



TrueCopy (TC) & Hitachi Universal Replicator (HUR) Support Matrix
Hitachi VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM

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 an HDS-supported replication solution.

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 (ISR) in order to gain support for the new configuration.

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

Note: The arrays supported now include the VSP F700, F900, G700, G900, F350, F370, G350, and G370.

For interoperability between different array models for TC refer to the System requirements of the Hitachi TrueCopy User Guide; for HUR refer to the Hitachi Universal Replicator User Guide.

Note that FC switches on both ends of the datapath must be of the same switch family (Brocade 8Gb for example) and running the exact same switch firmware (FOS v7.4.1c for example.) Intermixing different FC switch manufacturers or different speed models is never supported.

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DWDM support for the VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM with TC/HUR

DWDM/CWDM TC/HUR support							
Storage Array	Function	Switch Model	Switch F/W	Extender Model	Extender F/W	Configuration	Notes
VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM	TrueCopy/HUR	Any	Any	ADVA FSP2000, 3000 DWDM	Any GA FW	Config 12 or 13	
				Alcatel-Lucent 1696, 1830 PSS	Any GA FW	Config 12 or 13	FC and 10G IP extension only.
				Ciena CN4200, 6500 DWDM	Any GA FW	Config 12 or 13	FC and 10G IP extension only.
				Cisco ONS 15252, 15454, 15530, 15540	Any GA FW	Config 12 or 13	
				Ericsson ERION Metro	Any GA FW	Config 12 or 13	
				Hitachi AMN6200	latest	Config 12 or 13	
				Hitachi COM AMN601A, AMN601GF	latest	Config 12 or 13	
				Huawei Metro 6100 DWDM	latest	Config 12 or 13	
				Huawei OSN 1800, 3800, 6800, 8800	latest	Config 12 or 13	
				LuxN WS3234	latest	Config 12 or 13	
				Meriton 3300 OSM DWDM	latest	Config 12 or 13	
				Microsens MSP1000	latest	Config 12 or 13	
				Movaz RAYexpress	latest	Config 12 or 13	
				MRV LD1600	latest	Config 12 or 13	
				NEC LE4100	latest	Config 12 or 13	
				Nortel 5200, 6500	Any GA FW	Config 12 or 13	
				Packetlight PL1000TN	Any GA FW	Config 12 or 13	
				Padtec LightPad i1600G	Any GA FW	Config 12 or 13	
				Pan Dacom Direkt Speed-Dualline	Any GA FW	Config 12 or 13	
				Riverbed 5050, 6020, 6050, 7050	Any GA FW	Config 12 or 13	Please check the SAN switch and Riverbed's support matrices to ensure they both support the Riverbed appliance connected to the SAN switch.
				Siemens hiT 7300	Any GA FW	Config 12 or 13	
				Silver Peak NX-2000, NX-3000, NX-5000, NX-7000, NX-8000, NX-9000	Any GA FW	Config 12 or 13	Please check the SAN switch and Silver Peak's support matrices to ensure they both support the Silver Peak appliance connected to the SAN switch.
Smartoptics T-3808, 3809	latest	Config 12 or 13					
Tellabs 7110	latest	Config 12 or 13					
ZTE ZXMP M820/M720	latest	Config 12 or 13					

Brocade switch support for the VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM with TC/HUR

Brocade switch TC/HUR support							
Storage Array	Function	Switch Model	Switch F/W	Extender Model	Extender F/W	Configuration	Notes
VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM	TrueCopy/HUR	None	Not Applicable	Brocade 7800/FX8-24	v7.2.0a - v7.2.1b	Config. 11 or 12	v7.2.0 & v7.2.0c are not supported.
	TrueCopy/HUR	None	Not Applicable	Brocade 7800/FX8-24	v7.3.0 - v7.3.2	Config. 11 or 12	
	TrueCopy/HUR	None	Not Applicable	Brocade 7840	v7.3.0 - v7.3.2b	Config. 11 or 12	
	TrueCopy/HUR	Brocade 300, 5300, 7800, 8000, DCX, DCX-4s	v7.2.0a - v7.2.1g	Not Applicable	Not Applicable	Config. 11 or 12	v7.2.0 & v7.2.0c are not supported.
	TrueCopy/HUR	Brocade 300, 5300, 7800, 8000, DCX, DCX-4s	v7.3.0 - v7.3.2	Not Applicable	Not Applicable	Config. 11 or 12	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	Brocade 300, 5300, 7800, 8000, DCX, DCX-4s	v7.2.0a - v7.2.1g	Brocade 7800/FX8-24	v7.2.0a - v7.2.1g	Config. 13	v7.2.0 & v7.2.0c are not supported.
	TrueCopy	Brocade 300, 5300, 7800, 8000, DCX, DCX-4s	v7.3.0 - v7.3.2	Brocade 7800/FX8-24	v7.3.0 - v7.3.2	Config. 13	
	TrueCopy	Brocade 300, 5300, 7800, 8000, DCX, DCX-4s	v7.4.0 - v7.4.2a, v7.4.2c - v7.4.2d	Brocade 7800/FX8-24	v7.4.0 - v7.4.2a, v7.4.2c - v7.4.2d	Config. 13	Brocade FOS v7.4.2b is not supported.
	TrueCopy	Brocade 300, 5300, 7800, 8000, DCX, DCX-4s	v7.3.0 - v7.3.2b	Brocade 7840	v7.3.0 - v7.3.2b	Config. 13	
	TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v7.2.0a - v7.2.1e	Not Applicable	Not Applicable	Config. 11 or 12	v7.2.0 & v7.2.0c are not supported.
	TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v7.3.0 - v7.3.2	Not Applicable	Not Applicable	Config. 11 or 12	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v7.4.0 - v7.4.2a, v7.4.2c - v7.4.2d	Not Applicable	Not Applicable	Config. 11 or 12	Supported with 8Gb & 16G FC remote links. Brocade FOS v7.4.2b is not supported.
	TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v8.0.1 - v8.0.2f, v8.1.0a - v8.1.2b, v8.1.2d, v8.1.2f	Not Applicable	Not Applicable	Config. 11 or 12	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v7.2.0a - v7.2.1e	Brocade 7800/FX8-24	v7.2.0a - v7.2.1e	Config. 13	v7.2.0 & v7.2.0c are not supported.
	TrueCopy	Brocade 6505, 6510, 6520, DCX8510	v7.3.0 - v7.3.2	Brocade 7800/FX8-24	v7.3.0 - v7.3.2	Config. 13	
	HUR	Brocade 6505, 6510, 6520, DCX8510	v7.4.0 - v7.4.2a, v7.4.2c - v7.4.2d	Brocade 7800/FX8-24	v7.4.0 - v7.4.2a, v7.4.2c - v7.4.2d	Config. 13	Supported with 8Gb & 16G FC remote links. Brocade FOS v7.4.2b is not supported.
	TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v7.3.0 - v7.3.2b	Brocade 7840	v7.3.0 - v7.3.2b	Config. 13	
	TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v7.4.0 - v7.4.2a, v7.4.2c - v7.4.2d	Brocade 7840	v7.4.0 - v7.4.2a, v7.4.2c - v7.4.2d	Config. 13	Supported with 8Gb & 16G FC remote links. Brocade FOS v7.4.2b is not supported.
TrueCopy/HUR	Brocade 6505, 6510, 6520, DCX8510	v8.0.1 - v8.0.2f, v8.1.0a - v8.1.2b, v8.1.2d, v8.1.2f	Brocade 7840	v8.0.1 - v8.0.2f, v8.1.0a - v8.1.2b, v8.1.2d, v8.1.2f	Config. 13	Supported with 8Gb & 16G FC remote links.	
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Brocade G610, G620, G630, X6	v8.0.2 - v8.0.2f, v8.1.0a - v8.1.2b	Not Applicable	Not Applicable	Config. 11 or 12	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	Brocade G610, G620, G630, X6	v8.0.2 - v8.0.2f, v8.1.0a - v8.1.2b, v8.1.2d, v8.1.2f, v8.2.0b, v8.2.1a	Brocade 7840	v8.0.2 - v8.0.2f, v8.1.0a - v8.1.2b, v8.1.2d, v8.1.2f, v8.2.0b, v8.2.1a	Config. 13	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	Brocade G610, G620, G630, X6	v8.0.2 - v8.0.2f, v8.1.0a - v8.1.2b, v8.1.2d, v8.1.2f, v8.2.0b, v8.2.1a	Brocade SX6	v8.0.2 - v8.0.2f, v8.1.0a - v8.1.2b, v8.1.2d, v8.1.2f, v8.2.0b, v8.2.1a	Config. 13	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	Brocade VDX 6730	v4.1.2	Not Applicable	Not Applicable	Config. 11 or 12	Supported with FCoE remote links.

Cisco switch support for the VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM with TC/HUR

Cisco switch TC/HUR support							
Storage Array	Function	Switch Model	Switch F/W	Extender Model	Extender F/W	Configuration	Notes
VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM	TrueCopy/HUR	None	Not Applicable	Cisco MDS 9124, 9134, 9148, 9222i, 9506 (4G), 9509 (4G), 9513	v5.2(1) - v5.2(8g)	Config. 11 or 12	
	TrueCopy/HUR	None	Not Applicable	Cisco MDS 9148, 9222i, 9506 (4G), 9509 (4G), 9513	v6.2(1) - v6.2(13b), v6.2(17)	Config. 11 or 12	
	TrueCopy/HUR	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v5.2(1) - v5.2(8g)	Cisco FCIP Blade	Bundled	Config. 13	
	TrueCopy/HUR	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v5.2(1) - v5.2(8g)	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v5.2(1) - v5.2(8g)	Config. 13	
	TrueCopy/HUR	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23)	Not Applicable	Not Applicable	Config. 11 or 12	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23)	Cisco FCIP Blade	Bundled	Config. 13	
	TrueCopy/HUR	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23)	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23)	Config. 13	
	HUR	Cisco MDS 9148, 9222i (8G), 9506 (8G) 9509 (8G) 9513 (8G)	v7.3(0)D1(1), v7.3(1)DY(1)	Cisco MDS 9250i, 9710	v7.3(0)D1(1), v7.3(1)DY(1)	Config. 13	
	TrueCopy/HUR	Cisco MDS 9250i, 9710	v6.2(5) - v6.2(13b), v6.2(17) - v6.2(23)	Not Applicable	Not Applicable	Config. 11 or 12	Supported with 8G & 16G FC remote links.
	TrueCopy/HUR	Cisco MDS 9250i, 9710	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23)	Cisco FCIP Blade	Bundled	Config. 13	
	TrueCopy/HUR	Cisco MDS 9250i, 9710	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23)	Cisco MDS 9250i, 9710	v6.2(1) - v6.2(13b), v6.2(17) - v6.2(23)	Config. 13	
	HUR	Cisco MDS 9250i, 9710	v7.3(0)D1(1), v7.3(1)DY(1)	Cisco MDS 9250i, 9710	v7.3(0)D1(1), v7.3(1)DY(1)	Config. 13	
	TrueCopy/HUR	Cisco MDS 9250i, 9710	v7.3(0)D1(1)	Not Applicable	Not Applicable	Config. 11 or 12	
	TrueCopy/HUR	Cisco MDS 9250i, 9710	v7.3(0)DY(1) - v7.3(1)DY(1)	Not Applicable	Not Applicable	Config. 11 or 12	
	TrueCopy	Cisco MDS 9250i, 9710, 9718	v8.1(1) - v8.1(1a), v8.2(1) - v8.2(2)	Cisco FCIP Blade	Bundled	Config. 13	
	HUR	Cisco MDS 9396S	v8.2(1) - v8.2(2)	Not Applicable	Not Applicable	Config. 11 or 12	
	TrueCopy/HUR	Cisco MDS 9710	v8.2(1) - v8.2(2)	Not Applicable	Not Applicable	Config. 11 or 12	
	TrueCopy/HUR	Cisco MDS 9710 (32Gb)	v8.2(1) - v8.2(2)	Not Applicable	Not Applicable	Config. 11 or 12	
	HUR	Cisco MDS 9710 (32Gb)	v8.1(1) - v8.1(1a)	Cisco MDS 9250i, 9710	v8.1(1) - v8.1(1a)	Config. 13	
	VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Cisco MDS 9710 (FCoE)	v6.2(7) - v6.2(13b), v6.2(17) - v6.2(21)	Not Applicable	Not Applicable	Config. 11 or 12
TrueCopy		Cisco MDS 9250i, 9710, 9718	v8.3(1)	Cisco FCIP Blade	Bundled	Config. 13	
VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM	TrueCopy	Cisco Nexus 5010-2232pp, 5020, 5548p, 5548up, 5548up-2232pp, 5596up, 5596T, 5596T-2232TM-E	v7.0(0)N1(1) - v7.0(7)N1(1)	Not Applicable	Not Applicable	Config. 11	
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Cisco Nexus 5010-2232pp, 5020, 5548p, 5548up, 5548up-2232pp, 5596up, 5596T, 5596T-2232TM-E	v7.0(0)N1(1) - v7.0(7)N1(1)	Not Applicable	Not Applicable	Config. 11	Supported with FCoE remote links.
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Cisco Nexus 6001P, 6001p-2248pq, 6001T, 6004	v7.0(0)N1(1) - v7.0(7)N1(1)	Not Applicable	Not Applicable	Config. 11	Supported with FCoE remote links.

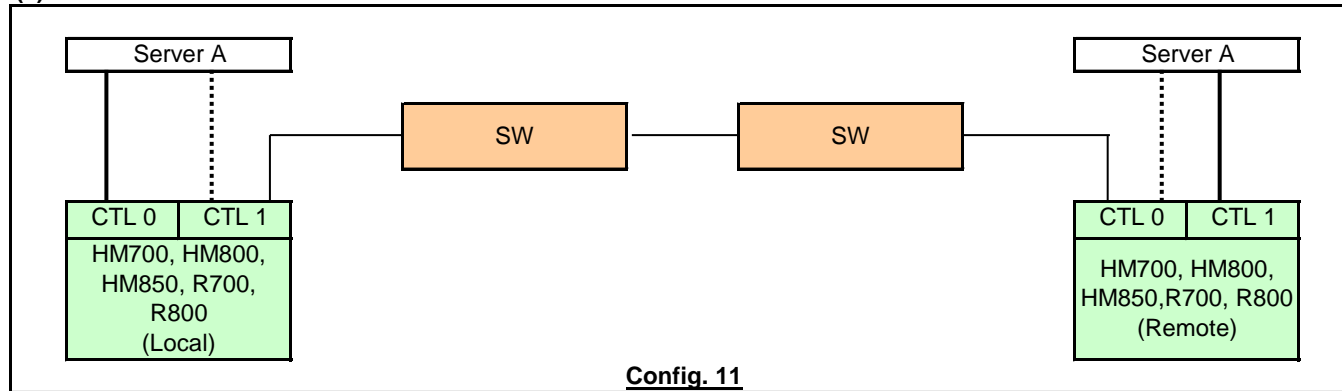
10Gb iSCSI support for the VSP G1x00, F1500, Gxx0, Fxx0, VSP, HUS VM with TC/HUR

10Gb iSCSI TC/HUR support					
Storage Array	Function	Switch Model	Switch F/W	Configuration	Notes
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Generic 10GigE Switch	Any 10GigE FW	Config. 11	Supported with 10G iSCSI remote links.
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Brocade 8000	v6.3.2e, v7.1.1	Config. 11	Supported with 10G iSCSI remote links.
	TrueCopy/HUR	Brocade VDX 6730	v4.1.2, v4.1.3a	Config. 11	Supported with 10G iSCSI remote links.
	TrueCopy/HUR	Cisco Nexus 5010-2232pp, 5020, 5548p, 5548up, 5548up-2232pp, 5596up, 5596T, 5596T-2232TM-E	v7.0(5)N1(1) - v7.0(7)N1(1)	Config. 11	Supported with 10G iSCSI remote links.
	TrueCopy/HUR	Cisco Nexus 6001P, 6001p-2248pq, 6001T, 6004	v7.0(1)N1(1) - v7.0(7)N1(1)	Config. 11	Supported with 10G iSCSI remote links.

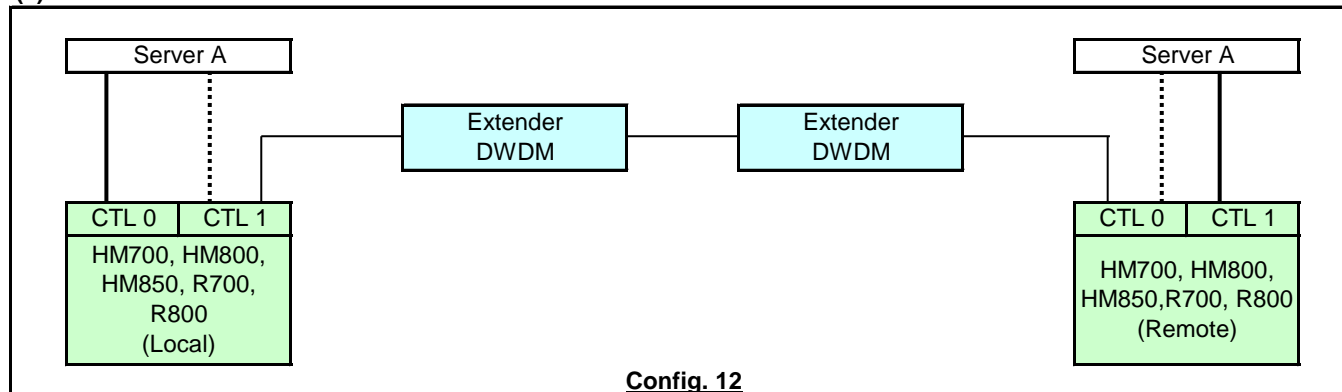
For interoperability between different array models for TC refer to the System requirements and specifications table on page 2-2 of the Hitachi TrueCopy User Guide; for HUR refer to Table 2-1 General system requirements on page 2-2 of the Hitachi Universal Replicator User Guide

(2) Remote Copy Configuration Pattern

(2)-1 Switch Connection



(2)-2 Extender/DWDM Direct Connection



(2)-3 Extender/DWDM Switch Connection

