



**HP Cluster Configuration Support Matrix for Microsoft Windows & HP StorageWorks MSA1500cs/MSA1000**

Config	Supported Servers*	Host Bus Adapters (HBAs)*	Multi Path Software	Storage Information	Interconnects (Switches)*	Other
<p>#1</p> <p>Windows Server 2003, EE R2</p> <p>&amp;</p> <p>Windows 2000 Advanced Server, SP4</p>	<p>Max supported nodes Windows Server 2003 = 8</p> <p>Max Supported nodes Windows 2000 Advanced Server = 2</p> <p>ProLiant</p> <ul style="list-style-type: none"> <li>• BL20p G2^</li> <li>• BL20p G3^^^</li> <li>• BL40p</li> <li>• BL30p^^</li> <li>• BL35p^^</li> <li>• BL25p^^^^</li> <li>• BL45p^^^^</li> <li>• DL360 G4, DL360 G5</li> <li>• DL360 G4p</li> <li>• DL365</li> <li>• DL380 G4, DL380 G5</li> <li>• DL580 G3, DL580 G4</li> <li>• DL585, DL585 G2</li> <li>• DL385, DL385 G2</li> <li>• ML370 G4, ML370 G5</li> <li>• ML530, ML530 G2</li> <li>• ML570 G3, ML570 G4</li> <li>• BL460c</li> <li>• BL480c</li> <li>• BL465c</li> <li>• BL685c</li> </ul> <p><b>*Note:</b> Servers can be used homogeneously or heterogeneously within a cluster. Maximum supported nodes for BL30p in a SCSIport config = 2</p> <p><b>^Note:</b> Supports the FC Mezzanine card only.</p> <p><b>^^Note:</b> Supports the FC Balcony card only.</p> <p><b>^^^Note:</b> Supports the FC Adapter Card BL20p G3</p> <p><b>^^^^Note:</b> Supports the HPBALCF 105</p> <p><b>Server Software:</b>  <a href="#">SmartStart</a>  <b>Ver:</b> 7.70            (Install non-RBSU servers using SmartStart 5.5 and then apply PSP 7.4)</p>	<p><b>HBA Family 1</b>  <b>SCSIPort Driver:</b> 5-5.30a2  <b>FW:</b> 1.91a5  <b>BIOS:</b> 1.71a0</p> <p><b>StorPort Driver:</b> 5-1.20a7  <b>FW:</b> 1.91a5  <b>BIOS:</b> 1.71a0</p> <ul style="list-style-type: none"> <li>• <a href="#">FCA2404</a></li> <li>• <a href="#">FCA2404DC</a></li> <li>• <a href="#">A7387A</a></li> <li>• <a href="#">A7388A</a></li> </ul> <p><b>HBA Family 2</b>  <b>SCSIPort Driver:</b> 5-5.30a2  <b>FW:</b> 1.91a5  <b>BIOS:</b> 1.71a0</p> <p><b>StorPort Driver:</b> 5-1.20a7  <b>FW:</b> 1.91a5  <b>BIOS:</b> 1.71a0</p> <ul style="list-style-type: none"> <li>• <a href="#">E-FC Balcony Card</a> ^^</li> <li>• <a href="#">E-FC Adapter Card</a> ^^</li> </ul> <p><b>^^For the BL25p, BL30p, BL35p, &amp; BL45p use E-FC Balcony Card.</b></p> <p><b>^^^For the BL20p G3 use E-FC Adapter Card.</b></p> <p><b>HBA Family 3</b>  <b>SCSIPort Driver:</b> 5-5.20a10  <b>FW:</b> 3.93a0  <b>BIOS:</b> 1.70a3</p> <p><b>StorPort Driver:</b> 5-1.11x1  <b>FW:</b> 3.93a0  <b>BIOS:</b> 1.70a3</p> <ul style="list-style-type: none"> <li>• <a href="#">FCA2101</a></li> <li>• <a href="#">FCA2355</a></li> </ul> <p><b>HBA Family 4</b>  <b>SCSIport Driver:</b> 9.1.3.11  <b>FW:</b> Loaded from Driver  <b>BIOS FC Mezz/Balcony:</b> 1.48  <b>BIOS FCA2214/2214DC:</b> 1.45</p> <p><b>StorPort Driver:</b> 9.1.3.16  <b>FW:</b> Loaded from Driver  <b>BIOS FC Mezz/Balcony:</b> 1.48  <b>BIOS FCA2214/2214DC:</b> 1.45</p> <ul style="list-style-type: none"> <li>• <a href="#">FCA2214</a></li> <li>• <a href="#">FCA2214DC</a></li> <li>• <a href="#">FC Balcony card</a></li> <li>• <a href="#">FC Mezz card</a> ^</li> </ul> <p><b>^For the BL20p G3 use:</b>  <b>BIOS:</b> 1.45 bl20p G3</p> <p><b>HBA Family 5</b>  <b>SCSIport Driver:</b> 9.1.3.11  <b>FW:</b> NA  <b>BIOS:</b> 1.48</p> <p><b>StorPort Driver:</b> 9.1.3.16  <b>FW:</b> NA  <b>BIOS:</b> 1.48</p> <p><a href="#">HPBALCF105</a> for BL25p and BL45p</p> <p><b>HBA Family 6</b>  <b>SCSIport Driver:</b> 5-5.30a2  <b>FW:</b> 2.50a6</p>	<p><a href="#">HP Full Featured MPIO</a>  V1.00.01</p>	<p><a href="#">StorageWorks MSA1500 Storage Controller FW:</a> v7.00</p> <p><a href="#">MSA20 SATA Disk Enclosure:</a> 2.02*</p> <p><b>*MSA20 SATA Disk Enclosure only attached to MSA1500</b></p>	<p><b>B-Series</b>            StorageWorks SAN Switches (8/16 ports 2GB)  <b>FW:</b> 3.2.1b</p> <ul style="list-style-type: none"> <li>• <a href="#">MSA SAN Switch 2/8^</a></li> <li>• <a href="#">SAN Switch 2/16</a></li> </ul> <p><b>FW:</b> 5.2.0b</p> <ul style="list-style-type: none"> <li>• <a href="#">SAN Switch 2/32</a></li> <li>• <a href="#">SAN Switch 2/8V</a></li> <li>• <a href="#">SAN Switch 2/16V</a></li> <li>• <a href="#">SAN Switch 2/16N</a></li> <li>• <a href="#">SAN Director 2/128</a></li> </ul> <p>StorageWorks SAN Switches (&gt;32 ports)  <b>FW:</b> 5.0.5c</p> <ul style="list-style-type: none"> <li>• <a href="#">Core Switch 2/64</a></li> </ul> <p>StorageWorks SAN Switches (4GB)  <b>FW:</b> 5.2.0b</p> <ul style="list-style-type: none"> <li>• <a href="#">4/8 SAN Switch</a></li> <li>• <a href="#">4/16 SAN Switch</a></li> <li>• <a href="#">4/32 SAN Switch</a></li> <li>• <a href="#">4/256 SAN Director</a></li> </ul> <p><b>M-Series</b>            StorageWorks Director and Edge Switches  <b>FW:</b> 09.00.00</p> <ul style="list-style-type: none"> <li>• <a href="#">Director 2/64</a></li> <li>• <a href="#">Director 2/140</a></li> <li>• <a href="#">Edge Switch 2/12</a></li> <li>• <a href="#">Edge Switch 2/24</a></li> <li>• <a href="#">Edge Switch 2/32</a></li> </ul> <p><b>C-Series</b>            Cisco Switches  <b>FW:</b> 3.1(2a)</p> <ul style="list-style-type: none"> <li>• <a href="#">MDS 9120</a></li> <li>• <a href="#">MDS 9140</a></li> <li>• <a href="#">MDS 9216</a></li> <li>• <a href="#">MDS 9506</a></li> <li>• <a href="#">MDS 9509</a></li> </ul> <p><b>^^Note:</b> Not supported with BL server line.</p> <p><b>*Note:</b> BL30p server supported with B-series switches only.</p>	<p><a href="#">Product Page</a></p> <p><a href="#">Supporting Documentation</a></p> <p><a href="#">MSCS Support Matrix - archive</a></p> <p>March 2007</p>

		<p>BIOS: 1.71a0</p> <p><b>StorPort Driver:</b> 5-1.20a7 <b>FW:</b> 2.50a6 <b>BIOS:</b> 1.71a0</p> <ul style="list-style-type: none"><li>• <a href="#">FC2142</a></li><li>• <a href="#">FC2242</a></li></ul> <p><b>HBA Family 7</b> <b>SCSIport Driver:</b> 5-5.30a2 <b>FW:</b> 2.10a10 <b>BIOS:</b> 1.71a0</p> <p><b>StorPort Driver:</b> 5-1.20a7 <b>FW:</b> 2.10a10 <b>BIOS:</b> 1.71a0</p> <ul style="list-style-type: none"><li>• <a href="#">FC2143</a></li><li>• <a href="#">FC2243</a></li></ul> <p><b>HBA Family 8</b> <b>SCSIport Driver:</b> 5-5.30a2 <b>FW:</b> 2.50a8 <b>BIOS:</b> 3.00a4</p> <p><b>StorPort Driver:</b> 5-1.20a7 <b>FW:</b> 2.50a8 <b>BIOS:</b> 3.00a4</p> <ul style="list-style-type: none"><li>• <a href="#">LPe1105</a></li></ul> <p><b>HBA Family 9</b> <b>SCSIport Driver:</b> 9.1.3.11 <b>FW:</b> Loaded from driver <b>BIOS:</b> 1.16</p> <p><b>StorPort Driver:</b> 9.1.3.16 <b>FW:</b> Loaded from driver <b>BIOS:</b> 1.16</p> <ul style="list-style-type: none"><li>• <a href="#">FC1143</a></li><li>• <a href="#">FC1243</a></li></ul> <p><b>HBA Family 10</b> <b>SCSIport Driver:</b> 9.1.3.11 <b>FW:</b> Loaded from driver <b>BIOS:</b> 1.16</p> <p><b>StorPort Driver:</b> 9.1.3.16 <b>FW:</b> Loaded from driver <b>BIOS:</b> 1.16</p> <ul style="list-style-type: none"><li>• <a href="#">FC1142</a></li><li>• <a href="#">FC1242</a></li></ul> <p><b>HBA Family 11</b> <b>SCSIport Driver:</b> 9.1.3.11 <b>FW:</b> Loaded from driver <b>BIOS:</b> 1.26</p> <p><b>StorPort Driver:</b> 9.1.3.16 <b>FW:</b> Loaded from driver <b>BIOS:</b> 1.26</p> <ul style="list-style-type: none"><li>• <a href="#">QMH2462</a></li></ul> <p><b>*Note 1:</b> HBAs must be used homogeneously within a cluster; but can be mixed if they are from the same HBA family as identified above.</p> <p><b>*Note 2:</b> Refer to Server QuickSpecs for confirmation on supported HBAs</p> <p><b>*Note 3:</b> StorPort Driver only supported on Windows Server 2003 Operating Systems.</p> <p><b>*Note 4:</b> For additional information on StorPort drivers, search the Microsoft's website for the latest StorPort QFE.</p>			
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Config	Supported Servers*	Host Bus Adapters (HBAs)*	Multi Path Software	Storage Information	Interconnects (Switches)*	Other
<p>#1</p> <p>Windows Server 2003, EE R2</p> <p>&amp;</p> <p>Windows 2000 Advanced Server, SP4</p>	<p>Max supported nodes = 8</p> <p>ProLiant</p> <ul style="list-style-type: none"> <li>• BL20p G2^</li> <li>• BL20p G3^^^</li> <li>• BL40p</li> <li>• BL30p^^</li> <li>• BL35p^^</li> <li>• BL25p^^^</li> <li>• BL45p^^^</li> <li>• DL360 G4, DL360 G5</li> <li>• DL360 G4p</li> <li>• DL365</li> <li>• DL380 G4, DL380 G5</li> <li>• DL580 G3, DL580 G4</li> <li>• DL585, DL585 G2</li> <li>• DL385, DL385 G2</li> <li>• ML370 G4, ML370 G5</li> <li>• ML530, ML530 G2</li> <li>• ML570 G3, ML570 G4</li> <li>• BL460c</li> <li>• BL480c</li> <li>• BL465c</li> <li>• BL685c</li> </ul> <p>*Note: Servers can be used homogeneously or heterogeneously within a cluster. Maximum supported nodes for BL30p in a SCSIport config = 2</p> <p>^Note: Supports the FC Mezzanine card only.</p> <p>^^Note: Supports the FC Balcony card only.</p> <p>^^^Note: Supports the FC Adapter Card BL20p G3</p> <p>^^^^Note: Supports the HPBALCF 105</p> <p><b>Server Software:</b>  <b>SmartStart</b>  <b>Ver: 7.60</b>          (Install non-RBSU servers using SmartStart 5.5 and then apply PSP 7.4)</p>	<p><b>HBA Family 1</b>  <b>SCSIPort Driver:</b> 5-5.30a2  <b>FW:</b> 1.91a5  <b>BIOS:</b> 1.71a0</p> <p><b>StorPort Driver:</b> 5-1.20a7  <b>FW:</b> 1.91a5  <b>BIOS:</b> 1.71a0</p> <ul style="list-style-type: none"> <li>• <a href="#">FCA2404</a></li> <li>• <a href="#">FCA2404DC</a></li> <li>• <a href="#">A7387A</a></li> <li>• <a href="#">A7388A</a></li> </ul> <p><b>HBA Family 2</b>  <b>SCSIPort Driver:</b> 9.1.3.11  <b>FW:</b> 1.91a5  <b>BIOS for 25p/45p:</b> 1.48  <b>BIOS for 20p/30p/35p:</b> 1.45</p> <p><b>StorPort Driver:</b> 9.1.3.16  <b>FW:</b> 1.91a5  <b>BIOS for 25p/45p:</b> 1.48  <b>BIOS for 20p/30p/35p:</b> 1.45</p> <ul style="list-style-type: none"> <li>• <a href="#">E-FC Balcony Card</a> ^^</li> <li>• <a href="#">E-FC Adapter Card</a> ^^^</li> </ul> <p>^^For the BL25p, BL30p, BL35p, &amp; BL45p use E-FC Balcony Card.</p> <p>^^^For the BL20p G3 use E-FC Adapter Card.</p> <p><b>HBA Family 3</b>  <b>SCSIPort Driver:</b> 5-5.20a10  <b>FW:</b> 3.93a0  <b>BIOS:</b> 1.70a3</p> <p><b>StorPort Driver:</b> 5-1.11x1  <b>FW:</b> 3.93a0  <b>BIOS:</b> 1.70a3</p> <ul style="list-style-type: none"> <li>• <a href="#">FCA2101</a></li> <li>• <a href="#">FCA2355</a></li> </ul> <p><b>HBA Family 4</b>  <b>SCSIport Driver:</b> 9.1.3.11  <b>FW:</b> NA  <b>BIOS:</b> 1.45</p> <p><b>StorPort Driver:</b> 9.1.3.16  <b>FW:</b> NA  <b>BIOS:</b> 1.45</p> <ul style="list-style-type: none"> <li>• <a href="#">FCA2214</a></li> <li>• <a href="#">FCA2214DC</a></li> <li>• <a href="#">FC Balcony card</a></li> <li>• <a href="#">FC Mezz card</a> ^</li> </ul> <p>^For the BL20p G3 use:  <b>BIOS:</b> 1.45 bl20p G3</p> <p><b>HBA Family 5</b>  <b>SCSIport Driver:</b> 9.1.3.11  <b>FW:</b> NA  <b>BIOS:</b> 1.48</p> <p><b>StorPort Driver:</b> 9.1.3.16  <b>FW:</b> NA  <b>BIOS:</b> 1.48</p> <p><a href="#">HPBALCF105</a> for BL25p and BL45p</p> <p><b>HBA Family 6</b>  <b>SCSIport Driver:</b> 5-5.30a2  <b>FW:</b> 2.50a6  <b>BIOS:</b> 1.71a0</p> <p><b>StorPort Driver:</b> 5-1.20a7  <b>FW:</b> 2.50a6  <b>BIOS:</b> 1.71a0</p>	<p>HP Full  <a href="#">Featured MPIO</a>  V1.00.01</p>	<p><a href="#">StorageWorks MSA1500</a>  <b>Storage Controller FW:</b> v6.86</p>	<p><b>B-Series</b>          StorageWorks SAN Switches (8/16 ports 2GB)  <b>FW:</b> 3.2.1b</p> <ul style="list-style-type: none"> <li>• <a href="#">MSA SAN Switch 2/8^</a></li> <li>• <a href="#">SAN Switch 2/16</a></li> </ul> <p><b>FW:</b> 5.2.0</p> <ul style="list-style-type: none"> <li>• <a href="#">SAN Switch 2/32</a></li> <li>• <a href="#">SAN Switch 2/8V</a></li> <li>• <a href="#">SAN Switch 2/16V FF</a></li> <li>• <a href="#">SAN Director 2/128</a></li> </ul> <p>StorageWorks SAN Switches (&gt;32 ports )  <b>FW:</b> 5.2.0</p> <ul style="list-style-type: none"> <li>• <a href="#">Core Switch 2/64</a></li> </ul> <p>StorageWorks SAN Switches (4GB )  <b>FW:</b> 5.2.0</p> <ul style="list-style-type: none"> <li>• <a href="#">4/8 SAN Switch</a></li> <li>• <a href="#">4/16 SAN Switch</a></li> <li>• <a href="#">4/32 SAN Switch</a></li> <li>• <a href="#">4/256 SAN Director</a></li> </ul> <p><b>M-Series</b>          StorageWorks Director and Edge Switches  <b>FW:</b> 09.00.00</p> <ul style="list-style-type: none"> <li>• <a href="#">Director 2/64</a></li> <li>• <a href="#">Director 2/140</a></li> <li>• <a href="#">Edge Switch 2/12</a></li> <li>• <a href="#">Edge Switch 2/24</a></li> <li>• <a href="#">Edge Switch 2/32</a></li> </ul> <p><b>C-Series</b>          Cisco Switches  <b>FW:</b> 3.0(3)</p> <ul style="list-style-type: none"> <li>• <a href="#">MDS 9120</a></li> <li>• <a href="#">MDS 9140</a></li> <li>• <a href="#">MDS 9216</a></li> <li>• <a href="#">MDS 9506</a></li> <li>• <a href="#">MDS 9509</a></li> </ul> <p>^^Note: Not supported with BL server line.</p> <p>*Note: BL30p server supported with B-series switches only.</p>	<p><a href="#">Product Page</a></p> <p><a href="#">Supporting Documentation</a></p> <p><a href="#">MCS Support Matrix - archive</a></p> <p>January 2007</p>

		<ul style="list-style-type: none"> <li>• <a href="#">FC2142</a></li> <li>• <a href="#">FC2242</a></li> </ul> <p><b>HBA Family 7</b>  <b>SCSIport Driver:</b> 5-5.30a2  <b>FW:</b> 2.10a10  <b>BIOS:</b> 1.71a0</p> <p><b>StorPort Driver:</b> 5-1.20a7  <b>FW:</b> 2.10a10  <b>BIOS:</b> 1.71a0</p> <ul style="list-style-type: none"> <li>• <a href="#">FC2143</a></li> <li>• <a href="#">FC2243</a></li> </ul> <p><b>HBA Family 8</b>  <b>SCSIport Driver:</b> 5-5.30a2  <b>FW:</b> 2.50a8  <b>BIOS:</b> 1.70a3</p> <p><b>StorPort Driver:</b> 5-1.11x1  <b>FW:</b> 2.50a8  <b>BIOS:</b> 1.70a3</p> <ul style="list-style-type: none"> <li>• <a href="#">LPe1105</a></li> </ul> <p><b>HBA Family 9</b>  <b>SCSIport Driver:</b> 9.1.3.11  <b>FW:</b> Loaded from driver  <b>BIOS:</b> 1.16</p> <p><b>StorPort Driver:</b> 9.1.3.16  <b>FW:</b> 2.50a2  <b>BIOS:</b> 1.16</p> <ul style="list-style-type: none"> <li>• <a href="#">FC1143</a></li> <li>• <a href="#">FC1243</a></li> </ul> <p><b>HBA Family 10</b>  <b>SCSIport Driver:</b> 9.1.3.11  <b>FW:</b> Loaded from driver  <b>BIOS:</b> 1.16</p> <p><b>StorPort Driver:</b> 9.1.3.16  <b>FW:</b> Loaded from driver  <b>BIOS:</b> 1.16</p> <ul style="list-style-type: none"> <li>• <a href="#">FC1142</a></li> <li>• <a href="#">FC1242</a></li> </ul> <p><b>HBA Family 10</b>  <b>SCSIport Driver:</b> 9.10.13  <b>FW:</b> Loaded from driver  <b>BIOS:</b> 1.16</p> <p><b>StorPort Driver:</b> 9.1.0.18  <b>FW:</b> Loaded from driver  <b>BIOS:</b> 1.16</p> <ul style="list-style-type: none"> <li>• <a href="#">QMH2462</a></li> </ul> <p><b>*Note 1:</b> HBAs must be used homogeneously within a cluster; but can be mixed if they are from the same HBA family as identified above.</p> <p><b>*Note 2:</b> Refer to Server QuickSpecs for confirmation on supported HBAs</p> <p><b>*Note 3:</b> StorPort Driver only supported on Windows Server 2003 Operating Systems.</p> <p><b>*Note 4:</b> For additional information on StorPort drivers, search the Microsoft's website for the latest StorPort QFE.</p>				
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