

ORACLE SOLARIS CLUSTER INTEROPERABILITY MATRIX

Hitachi Data Systems Universal Storage Platform USP-V Series	
Storage Supported^{3,11}	USP-V Series ³ , USP VM
SPARC	
Oracle Servers¹	Sun Fire: V210, V215, V240, V245, V250, 280R, V440, V445, V480, V490, V880, V890, V1280, E2900, 4800, E4900, 6800 E6900, 12K, 15K, E20K, E25K, T1000, T2000 Sparc Enterprise: T1000, T2000, T5120, T5140, T5220, T5240, T5440, M3000, M4000, M5000, M8000, M9000-32, M9000-64 Sun Netra: 210, 240, 440, 1290, T2000, T5220, T5240, T5440, T6340, T3-1, T3-1B, T4-1, T4-1B Sun Blade: T6300, T6320, T6340 Sparc T- Series: T3-1, T3-1B, T3-2, T3-4, T4-1, T4-2, T4-1B, T4-4
Oracle Solaris Operating system	Oracle Solaris 9, 10 ¹³
Oracle Solaris Cluster Software⁸	3.1 10/03, 3.1 4/04, 3.1 9/04, 3.1 8/05, 3.2 ⁵ , 3.2 2/08 ⁵ , 3.2 1/09 ⁵ , 3.2 11/09 ⁵ , 3.3
Maximum Number Of Nodes	Up to 16 ⁸
Volume Manager Software	Oracle Solaris SVM Veritas VxVM 4.1, 4.1 MP1, 5.0, 5.0 MP1 ⁵ , 5.0 MP3 ⁵ ZFS/zpools for ZFS Filesystems ¹²
Multi-Path Driver⁷	Oracle Sun StorEdge Traffic Manager Software 4.4.12, 4.4.13-4.4.15 ⁶ Oracle SAN driver bundled in Oracle Solaris 10 OS
Host Adapters	Sun 6727A, Sun 6757A SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-EM4-Z, SG-XPCI2FC-EM4-Z SG-XPCI1FC-QL2, SG-XPCI1FC-QF2, SG-XPCI2FC-QF2, SG-XPCI2FC-QF2-Z, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4 SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4 SG-XPCIE2FC-EB4-Z , SG-XPCIE2FC-QB4-Z , SG-XPCIE2FC-NEM-Z, SG-XPCIE2FCGBE-Q-Z, SG-XPCIE2FCGBE-E-Z SG-XPCIE1FC-QF8-Z, SG-XPCIE1FC-EM8-Z, SG-XPCIE2FC-QF8-Z, SG-XPCIE2FC-EM8-Z SG-XPCIE1FC-QF8-N, SG-XPCIE1FC-EM8-N, SG-XPCIE2FC-QF8-N, SG-XPCIE2FC-EM8-N SG-XPCIEFCGBE-Q8-Z, SG-XPCIEFCGBE-E8-Z SG-XPCIEFCGBE-Q8-N, SG-XPCIEFCGBE-E8-N
SAN Switches⁴	Brocade, Cisco, McData, Qlogic, Sun Cisco MDS: Fabric: 9120, 9124, 9134, 9140 Multi-Layer Fabric: 9216, 9216a, 9222i Multi-Layer Director: 9506, 9509, 9513

X86 (64 bit)	
Oracle Servers¹ X86	Sun Fire: V20Z, V40Z, X2100M2, X2200M2, X4100, X4100M2, X4140, X4150, X4170, X4170M2, X4200, X4200M2, X4240, X4250 X4270, X4270M2, X4275, X4440, X4450, X4470, X4540, X4600, X4600M2, X4640, X4800 Sun Blade: X6220, X6240, X6250, X6270, X6270M2, X6440 ¹⁷ , X6450, X8400, X8420, X8440, X8450 Sun Netra: X4200M2, X4250, X4450, X4270
Oracle Solaris Operating system	Oracle Solaris 10 1/06 or later ¹³
Oracle Solaris Cluster Software⁸	3.2 ⁵ , 3.2 2/08 ⁵ , 3.2 1/09 ⁵ , 3.2 11/09 ⁵ , 3.3
Maximum Number Of Nodes	4
Volume Manager Software⁷	Oracle Solaris SVM Veritas VxVM 4.1, 4.1MP1, 5.0, 5.0 MP1 ⁵ , 5.0 MP3 ⁵ ZFS/zpools for ZFS Filesystems ¹²
Multi-Path Driver⁷	Oracle SAN driver bundled in Solaris 10 OS
Host Adapters	SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCI1FC-EM4, SG-XPCI2FC-EM4, SG-XPCI1FC-EM4-Z, SG-XPCI2FC-EM4-Z SG-XPCI1FC-QL2, SG-XPCI2FC-QF2, SG-XPCI2FC-QF2-Z, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4 SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4, SG-XPCIE1FC-QF4, SG-XPCIE2FC-QF4 SG-XPCIE2FC-EB4-Z , SG-XPCIE2FC-QB4-Z , SG-XPCIE20FC-NEM-Z, SG-XPCIE2FCGBE-Q-Z, SG-XPCIE2FCGBE-E-Z SG-XPCIE1FC-QF8-Z, SG-XPCIE1FC-EM8-Z, SG-XPCIE2FC-QF8-Z, SG-XPCIE2FC-EM8-Z SG-XPCIE1FC-QF8-N, SG-XPCIE1FC-EM8-N, SG-XPCIE2FC-QF8-N, SG-XPCIE2FC-EM8-N SG-XPCIEFCGBE-E8-Z, SG-XPCIEFCGBE-Q8-Z SG-XPCIEFCGBE-Q8-N, SG-XPCIEFCGBE-E8-N
SAN Switches⁴	Same as above

¹ Go to My Oracle Support (MOS) or <http://myoraclesupport.com> for minimum supported Oracle Solaris operating environment versions, HBAs, patches and other supported options for list servers.

² left blank intentionally

³ HDS' USP V array = Sun's StorageTek 9985V and 9990V System

⁴ Unless an exception is explicitly called out, any FC SAN switch can be used with Solaris Cluster.

For Oracle supported switch offerings:

<http://www.oracle.com/us/products/servers-storage/storage/storage-networking/index.html>

⁵ For applicable OS and Volume Manager releases, please go to "System Software" at: <http://www.oracle.com/technetwork/indexes/documentation/index.html>

For Oracle Solaris 10 5/08, please see SunSolve Document id: 237505 when installing Oracle Solaris 10 5/08.

IF using VxVM, Oracle Solaris Cluster 3.2 requires VxVM 5.0 MP1, minimum. Download *Patch Id:* 122058-09 (or later qualified version) available on MOS.

Oracle Solaris Cluster 3.2 1/09 support requires the following patches: Sparc: 126106-33, x86: 126107-33

Oracle Solaris Cluster 3.2 1/09 minimum VxVM version required is VxVM_5.0_MP3_RP1.

See SunAlerts 272669 and 273610 when installing Oracle Solaris Cluster 3.2 11/09 update.

⁶ SAN 4.4.13 and later are supported on Oracle Solaris 9 only.

⁷ Storage Foundation (VxVM) with Sun's Traffic Manager (MPxIO) on 3rd party storage arrays is not supported by Symantec. Each storage partner fully tests and supports VxVM, and is the first line of support for any potential issues. Any escalations will be handled on a case by case basis. No future Storage Foundation releases (as of 5.1) will be supported with MpxIO.

⁸ Up to 16 node Sparc clusters support parameters:

- Oracle Solaris 10 10/08 (u6) and above
- Oracle Solaris Cluster 3.2 2/08 (u1) and Oracle Solaris 3.2 1/09 (u2)
- Oracle 10.2.0.3 and later, 11gR1 and later, including ASM
- QFS 4.6.2 and above (Shared QFS for RAC up to 16 nodes)
- Sun Branded Qlogic and Emulex HBAs
- Volume Manager support (up to 8 nodes only):
- SVM
- CVM 5.0
- VxVM 4.1 (mp2rp2) /CVM 4.1
- VxVM 5.0 (mp1rp4) /CVM 5.0
- No volume manager support beyond 8 nodes.

⁹ Sun Blade x6440 supported processors: 8376HE, 8380, 8384. The 8354 processor is not supported.

¹⁰ left blank intentionally

¹¹ For HDS detailed data path support, please refer to: http://www.hds.com/products/interoperability/?_p=v

¹² ZFS as a volume manager is supported only with ZFS as a filesystem on top of zpools.

¹³ For Solaris 10 8/11 (u10) support, please download the following patches: SPARC Platform: 144524-02, x86 Platform: 144525-02

Contact Us

For more information about Oracle Solaris Cluster, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

Copyright © 2010, Oracle and/or its affiliates. All rights reserved. Key Features

This document is provided for information purposes only and the contents hereof are subject to change without notice.

This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

 | Oracle is committed to developing practices and products that help protect the environment

All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. UNIX is a registered trademark licensed through X/Open Company, Ltd. 0410