



VSP 5x00 G1x00 F1500 E990 Gxx0 Fxx0

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 solution.

Please refer to other additional support matrix for details on version support for : e.g: Symantec for DMP and VCS, HDLM, UVM for supported external storage, storage interoperability for supported switch and HBA, If a combination does not appear on the OS support matrix, the customer's Hitachi Data Systems Sales Engineer (SE) or other HDS 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.

5x00 refers to : 5100 and 5500

Gxx0 refers to : G900,G800,G700, G600, G400,G370,G350 and G200

Fxx0 refers to : F900,F800, F700,F600, F400,F370,F350

G1x00 refers to : G1500 and G1000

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VSP 5x00 G1x00 F1500 E990 Gxx0 Fxx0 support for Global-Active Devices

| OS/Platform | Version | Server Configuration | 5x00, G1x00, F1500, E990, Gxx0, Fxx0 Multi-path support | | | | Notes |
|---------------|--|----------------------|---|------------------|---------------|------------|---|
| | | | Native MP | Native MP + ALUA | HDLM *1 | VxVM-DMP | |
| VMware | 5.5 - 5.5 U3 | Non-Cluster | ✓ | ✓ | ✓ | - | KB2146717 is required |
| | | VMware HA vMotion | ✓ | | ✓ | - | VSP E990 HDLM support requires ISR |
| | | vSphere vMSC | ✓ | | ✓ | - | Stretched cluster with both FC and iSCSI ESXi hosts is supported. Check VMware KB 2145375 for additional specifics |
| | 6.0 U2 - U3 6.5, 6.5 U1 - U3 6.7 - 6.7U3 | Non-Cluster | ✓ | ✓ | ✓ | - | KB2145663 is required for 6.0 U2 GAD over iSCSI is supported |
| | | VMware HA vMotion | ✓ | | ✓ | - | KB2145663 is required for 6.0 U2 |
| | | vSphere vMSC | ✓ | | ✓ | - | KB2145663 is required for 6.0 U2 Stretched cluster with both FC and iSCSI ESXi hosts is supported |
| AIX | 6.1 - 6.1 TL09 | Non-Cluster | ✓ | ✓ | ✓ | Submit ISR | AIX 6.1 TL09 or later is required for ALUA |
| | | HACMP /PowerHA | ✓ | | ✓ | Submit ISR | VSP E990 Veritas&HDLM support require ISR |
| | | VCS | ✓ | | - | ✓ | |
| | 7.1 - 7.1 TL05 | Non-Cluster | ✓ | ✓ | ✓ | Submit ISR | AIX7.1 TL03 or later is required for ALUA. |
| | | HACMP /PowerHA | ✓ | | Submit ISR | Submit ISR | GPFS 4.2 , 5.0 are supported |
| | | VCS | ✓ | | Submit ISR | Submit ISR | VSP E990 Veritas&HDLM support require ISR |
| | 7.2 - 7.2 TL02 | Non-Cluster | ✓ | ✓ | ✓ | Submit ISR | GPFS 4.2 , 5.0 are supported |
| | | HACMP /PowerHA | ✓ | | Submit ISR | Submit ISR | |
| | | VCS | ✓ | | Submit ISR | Submit ISR | |
| VIOS | 2.2.0, 2.2.3.0 - 2.2.4, 2.2.6 | Non-Cluster | ✓ | ✓ | Submit ISR | Submit ISR | IBMi aka AS/400 is supported as guest to VIOS. |
| Windows | 2008 | Non-Cluster | ✓ | ✓ | ✓ | Submit ISR | VSP E990 Veritas support require ISR |
| | | MSFC | ✓ | | ✓ | Submit ISR | |
| | 2008 R2 SP1 | Non-Cluster | ✓ | ✓ | ✓ | ✓ | VSP E990 Veritas support require ISR |
| | | MSFC | ✓ | | ✓ | ✓ | |
| | | VCS | ✓ | | ✓ | ✓ | |
| | 2012 | Non-Cluster | ✓ | ✓ | ✓ | Submit ISR | KB2919355 is required for 2012 R2 |
| | | MSFC | ✓ | | ✓ | Submit ISR | VSP E990 Veritas support require ISR |
| | | VCS | - | | - | ✓ | |
| | 2012 R2 | Non-Cluster | ✓ | ✓ | ✓ | ✓ | VSP E990 Veritas support require ISR |
| | | MSFC | ✓ | | ✓ | Submit ISR | |
| | | VCS | - | | - | ✓ | |
| | 2016 | Non-Cluster | ✓ | ✓ | ✓ | ✓ | VSP E990 Veritas support require ISR |
| | | MSFC | ✓ | | ✓ | Submit ISR | |
| | 2019 | Non-Cluster | ✓ | ✓ | ✓ | ✓ | VSP E990 Veritas support require ISR |
| | | MSFC | ✓ | | ✓ | Submit ISR | |
| Red Hat Linux | 6.0 - 6.10 | Non-Cluster | ✓ | ✓ | ✓ | ✓ | GPFS 4.2 , 5.0 are supported |
| | | Red Hat Cluster | ✓ | | ✓ | - | |
| | | Rose HA 10.0 | ✓ | | - | - | |
| | | HA Monitor | ✓ | | - | - | |
| | | VCS | - | | - | ✓ | |
| | 7.0 - 7.6 | Non-Cluster | ✓ | ✓* | ✓ | ✓ | GPFS 4.2 , 5.0 are supported *For ALUA with RHEL 7.5, set multipath.conf values: hardware_handler '0', prio_args 'alua' |
| | | Red Hat Cluster | ✓ | | ✓ | - | |
| | | Rose HA 10.0 | ✓ | | - | - | |
| | | VCS | - | | - | ✓ | |
| HP-UX | 11i V2 | Non-Cluster | ✓ | submit ISR | Not supported | Submit ISR | support for campus configuraton only |
| | | MC/SG | ✓ | | Not supported | Submit ISR | |
| | | VCS | - | | Not supported | ✓ | |
| | 11i V3 | Non-Cluster | ✓ | ✓ | Not supported | ✓ | HP-UX11iV3 2008/03 or later is required for ALUA |
| | | MC/SG | ✓ | | Not supported | ✓ | VSP E990 Veritas support require ISR |
| | | VCS | ✓ | | Not supported | ✓ | |

| OS/Platform | Version | Server Configuration | 5x00, G1x00, F1500, E990, Gxx0, Fxx0 Multi-path support | | | | Notes |
|-----------------|----------------------|---------------------------|---|------------------|---------------|------------|---|
| | | | Native MP | Native MP + ALUA | HDLM *1 | VxVM-DMP | |
| Solaris (SPARC) | 10 u1 - 10 u11 | Non-Cluster | ✓ | Not Supported | ✓ | ✓ | Solaris10+MPxIO requires patch 150400-22 or later |
| | | Sun Cluster | ✓ | | ✓ | Submit ISR | |
| | | VCS | ✓ | | Submit ISR | ✓ | |
| | 11.1 - 11.4 | Non-Cluster | ✓ | ✓* | ✓ | ✓ | * ALUA supported on Solaris 11.4 |
| | | Sun Cluster | ✓ | | ✓ | Submit ISR | |
| | | VCS | Submit ISR | | Submit ISR | ✓ | |
| Solaris (X64) | 10 u1 - 10 u11 | Non-Cluster | Submit ISR | Not Supported | Not supported | ✓ | |
| | | VCS | ✓ | | Not supported | ✓ | |
| | 11.1 - 11.4 | Non-Cluster | ✓ | ✓* | Not supported | Submit ISR | * ALUA supported on Solaris 11.4 |
| | | Sun Cluster | ✓ | | Not supported | Submit ISR | |
| SuSE Linux | 11 - 11 SP4 | Non-Cluster | ✓ | ✓ | Submit ISR | ✓ | VSP E990 with SUSE support requires ISR |
| | | Suse HA | ✓ | | Submit ISR | Submit ISR | |
| | | VCS | Submit ISR | | Submit ISR | ✓ | |
| | 12 - 12 SP3 | Non-Cluster | ✓ | ✓ | Submit ISR | ✓ | VSP E990 with SUSE support requires ISR |
| | | Suse HA | ✓ | | Submit ISR | Submit ISR | |
| | | | | | | | |
| Oracle Linux | 6 - 6.9 | Non-Cluster | ✓ | submit ISR | Submit ISR | ✓ | VSP E990 with Oracle Linux support requires ISR |
| | | VCS | Submit ISR | | Submit ISR | ✓ | |
| Oracle Linux | 7.3 - 7.6 | Non-Cluster | ✓ | ✓ | ✓ | Submit ISR | Oracle RAC 12.2 is supported VSP E990 with Oracle Linux support requires ISR |
| Oracle VM | 3.4.2 - 3.4.6 | Non-Cluster | ✓ | ✓ | Submit ISR | Submit ISR | Oracle RAC 11g, 12c, 19C, OCFS2 are supported |
| XENServer | 6.5 | Non-Cluster | ✓ | ✓ | Submit ISR | Submit ISR | VSP E990 with XENServer support requires ISR |
| | 7.4 | Non-Cluster | ✓ | ✓ | Submit ISR | Submit ISR | |
| HNAS | 4040,4060, 4080,4100 | Single Node | ✓ | submit ISR | - | - | NASOS 12.4.x or later |
| | | Cluster/Stretched Cluster | ✓ | | - | - | NASOS 12.4.x or later |

*1 Optimization/Non Optimization setting of alternate paths with HDLM is supported with HDLM Ver8.0.1 and later.

*2 Apply SP1 and hotfix KB2754704 on Windows 2008 R2 when using with MPIO & DMP

3 **Important:** Please refer to the user matrix "G1x00,F1500,Gxx0 TC_HUR_GAD_Replication intermix matrix" for supported storage models intermixes for GAD in 2DC and GAD + HUR in 3DC configuration

4 EOSL Oses such as Solaris 10, RHEL 5 require Vendors' extended support

5 Notes when using MPIO for version of windows from 2012-2019,:

[http://technet.microsoft.com/en-us/library/ee619749\(v=ws.10\).aspx](http://technet.microsoft.com/en-us/library/ee619749(v=ws.10).aspx)

- Set PathVerifyEnabled to 1.
- Set UseCustomPathRecoveryInterval to 1
- Set a value smaller than PDORemovePeriod (for example, 15) to PathRecoveryInterval. Example:

```
PathVerifyEnabled = 1 (Default: 0)
UseCustomPathRecoveryInterval = 1 (Default: 0)
PathRecoveryInterval = 15 (Default:40)
PDORemovePeriod = 20 (Default:20)
```

Carefully edit the registry: refer to <http://support.microsoft.com/kb/136393>

6 VMWare guest OS clusters using SCSI reserve are only supported with "straight path"