



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 - v8.2.2d | 7840 | v8.1.2a - v8.1.2b, v8.1.2d, v8.1.2f - v8.1.2k, v8.2.1a - v8.2.2d | Config. 13 | Supported with 8Gb & 16G FC remote links. |
| | TrueCopy/HUR | 7810, G610, G620, G630, X6 | v8.2.1a - v8.2.2d | 7840 | v8.2.1a - v8.2.2d | Config. 13 | Supported with 16Gb & 32G FC remote links. |
| | TrueCopy | 7810, G610, G620, G630, X6 | v8.2.1a - v8.2.2d | 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 - v8.2.2d | 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 - v8.2.2d | 7810/SX6 | v8.2.1a - v8.2.2d | 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 - v8.2.2d | 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 - v8.2.2d | 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 - v8.2.2d | N/A | N/A | Config. 11 or 12 | |
| | TrueCopy/HUR | G610, G620, G630, X6 | v8.2.2 - v8.2.2d | 7810/SX6 | v8.2.2 - v8.2.2d | 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 - v8.2.2d | 7840 | v8.2.2 - v8.2.2d | Config. 13 | Supported with 16Gb & 32G FC remote links. |
| | TrueCopy/HUR | G630v2, G720, X7 | v9.0.0a - v9.0.0b | 7840 | v8.2.2 - v8.2.2d | 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 | 9506 (8Gb), 9513 (8Gb) | v6.2(17) - v6.2(29) - v6.2(31) | Config. 11 or 12 | | |
| | TrueCopy/HUR | 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 | 9506 (8Gb), 9513 (8Gb) | v6.2(17) - v6.2(29) - v6.2(31) | Cisco FCIP Blade | Bundled | Config. 13 | | |
| | TrueCopy/HUR | 9506 (8Gb), 9513 (8Gb) | v6.2(17) - v6.2(29) - v6.2(31) | 9506 (8Gb), 9513 (8Gb) | v6.2(17) - v6.2(29) - v6.2(31) | Config. 13 | | |
| | HUR | 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 | 9148S, 9396S, 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 | 9148S, 9396S, 9250i, 9706, 9710, 9718 | v6.2(17) - v6.2(29) - v6.2(31) | Cisco FCIP Blade | Bundled | Config. 13 | | |
| | TrueCopy/HUR | 9148S, 9396S, 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 | 9148S, 9396S, 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 | 9148S, 9396S, 9250i, 9706, 9710, 9718 | v7.3(0)D1(1) | N/A | N/A | Config. 11 or 12 | | |
| | TrueCopy/HUR | 9148S, 9396S, 9250i, 9706, 9710, 9718 | v7.3(0)DY(1) - v7.3(1)DY(1) | N/A | N/A | Config. 11 or 12 | | |
| | HUR | 9148S, 9396S, 9250i, 9706, 9710, 9718 | v8.2(1) - v8.2(2) | N/A | N/A | Config. 11 or 12 | | |
| | TrueCopy/HUR | 9148S, 9396S, 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 | 9148S, 9396S, 9250i, 9706, 9710, 9718 | v8.1(1) - v8.1(1b), v8.2(1) - v8.2(2) | Cisco FCIP Blade | Bundled | Config. 13 | | |
| | TrueCopy | 9148S, 9396S, 9250i, 9706, 9710, 9718 | v8.3(1) | Cisco FCIP Blade | Bundled | Config. 13 | | |
| | TrueCopy/HUR | 9148S, 9396S, 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 | 9148S, 9396S, 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 | 9148S, 9396S, 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 | | |

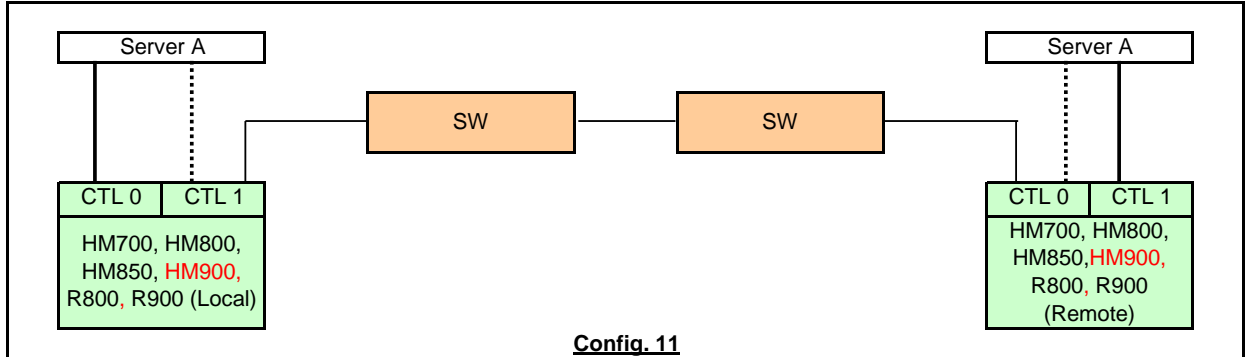
10Gb iSCSI support for the VSP G1x00, F1500, Gxx0, Fxx0, HUS VM with TC/HUR

| 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. |

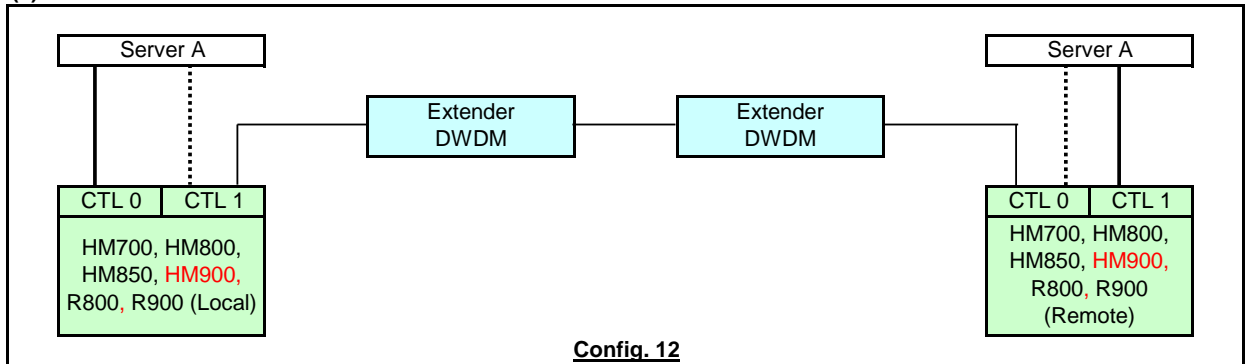
For interoperability between different array models for TC refer to the System requirements and specifications table on page 2-2 of the Hitachi TrueCopy User Guide; for HUR refer to Table 2-1 General system requirements on page 2-2 of the Hitachi Universal Replicator User Guide

(2) Remote Copy Configuration Pattern

(2)-1 Switch Connection



(2)-2 Extender/DWDM Direct Connection



(2)-3 Extender/DWDM Switch Connection

