <p>Added ONTAP 7.2.1.1</p> <p>Brocade 200E location fixed - to reside in the 4Gbps category of supported switches</p>
5-Feb-07	<p>Added CLARiiON support</p> <p>HDS USP 4Gbps now supported on ONTAP 7.2</p> <p>Added McDATA 6064 and 6140 4Gb support</p> <p>Added McDATA 4700 switch support</p> <p>Added maximum number of LUNs visible in a neighborhood.</p>
15-Jan-07	<p>Added DS8100 / 8300 FW 6.2.400.64</p>
5-Jan-07	<p>Added HDS 9570 FW 065C/R</p> <p>Added HDS 9580 / 9585V / 9520 FW 165C/R</p>
8-Dec-06	<p>Added ONTAP 7.2.1</p> <p>Added DS8100/8300 FW 6.2.200.104</p> <p>Added DS4800 FW 6.16.92.00</p> <p>Added HDS USP FW 50-07-72</p> <p>FW DELETION: For HDS 95xx models - All versions prior to B/R no longer supported!</p> <p>Added: Anti-Virus software support is for all versions of ONTAP.</p>
21-Nov-06	<p>Added IBM DS8xxx FW 6.1.720.17</p> <p>Added Cisco MDS 9020 FW 2.1(3)</p> <p>Added Cisco MDS 9120, 9140, 9216, 9216A, 9216i, 9506, 9509 with FW 3.0(2a)</p> <p>Fixed Capacity tables - V6000 supported only on ONTAP 7.2.</p>

IBM N series Gateway Support Matrix – Change History

IBM N series Gateway Support Matrix Change History	
3-Nov-06	Added HDS USP FW 50-07-67 Added HDS 9570V FW 065C/G Added HDS 9580 FW 165C/G Replaced HPXP1024 FW with current FW 21-14-24 Fixed FW versions for Brocade 4012, 3016, 3014 Added McDATA 4300 FW 8.00 Added McDATA 4500, 6064, 6140 FW 9.00
27-Oct-06	changed HP XP512/XP48 notation: they are re-branded Lightning systems from HDS. Added brocade 3200/3800 FW 3.2.1b Added brocade 3250/3850, FW 5.0.5a Added brocade 200E/4100/4900/48000 FW 5.2.0a. Added DS4800 FW 06.15.24.00 & 06.16.88.00 Added DS8000 FW 6.2.200.96
18-Oct-06	USP FW required for V6000 support upgraded to 50-07-64 due to know issues with -26.
16-Oct-06	N5500 capacity fixed, to reflect ONTAP code limits. Correct capacity limit is (96/96TB)
11-Oct-06	HDS AMS 200/500/1000 support on 7.0.5 added. See note on McDATA switch setting. McDATA 9020 switch added. FW 3.0(1) and 3.0(2) added for 4 other switches. McDATA 6064/6140 switch setting note added. HDS 95xx - new FW version 165C/C and 065C/C added HDS 9970 - new FW version 21-14-24 addeed IBM ESS800 - new FW version 2.4.4.45 added IBM DS8xxx - not currently supporting the the DS8000 Turbo/4gb option.
22-Sep-06	DS8000 FW 6.1.700.1 added
15-Sep-06	Max TB capacity of N5200 and N5500 increased on ONTAP 7.1.1, and 7.2
6-Sep-06	IBM DSS4800's equivalent Engenio model number updated.
25-Aug-06	New HDS USP FW version: 50-07-64 New HDS 9960 FW version: 01-19-99 HP XP10000 added HP XP FW updates for XP12000/10000/512/48. MetroCluster support moved to a separate page. Updated Tape Connectivity specification. SnapManager for Oracle, previously erroneously omitted, has been added.
7-Aug-06	
21-Jul-06	HDS Thunder (9500) new FW versions x65B/R and x65B/S ONTAP 7.2RC4 IBM DS4800 support on ONTAP 7.2RC4 Brocade FW 5.03a, 5.01d additions McDATA 8.01 additions Cisco 2.1(2b) added
30-Jun-06	Data ONTAP 7.1.1 added DS4800 support for Data ONTAP 7.1.1 added Added HDS note: USP 4Gbps connections not currently supported Reword note 6 on the FCP Switch support page for clarity. DS8000 direct connect not supported (pending resolution of some issues.) Correction: HP 12000 mode 254 should be set "Off"

IBM N series Gateway Support Matrix – Change History

IBM N series Gateway Support Matrix Change History	
12-Jun-06	V6000 and ONTAP 7.2RC3 support added for storage arrays and switches. V6000 capacities are also new V3000 capacities adjusted to equal the current Filer capacities
5-Jun-06	DS8xxx FW IBM LIC Level 6.1.600.46 added.
24-May-06	DS8300, Model 9A2 - LPAR support added.
26-Apr-06	was missing on IBM DS8100/DS4100 listing - fixed error.
19-Apr-06	IBM DS8100 FW ver. 6.1.0.52 added IBM DS4xxx note 3 added IBM ESS 750 & 800 FW ver 2.4.3.79 added Brocade Silkstorm current FW version support with Data ONTAP 7.1 and later McDATA 6064 & 6140 support with FW version 8.0 Reorganized Feature Support into Connectivity, Capacity, and SW Support pages. Neighborhoods limits added to SW Support listing
17-Mar-06	Data ONTAP 7.1 and 7.1.0.1 support for all arrays and switches added



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