



TrueCopy (TC) & Hitachi Universal Replicator (HUR) Support Matrix
Hitachi VSP 5x00, G1x00, F1500, E990, Gxx0, Fxx0, 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: The arrays supported now include the VSP E990.

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 v8.2.1c for example.) Intermixing different FC switch manufacturers or different speed models is never supported.

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DWDM support for the VSP 5x00, G1x00, F1500, E990, Gxx0, Fxx0, 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 5x00, G1x00, F1500, E990, Gxx0, Fxx0, 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.
				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-Dualine	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 5x00, G1x00, F1500, E990, Gxx0, Fxx0, 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, HUS VM	TrueCopy	300, 7800	v7.4.2d - v7.4.2g	7800/FX8-24	v7.4.2d - v7.4.2g	Config. 13	
	HUR	7800	v7.4.2d - v7.4.2g	N/A	N/A	Config. 11 or 12	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	6505, 6510, 6520, 7840, DCX 8510	v8.1.2a - v8.1.2b, v8.1.2d, v8.1.2f - v8.1.2k	N/A	N/A	Config. 11 or 12	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	6505, 6510, 6520, 7840, DCX 8510	v8.1.2a - v8.1.2b, v8.1.2d, v8.1.2f - v8.1.2k, v8.2.1a - v8.2.2c	7840	v8.1.2a - v8.1.2b, v8.1.2d, v8.1.2f - v8.1.2k, v8.2.1a - v8.2.2c	Config. 13	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	7810, G610, G620, G630, X6	v8.2.1a - v8.2.2c	7840	v8.2.1a - v8.2.2c	Config. 13	Supported with 16Gb & 32G FC remote links.
	TrueCopy	7810, G610, G620, G630, X6	v8.2.1a - v8.2.2c	N/A	N/A	Config. 11 or 12	Supported with 16Gb & 32G FC remote links.
VSP 5x00, G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	6505, 6510, 6520, 7840, DCX 8510	v8.2.1a - v8.2.2c	N/A	N/A	Config. 11 or 12	
	TrueCopy/HUR	G610, G620, G630, X6	v8.1.2a - v8.1.2b, v8.1.2d, v8.1.2f - v8.1.2k	N/A	N/A	Config. 11 or 12	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	7810, G610, G620, G630, X6	v8.2.1a - v8.2.2c	7810/SX6	v8.2.1a - v8.2.2c	Config. 13	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	G610, G620, G630, X6	v8.1.2a - v8.1.2b, v8.1.2d, v8.1.2f - v8.1.2k, v8.2.0a - v8.2.0b, v8.2.1a - v8.2.1e, v8.2.2 - v8.2.2c	7840	v8.1.2a - v8.1.2b, v8.1.2d, v8.1.2f - v8.1.2k, v8.2.0a - v8.2.0b, v8.2.1a - v8.2.1e, v8.2.2 - v8.2.2c	Config. 13	Supported with 16Gb & 32G FC remote links.
VSP 5x00, G1x00, F1500, E990, Gxx0, Fxx0	TrueCopy/HUR	6505, 6510, 6520, 7840, DCX 8510	v8.2.2 - v8.2.2c	N/A	N/A	Config. 11 or 12	
	TrueCopy/HUR	G610, G620, G630, X6	v8.2.2 - v8.2.2c	7810/SX6	v8.2.2 - v8.2.2c	Config. 13	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	G630v2, G720, X7	v9.0.0a - v9.0.0b	7810/SX6	v9.0.0a - v9.0.0b	Config. 13	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	G610, G620, G630, X6	v8.2.2 - v8.2.2c	7840	v8.2.2 - v8.2.2c	Config. 13	Supported with 16Gb & 32G FC remote links.
	TrueCopy/HUR	G630v2, G720, X7	v9.0.0a - v9.0.0b	7840	v8.2.2 - v8.2.2c	Config. 13	Supported with 16Gb & 32G FC remote links.

Cisco switch support for the VSP 5x00, G1x00, F1500, E990, Gxx0, Fxx0, 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, HUS VM	TrueCopy/HUR	None	Not Applicable	9148, 9506 (8Gb), 9513 (8Gb)	v6.2(17) - v6.2(29) - v6.2(31)	Config. 11 or 12	
	TrueCopy/HUR	9148, 9506 (8Gb), 9513 (8Gb)	v6.2(17) - v6.2(29) - v6.2(31)	N/A	N/A	Config. 11 or 12	Supported with 8Gb & 16G FC remote links.
	TrueCopy/HUR	9148, 9506 (8Gb), 9513 (8Gb)	v6.2(17) - v6.2(29) - v6.2(31)	Cisco FCIP Blade	Bundled	Config. 13	
	TrueCopy/HUR	9148, 9506 (8Gb), 9513 (8Gb)	v6.2(17) - v6.2(29) - v6.2(31)	9148, 9506 (8Gb), 9513 (8Gb)	v6.2(17) - v6.2(29) - v6.2(31)	Config. 13	
	HUR	9148, 9506 (8Gb), 9513 (8Gb)	v7.3(0)D1(1), v7.3(1)DY(1)	9250i, 9706, 9710, 9718	v7.3(0)D1(1), v7.3(1)DY(1)	Config. 13	
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v6.2(17) - v6.2(29) - v6.2(31)	N/A	N/A	Config. 11 or 12	Supported with 8G & 16G FC remote links.
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v6.2(17) - v6.2(29) - v6.2(31)	Cisco FCIP Blade	Bundled	Config. 13	
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v6.2(17) - v6.2(29) - v6.2(31)	9250i, 9706, 9710, 9718	v6.2(17) - v6.2(29) - v6.2(31)	Config. 13	
	HUR	9250i, 9706, 9710, 9718	v7.3(0)D1(1), v7.3(1)DY(1)	9250i, 9706, 9710, 9718	v7.3(0)D1(1), v7.3(1)DY(1)	Config. 13	
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v7.3(0)D1(1)	N/A	N/A	Config. 11 or 12	
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v7.3(0)DY(1) - v7.3(1)DY(1)	N/A	N/A	Config. 11 or 12	
	HUR	9396S	v8.2(1) - v8.2(2)	N/A	N/A	Config. 11 or 12	
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v8.1(1) - v8.1(1b), v8.2(1) - v8.2(2)	N/A	N/A	Config. 11 or 12	
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v8.1(1) - v8.1(1b), v8.2(1) - v8.2(2)	Cisco FCIP Blade	Bundled	Config. 13	
	TrueCopy	9250i, 9706, 9710, 9718	v8.3(1)	Cisco FCIP Blade	Bundled	Config. 13	
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v8.1(1) - v8.1(1b), v8.2(1) - v8.2(2)	9250i, 9706, 9710, 9718	v8.1(1) - v8.1(1b), v8.2(1) - v8.2(2)	Config. 13	
	TrueCopy/HUR	9710 (32Gb), 9718 (32Gb)	v8.1(1) - v8.1(1b), v8.2(1) - v8.2(2)	N/A	N/A	Config. 11 or 12	
	HUR	9710 (32Gb), 9718 (32Gb)	v8.1(1) - v8.1(1b)	9250i, 9706, 9710, 9718	v8.1(1) - v8.1(1b)	Config. 13	
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	9710 (FCoE)	v6.2(17) - v6.2(29) - v6.2(31)	N/A	N/A	Config. 11 or 12	Supported with FCoE remote links.
	TrueCopy/HUR	9250i, 9706, 9710, 9718	v8.3(1) - v8.3(2), v8.4(1) - v8.4(2a)	Cisco FCIP Blade	Bundled	Config. 13	
VSP G1x00, F1500, Gxx0, Fxx0, HUS VM	TrueCopy	Nexus 5548p, 5548up, 5548up-2232pp, 5596up, 5596T, 5596T-2232TM-E	v7.0(0)N1(1) - v7.0(7)N1(1)	N/A	N/A	Config. 11	
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Nexus 5548p, 5548up, 5548up-2232pp, 5596up, 5596T, 5596T-2232TM-E	v7.0(0)N1(1) - v7.0(7)N1(1)	N/A	N/A	Config. 11	Supported with FCoE remote links.
VSP G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	Nexus 6001P, 6001p-2248pq, 6001T, 6004	v7.0(0)N1(1) - v7.0(7)N1(1)	N/A	N/A	Config. 11	Supported with FCoE remote links.
VSP 5x00, G1x00, F1500, Gxx0, Fxx0	TrueCopy/HUR	9250i, 9706, 9710, 9718	v8.3(1) - v8.3(2), v8.4(1) - v8.4(2a)	N/A	N/A	Config. 11 or 12	
	TrueCopy/HUR	9710 (32Gb), 9718 (32Gb)	v8.3(1) - v8.3(2)	N/A	N/A	Config. 11 or 12	
VSP 5x00, G1x00, F1500, E990, Gxx0, Fxx0	TrueCopy/HUR	9250i, 9706, 9710, 9718	v8.3(1) - v8.3(2), v8.4(1) - v8.4(2a)	N/A	N/A	Config. 11 or 12	
	TrueCopy/HUR	9710 (32Gb), 9718 (32Gb)	v8.3(1) - v8.3(2), v8.4(1) - v8.4(2a)	9250i, 9706, 9710, 9718	v8.3(1) - v8.3(2), v8.4(1) - v8.4(2a)	Config. 13	

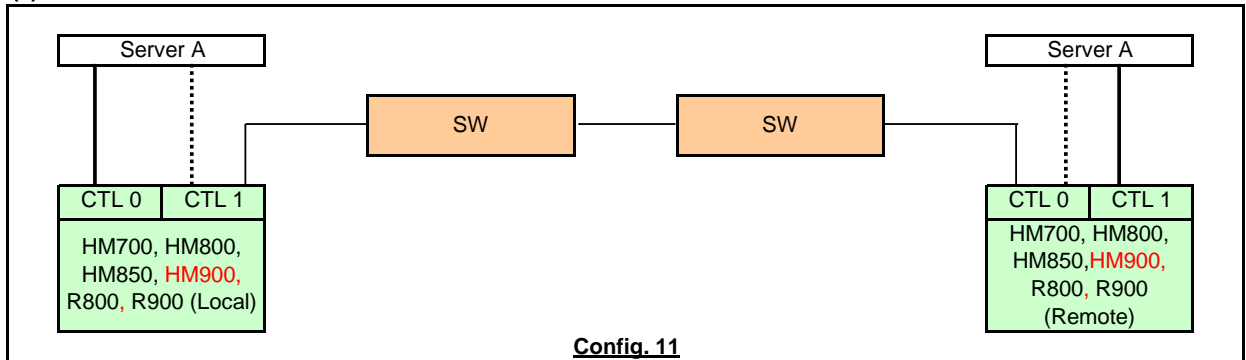
10Gb iSCSI support for the VSP G1x00, F1500, Gxx0, Fxx0, HUS VM with TC/HUR

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.
	TrueCopy/HUR	Cisco Nexus 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.

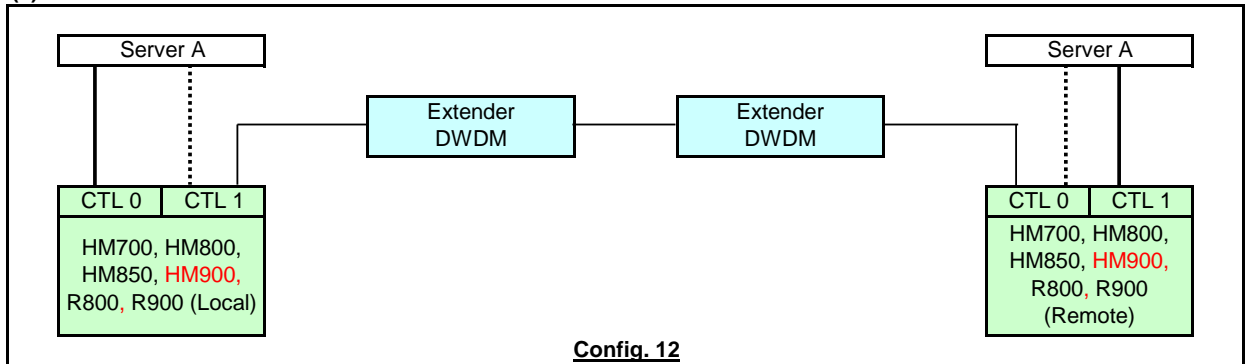
For interoperability between different array models for TC refer to the System requirements and specifications table on page 2-2 of the Hitachi TrueCopy User Guide; for HUR refer to Table 2-1 General system requirements on page 2-2 of the Hitachi Universal Replicator User Guide

(2) Remote Copy Configuration Pattern

(2)-1 Switch Connection



(2)-2 Extender/DWDM Direct Connection



(2)-3 Extender/DWDM Switch Connection

