



Windows Support Matrix

Hitachi Unified Storage 100 Family

Note: Configurations added since the last matrix will be shown in **red** text.

Introduction

Use this interoperability matrix to check whether a proposed customer configuration is supported. Each tab contains a set of components that together comprise a Hitachi Vantara supported solution. This includes operating system (OS) and maintenance release, host bus adapter (HBA), HBA driver, and storage area network (SAN) switches, both Fibre channel (FC) and Fibre channel over Ethernet (FCoE).

In the sample datapath below, a customer configuration is supported if that particular HBA and driver, switch and switch firmware combinations both appear on the Windows Server 2012 R2 support matrix.

For example: Windows Server 2012 R2 host that has an Emulex LPe12000/12002 HBA using driver v2.76.002.001 connected to a Brocade DCX SAN switch with FOS v7.2.1 installed.

If a combination does not appear on the OS support matrix, the customer's Hitachi Vantara Sales Engineer (SE) or other Hitachi field service employee must submit an Interoperability Support Request in order to gain support for the new configuration.

Note that in some cases a component (HBA, driver, switch, switch firmware version) may no longer be supported (end of service life, EOSL) in which case the customer should choose components that are already supported from the matrix. Click on a tab to view associated components.

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HUS 110 130 150 support for Microsoft Windows Server 2012 R2

FC Storage Interface			
Host Bus Adapters (FC-HBA)/Converged Network Adapters (CNA)			
Manufacturer	Models	Driver Versions	Notes
Cisco	UCS 1225, 1225T, 1227, 11240, 1280, 1285	v2.3.0.20 v2.4.0.8 v2.4.0.9 v2.4.0.13	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS 1340, 1380	v2.4.0.8 v2.4.0.9 v2.4.0.11 v2.4.0.13 v2.4.0.19	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS M81KR	v2.3.0.12 v2.4.0.11 v2.4.0.13 v2.4.0.19	Must connect to a Cisco UCS top of rack interconnect switch.
Emulex	LPe12000, LPe12002, LPe1205, LPe1205-HI	v2.74.214.004 v2.76.002.001 v10.2.261.4 v10.2.370.8	
	LPe16000, LPe16002, LPe16002B	v2.74.214.004 v2.76.002.001 v2.76.003.001 v10.1.1.26 v10.2.261.4 v10.6.114.0 v11.0.247.0 v11.1.145.16	
	LPm16002B-HI	v2.76.002.001	
	LPe31000, LPe31002, LPe31004, LPe32000, LPe32002	v11.0.247.0	
	OCe10102	v2.76.002.001 v2.76.003.001 v10.4.246.0	
	OCe11102	v10.2.370.8	
	HP	451871-B21 QMH2562 554M, 554FLB 650M, 650FLB 651281-B21 QMH2572 AJ763A, AJ763B, 82E AJ762A, AJ762B, 81E	v9.1.11.28 v10.2.261.4 v10.2.370.8 v10.2.261.4 v10.4.246.0 v9.1.11.28 v2.74.214.004 v2.76.002.001 v10.2.261.4
IBM	42C2069, 42C2071	v2.74.214.004 v2.76.002.001 v10.2.261.4	
	42D0485, 42D0494	v2.74.214.004 v2.76.002.001 v10.2.261.4	
Qlogic	QLE2560, QLE2562	v9.1.14.22 v9.1.15.21 v9.2.2.20	

	QLE2660, QLE2662, QLE2670, QLE2672, QME2662	v9.1.10.26 v9.1.11.24 v9.1.11.28 v9.1.11.3 v9.1.12.21 v9.1.15.21	
	QLE2690, QLE2692, QLE2740, QLE2742, QLE2764	v9.1.15.21 v9.1.17.21	
	QLE8142	v9.1.11.12	
	QLE8360, QLE8362	v9.1.12.10	
FC Switches			
Manufacturer	Models	Firmware Versions	Notes
Brocade	300, 5300, 7800, DCX, DCX-4s	v7.4.2d	
	6505, 6510, 6520, DCX8510	v7.4.2d, v8.0.1 - v8.0.2f	Brocade FOS v8.0.1 is not supported.
	G620, X6	v8.0.1 - v8.0.2f	Brocade FOS v8.0.1 is not supported.
Cisco	9148, 9222i, 9506 (8Gb), 9513, 9513 (8Gb)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9148S	v6.2(9a) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9250i	v6.2(5) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9396S	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9706	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9710	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9718	v7.3(0)D1(1) - v7.3(1)D1(1), v7.3(0)DY(1)	

FCOE Switches (FCF mode)			
Manufacturer	Models	Firmware Versions	Notes
Brocade	VDX 6730 (8G)	v4.0.1	
Cisco	9250i (FCoE)	v6.2(5) - v6.2(13b), v6.2(17) - v6.2(23), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9513 (FCoE)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9718 (FCoE)	v7.3(0)D1(1) - v7.3(1)D1(1)	VSP G1000 & VSP only
	Nexus 5010-2232pp, 5020, 5548p, 5548up, 5548up-2232pp, 5596T-2232TM- E, 5596up	v6.0(2)N1(2), v6.0(2)N1(2a), v6.0(2)N2(1) - v6.0(2)N2(6), v7.0(0)N1(1) - v7.0(8)N1(1), v7.1(0)N1(1a) - v7.1(4)N1(1)	
	Nexus 5672up, 5672up-2248pq	v7.0(0)N1(1) - v7.0(8)N1(1), v7.1(0)N1(1a) - v7.1(4)N1(1), v7.3(0)N1(1) - v7.3(1)N1(1)	
	Nexus 7710 (FCoE)	v7.3(0)D1(1) - v7.3(1)D1(1)	
	UCS 6120XP, 6140XP, 6248up, 6296up	v2.1(3a) - v2.1(3g), 2.2(1b) - v2.2(1d), v2.2(3a) - v2.2(3f), v2.2(5b) - v2.2(5d), v2.2(6c) - v2.2(8f)	
	UCS 6324	v3.0(2c) - v3.0(2d), v3.1(1e) - v3.1(1l)	Cisco UCS Mini only

HUS 110 130 150 support for Microsoft Windows Server 2012

FC Storage Interface			
Host Bus Adapters (FC-HBA)/Converged Network Adapters (CNA)			
Manufacturer	Models	Driver Versions	Notes
Cisco	UCS 1225, 1225T, 1227, 11240, 1280, 1285	v2.2.0.9 v2.2.0.17 v2.3.0.12 v2.4.0.8 v2.4.0.11	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS M81KR	v2.2.0.9 v2.2.0.17 v2.3.0.12 v2.4.0.8	Must connect to a Cisco UCS top of rack interconnect switch.
Emulex	LPe12000, LPe12002, LPe1205, LPe1205-HI	v2.74.009.001 v2.74.014.001 v2.76.003.001 v10.2.261.4	
	LPe16000, LPe16002, LPe16002B	v2.72.012.001 v2.76.003.001 v10.2.261.4	
	OCm11104-F2	v2.72.012.001	
HP	451871-B21 QMH2562	v9.1.10.27 v9.1.11.20 v9.1.11.28	
	456972-B21 LPe1205	v2.74.009.001	
	554M, 554FLB	v2.74.009.001 v2.74.014.001 v10.2.261.4	
	AJ763A, AJ763B, 82E AJ762A, AJ762B, 81E	v2.74.009.001 v2.74.014.001 v10.2.261.4	
	AK344A, AJ764A, 81Q, 82Q	v9.1.10.26 v9.1.10.27 v9.1.11.20 v9.1.11.24 v9.1.11.28	
IBM	42C2069, 42C2071	v2.74.009.001 v2.74.014.001 v10.2.261.4	
	42D0485, 42D0494	v2.74.009.001 v2.74.014.001 v10.2.261.4	
	42D0501, 42D0510	v9.1.10.26 v9.1.10.27 v9.1.11.20 v9.1.11.24 v9.1.11.28	

Qlogic	QLE2560, QLE2562	v9.1.10.26 v9.1.10.27 v9.1.11.20 v9.1.11.24 v9.1.11.28	
	QLE2660, QLE2662, QLE2670, QLE2672	v9.1.10.26 v9.1.11.24 v9.1.11.28	
	QLE8142	v9.1.10.15 v9.1.11.24	

FC Switches

Manufacturer	Models	Firmware Versions	Notes
Brocade	300, 5300, 7800, DCX, DCX-4s	v7.4.2d	
	6505, 6510, 6520, DCX8510	v7.4.2d, v8.0.1 - v8.0.2f	Brocade FOS v8.0.1 is not supported.
	G620, X6	v8.0.1 - v8.0.2f	Brocade FOS v8.0.1 is not supported.
Cisco	9148, 9222i, 9506 (8Gb), 9513, 9513 (8Gb)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9148S	v6.2(9a) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9250i	v6.2(5) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9396S	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9706	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9710	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.

FCOE Switches (FCF mode)

Manufacturer	Models	Firmware Versions	Notes
Cisco	Nexus 5010-2232pp, 5020, 5548p, 5548up, 5548up-2232pp, 5596T-2232TM-E, 5596up	v5.1(3)N2(1), v5.2(1)N1(1b)	
	UCS 6120XP, 6140XP, 6248up, 6296up	v2.0(4a) - v2.0(4d), v2.0(5a) - v2.0(5f), v2.1(1a) - v2.1(1f), v2.1(2a) - v2.1(2d), v2.1(3a) - v2.1(3g), v2.2(3a) - v2.2(4c), v2.2(6c) - v2.2(8f)	
	UCS 6324	v3.0(2c) - v3.0(2d)	Cisco UCS Mini only

iSCSI Storage Interface

iSCSI Adapters

Manufacturer	Models	Driver Versions	Notes
Any	10 GbE NIC	Bundled	

iSCSI Switches

Manufacturer	Models	Firmware Versions	Notes
Any	Generic 10GigE Switch	Any 10GigE FW	

HUS 110 130 150 support for Microsoft Windows Server 2008 R2 & R2 SP1

FC Storage Interface			
Host Bus Adapters (FC-HBA)/Converged Network Adapters (CNA)			
Manufacturer	Models	Driver Versions	Notes
Cisco	UCS 1225, 1225T, 1227, 11240, 1280, 1285	v2.1.0.17 v2.1.0.18 v2.1.0.20 v2.1.0.25 v2.1.0.27 v2.4.0.13	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS 1340, 1380	v2.1.0.27 v2.1.0.31 v2.1.0.34	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS M71KR-Q, M72KR-Q	v9.1.8.27	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS M81KR	v2.1.0.17 v2.1.0.18 v2.1.0.20 v2.1.0.25 v2.1.0.27 v2.1.0.31 v2.1.0.34	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS P81E	v2.1.0.17 v2.1.0.20	Must connect to a Cisco UCS top of rack interconnect switch.
Emulex	LPe12000, LPe12002, LPe1205, LPe1205-HI	v2.72.012.001 v2.74.014.001 v2.76.003.001 v10.2.370.8 v10.4.246.0	
	LPe16000, LPe16002, LPe16002B	v2.72.012.001 v10.2.261.4 v10.2.370.8 v10.4.246.0 v11.1.145.16	
	OCe10102	v10.0.720.0	
	OCe11102	v10.2.370.8 v10.0.720.0	
	OCm11104-F2	v2.72.012.001	
HP	451871-B21	v9.1.9.49	
	QMH2562	v9.1.10.26	
	554M, 554FLB	v2.74.009.001 v2.76.003.001 v10.2.261.4 v10.2.370.8	
	650M, 650FLB	v10.2.261.4 v10.2.370.8	
	659818-B21 LPe1205A	v10.4.246.0	
	AJ763A, AJ763B, 82E AJ762A, AJ762B, 81E	v2.72.012.001 v2.74.014.001 v2.76.003.001	
	AK344A, AJ764A, 81Q, 82Q	v9.1.9.27 v9.1.9.47 v9.1.10.26 v9.1.10.27	
	NC553i, NC553m, CN1100E	v10.2.370.8	
IBM	42D0485, 42D0494	v2.72.012.001 v2.74.014.001 v2.76.003.001	

	42D0501, 42D0510	v9.1.9.27 v9.1.9.47 v9.1.10.26 v9.1.10.27	
QLogic	QLE2560, QLE2562	v9.1.9.27 v9.1.9.47 v9.1.10.26 v9.1.10.27 v9.1.14.22 v9.2.2.20	
	QLE2660, QLE2662, QLE2670, QLE2672	v9.1.10.26 v9.1.13.20 v9.1.17.21	
	QLE8142	v9.1.9.15	
	QLE8152	v9.1.9.15 v9.1.9.55 v9.1.10.18	
	QLE8360, QLE8362	v9.1.12.10	

FC Switches				
Manufacturer	Models	Firmware Versions	Notes	
Brocade	300, 5300, 7800, DCX, DCX-4s	v7.4.2d		
	6505, 6510, 6520, DCX8510	v7.4.2d, v8.0.1 - v8.0.2f	Brocade FOS v8.0.1 is not supported.	
	G620, X6	v8.0.1 - v8.0.2f	Brocade FOS v8.0.1 is not supported.	
Cisco	9148, 9222i, 9506 (8Gb), 9513, 9513 (8Gb)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.	
	9148S	v6.2(9a) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.	
	9250i	v6.2(5) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.	
	9396S	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.	
	9706	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.	
	9710	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.	
	9718	v7.3(0)D1(1) - v7.3(1)D1(1), v7.3(0)DY(1)		
FCOE Switches (FCF mode)				
Manufacturer	Models	Firmware Versions	Notes	
Cisco	9250i (FCoE)	v6.2(5) - v6.2(13b), v6.2(17) - v6.2(23), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.	
	9513 (FCoE)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.	
	9718 (FCoE)	v7.3(0)D1(1) - v7.3(1)D1(1)	VSP G1000 & VSP only	
	Nexus 5010-2232pp, 5020, 5548p, 5548up, 5548up-2232pp, 5596T-2232TM-E, 5596up	v5.1(3)N1(1) - v5.1(3)N2(1c), v5.2(1)N1(1) - v5.2(1)N1(8b), v6.0(2)N1(2), v6.0(2)N1(2a), v6.0(2)N2(1) - v6.0(2)N2(6), v7.0(0)N1(1), v7.0(1)N1(1) - v7.0(8)N1(1), v7.1(0)N1(1a) - v7.1(4)N1(1)		
	Nexus 5672up, 5672up-2248pq	v7.0(0)N1(1) - v7.0(8)N1(1), v7.1(0)N1(1a) - v7.1(4)N1(1), v7.3(0)N1(1) - v7.3(1)N1(1)		
	Nexus 6001p-2248pq, 6001T, 6004	v6.0(2)N1(2), v6.0(2)N1(2a), v6.0(2)N2(1) - v6.0(2)N2(6), v7.0(0)N1(1), v7.0(0)N1(1) - v7.0(8)N1(1)		Cisco Nexus 6001/6004 series requires v6.0(2)N1(2) and above. Nexus 6001T requires v6.0(2)N2(1) and above.
	Nexus 7710 (FCoE)	v7.3(0)D1(1) - v7.3(1)D1(1)		
UCS 6120XP, 6140XP, 6248up, 6296up	v2.0(3a) - v2.0(3c), v2.0(5a) - v2.0(5f), v2.1(1a) - v2.1(1f), v2.1(2a) - v2.1(2d), v2.1(3a) - v2.1(3g), v2.2(1b) - v2.2(1d), v2.2(2c), v2.2(3a) - v2.2(3f), v2.2(5b) - v2.2(5d), v2.2(6c) - v2.2(8f)			

iSCSI Storage Interface

iSCSI Adapters

Manufacturer	Models	Driver Versions	Notes
Any	Gbit NIC	Bundled	
Any	10 GbE NIC	Bundled	
Cisco	UCS M81KR	v2.1.0.9	
Emulex	OCe10102	v2.103.386	
Emulex	OCe11102	v4.0.317.0	
HP	NC553i	v4.0.317.0	
QLogic	QLE8242	v2.1.5.15	

iSCSI Switches

Manufacturer	Models	Firmware Versions	Notes
Any	Generic GigE Switch	Any GigE FW	
Any	Generic 10GigE Switch	Any 10GigE FW	
Cisco	UCS 6120XP, 6140XP, 6248up, 6296up	v2.0(3a) - v2.0(3c)	

HUS 110 130 150 support for Microsoft Windows Server 2008 (X64) & 2008 SP2 (X64)

FC Storage Interface			
Host Bus Adapters (FC-HBA)/Converged Network Adapters (CNA)			
Manufacturer	Models	Driver Versions	Notes
Cisco	UCS 1225, 1225T, 1227, 11240, 1280, 1285	v2.1.0.20 v2.1.0.25	Must connect to a Cisco UCS top of rack interconnect switch.
	UCS M81KR	v2.1.0.11	Must connect to a Cisco UCS top of rack interconnect switch.
Emulex	LPe12000, LPe12002, LPe1205, LPe1205A-HI, LPe1205-HI	v2.72.012.001 v2.74.014.001	
	LPe16000, LPe16002, LPe16002B	v10.2.261.4	
HP	554M, 554FLB	v10.2.261.4	
	650M, 650FLB	v10.2.261.4	
	AJ763A, AJ763B, 82E	v2.72.012.001	
	AJ762A, AJ762B, 81E	v2.74.014.001	
IBM	AK344A, AJ764A, 81Q, 82Q	v9.1.9.25 v9.1.9.27 v9.1.9.47	
	42C2069, 42C2071	v2.70.018 v2.70.019	
	42D0485, 42D0494	v2.72.012.001 v2.74.014.001	
QLogic	42D0501, 42D0510	v9.1.9.25 v9.1.9.27 v9.1.9.47	
	QLE2560, QLE2562	v9.1.9.25 v9.1.9.27 v9.1.9.47 v9.1.13.20	
	QLE8142	v9.1.9.15	
	QME2572	v9.1.9.27	

FC Switches			
Manufacturer	Models	Firmware Versions	Notes
Brocade	300, 5300, 7800, DCX, DCX-4s	v7.4.2d	
	6505, 6510, 6520, DCX8510	v7.4.2d	
Cisco	9148, 9222i, 9506 (8Gb), 9513, 9513 (8Gb)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9148S	v6.2(9a) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9250i	v6.2(5) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9396S	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27), v7.3(0)D1(1) - v7.3(1)D1(1)	Cisco OS v6.2(15) is no longer supported.
	9706	v6.2(13) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9710	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(27)	Cisco OS v6.2(15) is no longer supported.
	9718	v7.3(0)D1(1) - v7.3(1)D1(1)	

FCOE Switches (FCF mode)			
Manufacturer	Models	Firmware Versions	Notes
Cisco	UCS 6120XP, 6140XP, 6248up, 6296up	v2.1(1a) - v2.1(1f), v2.1(2a) - v2.1(2d)	

iSCSI Storage Interface

iSCSI Adapters			
Manufacturer	Models	Driver Versions	Notes
Any	Gbit NIC	Bundled	
Any	10 GbE NIC	Bundled	
Emulex	OCe10102	v2.103.386	
QLogic	QLE8242	v2.1.5.15	

iSCSI Switches			
Manufacturer	Models	Firmware Versions	Notes
Any	Generic GigE Switch	Any GigE FW	
Any	Generic 10GigE Switch	Any 10GigE FW	