



## **HOW TO USE THIS DOCUMENT**

This document describes OS, Server and Storage support with the listed version of HP Serviceguard for Linux (SGLX), and refers to HP Serviceguard for Linux support only. All other hardware and software components must be supported together independent of Serviceguard. Unless specifically stated in the notes, all configurations of any server listed are supported as long as the general Serviceguard configuration requirements are met.

This matrix includes certified configurations for HP Serviceguard for Linux versions A.11.14 through the current version, A.11.18. Notes in each section apply to the SGLX version indicated in the top right corner of the page on which they reside.

## **Contacts and Other Resources**

- The most recent version of this matrix can be found at <http://www.hp.com/go/sqlx/info>.
- For questions about this matrix, or to inquire about the certification status of an unlisted configuration, send an email to [SGLXhelp@hp.com](mailto:SGLXhelp@hp.com).
- For SGLX support dates, release news and software updates, refer to <http://www.hp.com/software/releases/releases-media2>.

## **Known Issues**

A problem with the Round Robin load balancing function of Red Hat Linux bonding may prevent Serviceguard from detecting network failures in Red Hat kernels. A package may not fail over in this situation. The driver has been fixed in kernels RHEL4 U5 and later. For earlier kernel versions, the "Failover" bonding mode is recommended.

**Red text indicates changes since the previous update of this matrix.**



<b>OS Versions</b>	
<b>VERSIONS</b> <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup>	
<b><u>RHEL4 Kernel Versions</u></b> RHEL4 U3 [ES/AS] ... 2.6.9-34.EL RHEL4 U4 [ES/AS] ... 2.6.9-42.EL RHEL4 U4 [ES/AS] ... 2.6.9-42.0.8.EL RHEL4 U5 [ES/AS] ... 2.6.9-55.EL <b>RHEL4 U6 [ES/AS] ... 2.6.9-67.EL</b>	<b><u>SLES10 Kernel Versions</u></b> SLES10 ... errata 2.6.16.21 SLES10 ... errata 2.6.16.21-0.8 SLES10 SP1 ... errata 2.6.16.46 SLES10 SP1 ... errata 2.6.16.46-0.12 SLES10 SP1 ... errata 2.6.16.46-0.14
<b><u>RHEL5 Kernel Versions</u></b> RHEL5 ... 2.6.18-8.EL5 RHEL5 ... 2.6.18-8.1.6.EL5 RHEL5 ... 2.6.18-8.1.8.EL5 RHEL5.1 ... 2.6.18-49.EL5	
<b>Notes:</b> (1) Not every product in a certified configuration supports all of the errata shown here. Please check that other products used in the cluster support the errata that is proposed. (2) Information on older errata that are supported may not be shown. (3) Certification of newer Updates, Service Packs, and Errata will be completed as soon after release as practical. (4) Supports the IA-32, IA-64 and x86-64 versions of the distributions but not mixed in the same cluster.	



<b>HP ProLiant and 3rd Party x86 Class Servers</b>		
<b>SERVER MODELS</b>	<b>FIBRE CHANNEL (MAX NODES = 16)</b>	<b>SCSI <sup>(14)</sup></b>
<p><b>HP ProLiant BladeSystem p-Class <sup>(5) (6)</sup></b> BL20p G1, G2, G3, G4 BL25p G1, G2 BL40p BL45p G1, G2</p> <p><b>HP ProLiant BladeSystem c-Class <sup>(5) (6)</sup></b> BL460c BL465c BL480c BL680c G5 BL685c</p> <p><b>HP ProLiant DL</b> <b>DL320 G5</b> DL360 G1, G2, G3, G4, G4p, G5 DL365 G1 DL380 G1, G2, G3, G4, G5 DL385 G1, G2 DL560 DL580 G1, G2, G3, G4, G5 DL585 G1, G2 DL740 DL760 G1, G2</p>	<p><b>HP ProLiant ML</b> ML350 G3, G4p, G5 ML370 G3, G4, G5 ML570 G3, G4</p> <p><b>IBM Servers <sup>(7)</sup></b> eServer 325 xSeries 346 x3650 x3550</p> <p><b>DELL Servers <sup>(7)</sup></b> PowerEdge 2850 PowerEdge 1900, 1950 PowerEdge 2900, 2950</p>	<p><b>HP StorageWorks MSA <sup>(8) (9) (10) (11)</sup></b> MSA1000 ProLiant DL380 G4 Packaged Cluster w/MSA1000 MSA1500cs</p> <p><b>HP StorageWorks EVA <sup>(9) (10) (11) (12)</sup></b> EVA 3000 EVA 4x00 EVA 5000 EVA 6x00 EVA 8x00</p> <p><b>HP StorageWorks XP <sup>(9) (10) (11)</sup></b> XP48 XP128 XP512 XP1024 XP10000 XP12000 XP20000 XP24000</p> <p><b>EMC Symmetrix <sup>(13)</sup></b> Symmetrix 8000-Series: 5, 5.5 Symmetrix DMX: 6, 6.5 CLARiiON CX/AX</p>
		<p><b>HP StorageWorks MSA: Single path (max nodes = 2)</b> MSA500 G2 ProLiant DL380 G3 Packaged Cluster ProLiant DL380 G3 Packaged Cluster, Racked</p> <p><b>HP StorageWorks MSA: Multipath w/MD (max nodes = 4) <sup>(15) (16)</sup></b> MSA500 G2 ProLiant DL380 G4 Packaged Cluster w/MSA500G2 ProLiant DL385 G4 Packaged Cluster w/MSA500G2</p>

**Notes:**

- (5) HP ProLiant Blades using Virtual Connect Technology are supported.
- (6) HP ProLiant Blades are supported with FibreChannel storage only with the mezzanine adapters.
- (7) Non-HP servers require the addition of a software Care Pack or support contract as well as HP HBA & driver. Serviceguard Manager has been tested, but is not fully supported on non-HP servers.
- (8) Both Active/Active and Active/Passive versions supported. MSA1000 and especially the MSA1500cs arrays must be configured so that no single failure would make any shared storage unavailable. Please refer to the respective documentation on ensuring high availability storage.
- (9) Supported with any HP HBA supported in the listed HP ProLiant servers.
- (10) For HP arrays, use multipath function built into HBA driver from HP.
- (11) Non-HP servers are supported with any HP FC HBA supported in those servers with the listed HP storage arrays.
- (12) HP StorageWorks EVA supported with firmware v3.01 or later.
- (13) Supported with Red Hat EL 4 and SLES10. PowerPath 4.3.3 and above. PowerPath must be used for multipath and it is supported for LockLUN. If a version of PowerPath earlier than 4.5 is used, search for article "emc137801" on EMC PowerLink at <http://powerlink.emc.com>.
- (14) SGLX on VMware guest requires storage that supports SCSI "Persistent Reservation" and is not supported with MSA500 or MSA500 G2.
- (15) DM not supported - see Manual.
- (16) Multipath not supported for LockLUN device.



<b>HP Integrity Servers</b>		
<b>SERVER MODELS</b>	<b>FIBRE CHANNEL (MAX NODES = 16)</b>	<b>SCSI</b>
<p><b>HP Integrity BladeSystem c-Class</b> <sup>(17)</sup> BL860c</p> <p><b>HP Integrity Entry-Level Servers</b> <sup>(18)</sup> rx1600 / rx1600-2 rx1620 / rx1620-2 rx2600 rx2620 / rx2620-2 rx2660 rx3600 rx4640 rx5670 rx6600</p> <p><b>HP Integrity Midrange Servers</b> <sup>(18)</sup> rx7620 rx7640 rx8620 rx8640</p> <p><b>HP Integrity High-End Servers</b> <sup>(18)</sup> Superdome</p>	<p><b>HP StorageWorks MSA</b> <sup>(19) (20) (21)</sup> MSA1000 MSA1500cs</p> <p><b>HP StorageWorks EVA</b> <sup>(20) (21) (22)</sup> EVA 3000 EVA 4x00 EVA 5000 EVA 6x00 EVA 8x00</p> <p><b>HP StorageWorks XP</b> <sup>(20) (21)</sup> XP48 XP128 XP512 XP1024 XP10000 XP12000 XP20000 XP24000</p> <p><b>EMC Symmetrix</b> <sup>(23)</sup> Symmetrix 8000-Series: 5, 5.5 Symmetrix DMX: 6, 6.5 CLARiiON CX/AX</p>	<p>Not supported</p>
<p><b>Notes:</b></p> <p>(17) HP Integrity Blades using Virtual Connect Technology are supported.</p> <p>(18) HP Serviceguard for Linux supports servers with single and dual core Intel Itanium 2 processors. Please ensure that the Linux distribution used is supported on both SGLX and the server.</p> <p>(19) Both Active/Active and Active/Passive versions supported. MSA1000 and especially the MSA1500cs arrays must be configured so that no single failure would make any shared storage unavailable. Please refer to the respective documentation on ensuring high availability storage.</p> <p>(20) Supported with any HP HBA supported in the listed HP Integrity servers.</p> <p>(21) For HP arrays, use multipath function built into HBA driver from HP.</p> <p>(22) HP StorageWorks EVA supported with firmware v3.01 or later.</p> <p>(23) Supported with Red Hat EL 4 and SLES10. PowerPath 4.3.3 and above. PowerPath must be used for multipath and it is supported for LockLUN. If a version of PowerPath earlier than 4.5 is used, search for article "emc137801" on EMC PowerLink at <a href="http://powerlink.emc.com">http://powerlink.emc.com</a>.</p>		



<b>OS Versions</b>	
<b>VERSIONS</b> <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup>	
<b><u>RHEL3 Kernel Versions</u></b> RHEL3 U1 [ES/AS] ... 2.4.21-9.0.3 RHEL3 U2 [ES/AS] ... 2.4.21-15.0.3 RHEL3 U2 [ES/AS] ... 2.4.21-15.0.4 RHEL3 U3 [ES/AS] ... 2.4.21-20.EL <sup>(5)</sup> RHEL3 U4 [ES/AS] ... 2.4.21-27.EL RHEL3 U5 [ES/AS] ... 2.4.21-32.EL RHEL3 U5 [ES/AS] ... 2.4.21-32.0.1.EL RHEL3 U6 [ES/AS] ... 2.4.21-37.EL RHEL3 U6 [ES/AS] ... 2.4.21-37.0.1.EL RHEL3 U7 [ES/AS] ... 2.4.21-40.EL RHEL3 U8 [ES/AS] ... 2.4.21-47.EL RHEL3 U8 [ES/AS] ... 2.4.21-47.0.1.EL	<b><u>SLES9 Kernel Versions</u></b> SLES9 SP1 ... errata 2.6.5-7.139 SLES9 SP1 ... errata 2.6.5-7.145 SLES9 SP1 ... errata 2.6.5-7.147 SLES9 SP1 ... errata 2.6.5-7.151 SLES9 SP1 ... errata 2.6.5-7.151.29 SLES9 SP2 ... errata 2.6.5-7.191 SLES9 SP2 ... errata 2.6.5-7.193 SLES9 SP2 ... errata 2.6.5-7.202.7 SLES9 SP3 ... errata 2.6.5-7.244 SLES9 SP3 ... errata 2.6.5-7.252 SLES9 SP3 ... errata 2.6.5-7.253 <b>SLES9 SP4 ... errata 2.6.5-7.308</b>
<b><u>RHEL4 Kernel Versions</u></b> RHEL4 U1 [ES/AS] ... 2.6.9-11.EL RHEL4 U2 [ES/AS] ... 2.6.9-22.EL <sup>(6)</sup> RHEL4 U2 [ES/AS] ... 2.6.9-22.0.2.EL RHEL4 U3 [ES/AS] ... 2.6.9-34.EL RHEL4 U4 [ES/AS] ... 2.6.9-42.EL RHEL4 U4 [ES/AS] ... 2.6.9-42.0.8.EL RHEL4 U5 [ES/AS] ... 2.6.9-55.EL <b>RHEL4 U6 [ES/AS] ... 2.6.9-67.EL</b>	<b><u>SLES10 Kernel Versions</u></b> SLES10 ... errata 2.6.16.21 SLES10 ... errata 2.6.16.21-0.8 SLES10 SP1 ... errata 2.6.16.46 SLES10 SP1 ... errata 2.6.16.46-0.12 SLES10 SP1 ... errata 2.6.16.46-0.14
<b>Notes:</b> (1) Not every product in a certified configuration supports all of the errata shown here. Please check that other products used in the cluster support the errata that is proposed. (2) Information on older errata that are supported may not be shown. (3) Certification of newer Updates, Service Packs, and Errata will be completed as soon after release as practical. (4) Supports the IA-32, IA-64 and x86-64 versions of the distributions but not mixed in the same cluster. (5) Rare problem caused by failures in the network environment with Red Hat 3 Update 3 can be avoided by work around detailed at <a href="http://forums1.itrc.hp.com/service/forums/questionanswer.do?threadId=754018">http://forums1.itrc.hp.com/service/forums/questionanswer.do?threadId=754018</a> . This is fixed in Update 4. (6) Please contact HP support to receive required Serviceguard for Linux patch for support for this and later updates.	



<b>HP ProLiant and 3rd Party x86 Class Servers</b>		
<b>SERVER MODELS</b>	<b>FIBRE CHANNEL (MAX NODES = 16)</b>	<b>SCSI</b>
<p><b>HP ProLiant BladeSystem p-Class</b> <sup>(7) (8)</sup></p> <p>BL20p G1, G2, G3, G4 BL25p G1, G2 BL40p BL45p</p> <p><b>HP ProLiant BladeSystem c-Class</b> <sup>(7) (8)</sup></p> <p>BL460c BL465c BL480c BL680c: G5 BL685c</p> <p><b>HP ProLiant DL</b></p> <p>DL360 G1, G2, G3, G4, G5 DL365 DL380 G1, G2, G3, G4, G5 DL385 G1, G2 DL560 DL580 G1, G2, G3, G4, G5 DL585 G1, G2 DL740 DL760 G1, G2</p> <p><b>HP ProLiant ML</b></p> <p>ML350 G3, G4p, G5 ML370 G3, G4, G5 ML570 G3, G4</p>	<p><b>IBM Servers</b> <sup>(9)</sup></p> <p>eServer 325 xSeries 346</p> <p><b>DELL Servers</b> <sup>(9)</sup></p> <p>PowerEdge 2850</p>	<p><b>HP StorageWorks MSA</b> <sup>(10) (11) (12) (13)</sup></p> <p>MSA1000 ProLiant DL380 G4 Packaged Cluster w/MSA1000 MSA1500cs</p> <p><b>HP StorageWorks VA</b> <sup>(11) (12) (13)</sup></p> <p>VA71x0 VA74x0</p> <p><b>HP StorageWorks EVA</b> <sup>(11) (12) (13) (14)</sup></p> <p>EVA 3000 EVA 4x00 EVA 5000 EVA 6x00 EVA 8x00</p> <p><b>HP StorageWorks XP</b> <sup>(11) (12) (13)</sup></p> <p>XP48 XP128 XP512 XP1024 XP10000 XP12000 XP20000 XP24000</p> <p><b>EMC Symmetrix</b> <sup>(15)</sup></p> <p>Symmetrix 8000-Series: 5, 5.5 Symmetrix DMX: 6, 6.5 CLARiiON CX/AX</p>
<p><b>HP StorageWorks MSA: Single path (max nodes = 2)</b></p> <p>MSA500 G2 ProLiant DL380 G3 Packaged Cluster ProLiant DL380 G3 Packaged Cluster, Racked</p> <p><b>HP StorageWorks MSA: Multipath w/MD (max nodes = 4)</b> <sup>(16) (17)</sup></p> <p>MSA500 G2 ProLiant DL380 G4 Packaged Cluster w/MSA500G2 ProLiant DL385 G4 Packaged Cluster w/MSA500G2</p>		
<p><b>Notes:</b></p> <p>(7) HP ProLiant Blades using Virtual Connect Technology are supported.</p> <p>(8) HP ProLiant Blades are supported with FibreChannel storage only with the mezzanine adapters.</p> <p>(9) Non-HP servers require the addition of a software Care Pack or support contract as well as HP HBA &amp; driver. Serviceguard Manager has been tested, but is not fully supported on non-HP servers.</p> <p>(10) Both Active/Active and Active/Passive versions supported. MSA1000 and especially the MSA1500cs arrays must be configured so that no single failure would make any shared storage unavailable. Please refer to the respective documentation on ensuring high availability storage.</p> <p>(11) Supported with any HP HBA supported in the listed HP ProLiant servers.</p> <p>(12) For HP arrays, use multipath function built into HBA driver from HP.</p> <p>(13) Non-HP servers are supported with any HP FC HBA supported in those servers with the listed HP storage arrays.</p> <p>(14) HP StorageWorks EVA supported with firmware v3.01 or later.</p> <p>(15) Supported with Red Hat EL 4, SLES9 and SLES10. PowerPath 4.3.3 and above. PowerPath must be used for multipath and it is supported for LockLUN. If a version of PowerPath earlier than 4.5 is used, search for article "emc137801" on EMC PowerLink at <a href="http://powerlink.emc.com">http://powerlink.emc.com</a>.</p> <p>(16) DM not supported - see Manual.</p> <p>(17) Multipath not supported for LockLUN device.</p>		



<b>HP Integrity Servers</b>		
<b>SERVER MODELS</b>	<b>FIBRE CHANNEL (MAX NODES = 16)</b>	<b>SCSI</b>
<p><b>HP Integrity BladeSystem c-Class</b> <sup>(18)</sup> BL860c</p> <p><b>HP Integrity Entry-Level Servers</b> <sup>(19)</sup> rx1600 / rx1600-2 rx1620 / rx1620-2 rx2600 rx2620 / rx2620-2 rx2660 rx3600 rx4640 rx5670 rx6600</p> <p><b>HP Integrity Midrange Servers</b> <sup>(19)(18)</sup> rx7620 rx7640 rx8620 rx8640</p> <p><b>HP Integrity High-End Servers</b> <sup>(19)</sup> Superdome</p>	<p><b>HP StorageWorks MSA</b> <sup>(20) (21) (22)</sup> MSA1000 MSA1500cs</p> <p><b>HP StorageWorks VA</b> <sup>(21) (22)</sup> VA71x0 VA74x0</p> <p><b>HP StorageWorks EVA</b> <sup>(21) (22) (23)</sup> EVA 3000 EVA 4x00 EVA 5000 EVA 6x00 EVA 8x00</p> <p><b>HP StorageWorks XP</b> <sup>(21) (22)</sup> XP48 XP128 XP512 XP1024 XP10000 XP12000 XP20000 XP24000</p> <p><b>EMC Symmetrix</b> <sup>(24)</sup> Symmetrix 8000-Series: 5, 5.5 Symmetrix DMX: 6, 6.5 CLARiiON CX/AX</p>	<p>Not supported</p>

**Notes:**

(18) HP Integrity Blades using Virtual Connect Technology are supported.

(19) HP Serviceguard for Linux supports servers with single and dual core Intel Itanium 2 processors. Please ensure that the Linux distribution used is supported on both SGLX and the server.

(20) Both Active/Active and Active/Passive versions supported. MSA1000 and especially the MSA1500cs arrays must be configured so that no single failure would make any shared storage unavailable. Please refer to the respective documentation on ensuring high availability storage.

(21) Supported with any HP HBA supported in the listed HP Integrity servers.

(22) For HP arrays, use multipath function built into HBA driver from HP.

(23) HP StorageWorks EVA supported with firmware v3.01 or later.

(24) Supported with Red Hat EL 4 and SLES10. PowerPath 4.3.3 and above. PowerPath must be used for multipath and it is supported for LockLUN. If a version of PowerPath earlier than 4.5 is used, search for article "emc137801" on EMC PowerLink at <http://powerlink.emc.com>.



**OS Versions**

**VERSIONS** <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup>

<b>RHEL3 Kernel Versions</b>	<b>SLES8 Kernel Versions</b>
RHEL3 U1 [ES/AS] ... 2.4.21-9.0.3	SLES8 SP3 ... errata 2.4.21-198
RHEL3 U2 [ES/AS] ... 2.4.21-15.0.3	SLES8 SP3 ... errata 2.4.21-215
RHEL3 U2 [ES/AS] ... 2.4.21-15.0.4	SLES8 SP3 ... errata 2.4.21-241
RHEL3 U3 [ES/AS] ... 2.4.21-20.EL <sup>(5)</sup>	SLES8 SP3 ... errata 2.4.21-273
RHEL3 U4 [ES/AS] ... 2.4.21-27.EL	SLES8 SP4 ... errata 2.4.21-278
RHEL3 U5 [ES/AS] ... 2.4.21-32.EL	SLES8 SP4 ... errata 2.4.21-286
RHEL3 U5 [ES/AS] ... 2.4.21-32.0.1.EL	SLES8 SP4 ... errata 2.4.21-292
RHEL3 U6 [ES/AS] ... 2.4.21-37.EL	SLES8 SP4 ... errata 2.4.21-295
RHEL3 U6 [ES/AS] ... 2.4.21-37.0.1.EL	
RHEL3 U7 [ES/AS] ... 2.4.21-40.EL	

**Notes:**

- (1) SGLX 11.15 is not recommended for new installations as this version is out of "patch phase". Please refer to the SGLX support model at <http://www.hp.com/software/releases/releases-media2/>
- (2) SGLX 11.15 supports IA-32 versions of Linux only
- (3) Not every product in a certified configuration supports all of the errata shown here. Please check that other products used in the cluster support the errata that is proposed.
- (4) Information on older errata that are supported may not be shown.
- (5) Rare problem caused by failures in the network environment with Red Hat 3 Update 3 can be avoided by work around detailed at <http://forums1.itrc.hp.com/service/forums/questionanswer.do?threadId=754018>. This is fixed in Update 4.



<b>HP ProLiant and 3rd Party x86 Class Servers</b>		
<b>SERVER MODELS</b>	<b>FIBRE CHANNEL (MAX NODES = 16)</b>	<b>SCSI</b>
<p><b>HP ProLiant BladeSystem p-Class</b> <sup>(6)</sup></p> <p>BL20p G1, G2, G3, G4 BL25p G1 BL40p</p> <p><b>HP ProLiant DL</b> <sup>(7)</sup></p> <p>DL360 G1, G2, G3, G4 DL380 G1, G2, G3, G4, G5 DL385 DL560 DL580 G1, G2, G3, G4 DL585 DL740 DL760 G1, G2</p> <p><b>HP ProLiant ML</b></p> <p>ML350 G3, G4 ML370 G3, G4</p>	<p><b>HP StorageWorks MSA</b> <sup>(8) (9) (10)</sup></p> <p>MSA1000 ProLiant DL380 G4 Packaged Cluster with MSA1000 MSA1500cs</p> <p><b>HP StorageWorks VA</b> <sup>(9) (10)</sup></p> <p>VA71x0 VA74x0</p> <p><b>HP StorageWorks EVA</b> <sup>(9) (10)</sup></p> <p>EVA 3000 EVA 4000 EVA 5000 EVA 6000 EVA 8000</p> <p><b>HP StorageWorks XP</b> <sup>(9) (10)</sup></p> <p>XP48 XP128 XP512 XP1024 XP10000 XP12000</p> <p><b>EMC Symmetrix</b> <sup>(11) (12)</sup></p> <p>Symmetrix 8000-Series: 5, 5.5 Symmetrix DMX: 6, 6.5</p>	<p><b>HP StorageWorks MSA: Single path (max nodes = 2)</b></p> <p>MSA500 ProLiant DL380 G2 Packaged Cluster ProLiant DL380 G3 Packaged Cluster</p>

**Notes:**

- (6) HP ProLiant Blades are supported with FibreChannel storage only with the mezzanine adapters.
- (7) There is no support running the AMD64 or EMT64 versions of Red Hat or SuSE, even though the OS may support 32-bit applications. During certification testing of the DL585 and the G4 servers, a seldom seen problem was discovered affecting the disk monitor (cmresmond). A replacement copy of cmresmond is available from [www.itrc.hp.com](http://www.itrc.hp.com) in the Servers/ProLiant server clustering forum at <http://forums1.itrc.hp.com/service/forums/questionanswer.do?threadId=665900>.
- (8) Both Active/Active and Active/Passive versions supported. MSA1000 and especially the MSA1500cs arrays must be configured so that no single failure would make any shared storage unavailable. Please refer to the respective documentation on ensuring high availability storage.
- (9) Supported with any QLogic based HBA including FCA2214, FCA2214DC, FC2214, FC2214DC, FC1142SR, FC1242SRDC, FC1143, FC1243DC and Mezzanine adapters for HP BladeSystem
- (10) For HP arrays, use multipath function built into HBA driver 7.00.03 and above or SecurePath from HP. HP SecurePath is supported for SLES8 and various Red Hat 3 errata. Check with your representative.
- (11) HP StorageWorks EVA supported with firmware v3.01 or later.
- (12) Requires Red Hat EL 3 update 2 or later. For PowerPath version 4.3.3 and 4.3.4 contact EMC support for the version that does NOT automatically activate ALL volume groups. Any 4.5 or later version is supported. Search for article "emc137801" on EMC PowerLink at <http://powerlink.emc.com> for more information.



<b>HP Integrity Servers</b>		
<b>SERVER MODELS</b>	<b>FIBRE CHANNEL (MAX NODES = 16)</b>	<b>SCSI</b>
<p><b>HP Integrity Entry-Level Servers</b></p> <p>rx1600 rx2600 rx4640 rx5670</p> <p><b>HP Integrity Midrange Servers<sup>(18)</sup></b></p> <p>rx7620 rx8620</p>	<p><b>HP StorageWorks MSA<sup>(13) (14) (15)</sup></b> MSA1000</p> <p><b>HP StorageWorks VA<sup>(14) (15)</sup></b> VA71x0 VA74x0</p> <p><b>HP StorageWorks EVA<sup>(14) (15)</sup></b> EVA 3000 EVA 4000 EVA 5000 EVA 6000 EVA 8000</p> <p><b>HP StorageWorks XP<sup>(14) (15)</sup></b> XP48 XP128 XP512 XP1024 XP10000 XP12000</p> <p><b>EMC Symmetrix<sup>(17)</sup></b> Symmetrix 8000-Series: 5, 5.5 Symmetrix DMX: 6, 6.5</p>	<p>Not supported</p>

**Notes:**

- (13) Both Active/Active and Active/Passive versions supported. MSA1000 and especially the MSA1500cs arrays must be configured so that no single failure would make any shared storage unavailable. Please refer to the respective documentation on ensuring high availability storage.
- (14) Supported with any HP A6826A HBA as supported in the listed HP Integrity servers.
- (15) For HP arrays, use multipath function built into HBA driver 7.00.03 and above or SecurePath from HP. HP SecurePath is supported for SLES8 and various Red Hat 3 errata. Check with your representative.
- (16) HP StorageWorks EVA supported with firmware v3.01 or later.
- (17) Requires Red Hat EL 3 update 2 or later. For PowerPath version 4.3.3 and 4.3.4 contact EMC support for the version that does NOT automatically activate ALL volume groups. Any 4.5 or later version is supported. Search for article "emc137801" on EMC PowerLink at <http://powerlink.emc.com> for more information.



OS Versions	
<b>VERSIONS</b> <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup>	
<b>RHEL2.1 Kernel Versions</b> RHEL2.1 U3 [ES/AS] ... 2.4.9-e35 RHEL2.1 U3 [ES/AS] ... 2.4.9-e38 RHEL2.1 U3 [ES/AS] ... 2.4.9-e39 RHEL2.1 U4 [ES/AS] ... 2.4.9-e41 RHEL2.1 U4 [ES/AS] ... 2.4.9-e43 RHEL2.1 U5 [ES/AS] ... 2.4.9-e49	<b>SLES8 Kernel Versions</b> <sup>(4)</sup> SLES8 SP3 ... errata 2.4.21-198 SLES8 SP3 ... errata 2.4.21-215 SLES8 SP3 ... errata 2.4.21-241 SLES8 SP3 ... errata 2.4.21-273
<b>Notes:</b> (1) SGLX 11.14 is not recommended for new installations as this version is out of "patch phase" for Red Hat 2.1 and out of support phase for SLES8. Please refer to the SGLX support model at <a href="http://www.hp.com/software/releases/releases-media2/">http://www.hp.com/software/releases/releases-media2/</a> (2) Not every product in a certified configuration supports all of the errata shown here. Please check that other products used in the cluster support the errata that is proposed. (3) Information on older errata that are supported may not be shown. (4) Serviceguard for Linux version A.11.15 is recommended for SLES8 clusters.	



<b>HP ProLiant and 3rd Party x86 Class Servers <sup>(2)</sup></b>		
<b>SERVER MODELS</b>	<b>FIBRE CHANNEL (MAX NODES = 16)</b>	<b>SCSI</b>
<p><b>HP ProLiant BladeSystem p-Class <sup>(6)</sup></b> BL20p G1, G2 BL40p</p> <p><b>HP ProLiant DL</b> DL360 G1, G2, G3 DL380 G1, G2, G3 DL560 DL580 G1, G2 DL740 DL760 G1, G2</p> <p><b>HP ProLiant ML</b> ML350 G3 ML370 G3</p>	<p><b>HP StorageWorks MSA <sup>(7) (8)</sup></b> <b>(max nodes = 2)</b> MSA1000 ProLiant DL380 Packaged Cluster w/MSA1000 <sup>(9)</sup> MSA1500cs</p> <p><b>HP StorageWorks EVA <sup>(7) (8) (10)</sup></b> <b>(max nodes = 2)</b> EVA 3000 EVA 5000</p> <p><b>HP StorageWorks VA <sup>(7) (8)</sup></b> <b>(max nodes = 16)</b> VA71x0 VA74x0</p> <p><b>HP StorageWorks XP <sup>(7) (8)</sup></b> <b>(max nodes = 16)</b> XP48 XP128 XP512 XP1024</p>	<p><b>HP StorageWorks MSA: Single path</b> <b>(max nodes = 2)</b> MSA500 ProLiant DL380 G2 Packaged Cluster ProLiant DL380 G3 Packaged Cluster ProLiant DL380 G3 Packaged Cluster, Racked</p>
<p><b>Notes:</b></p> <p>(5) HP Integrity servers are not supported with HP Serviceguard for Linux A.11.14.  (6) HP ProLiant Blades are supported with FibreChannel storage only with the mezzanine adapters.  (7) Supported with any QLogic based HBA including FCA2214, FCA2214DC and Mezzanine adapters for HP BladeSystem  (8) For HP arrays, use multipath function built into HBA driver 7.00.03 and above or SecurePath from HP. HP SecurePath is supported for SLES8 and various Red Hat 2.1 errata. Check with your representative.  (9) Requires MSA1000 High Availability Kit  (10) HP StorageWorks EVA supported with firmware v3.01 or later.</p>		