

Summer 2006 v1.0

**HP StorageWorks
1500 cs Modular Smart Array
Compatibility Guide
for Dual Active Controllers Only**

Firmware: active/active version 6.86 or higher
MSA support CD 7.57 or later

MSA1500 Compatibility Guide for Dual Active Controllers Only				Firmware: active/active version 6.86			
	W2003 64-bit	W2003 32-bit	Windows 2000 32-bit ONLY	HP-UX	RED HAT LINUX (32-bit)	RED HAT LINUX (64-bit)	SuSE 8 & SuSE 9 (32- or 64-bit)
Operating System Details	Windows Server 2003 64-bit Enterprise Edition & Datacenter	Windows Server 2003 Enterprise Edition	W2000 SP3, SP4	HP-UX 11.11 and 11.23	RH EL 3 U3 (AS,ES,WS) 2.4.21-40EL 2.4.21-40ELSMP	RH EL 3 U3 (AS,ES,WS) 2.4.21-40EL, 2.4.21- 40ELSMP	SIES 8 32-bit 2.4.21-304smp SIES 9 32-bit 2.6.5-7.244 smp
OS HETEROGENEITY concurrent access by servers w/ other OSes	W2003, W2K only			HP-UX only	Red Hat & SuSE only		
ARRAY HETEROGENEITY support for a server also having access to non- MSA arrays	no	no	no	no	no	no	no
MAX NUMBER OF ATTACHED NODES ¹	8	20	20	4	20	20	20
MULTI PATH SUPPORT	HP MPIO Full Featured DSM ver 1.00.00 b7205			PV Links	Qlogic	Qlogic	Qlogic
# OF NODES IN A CLUSTER <i>SINGLE PATH</i>	8	8	8	4	6	6	6
# OF NODES IN A CLUSTER <i>w/ path failover</i>	4	4	4	4	6	6	6
# OF CLUSTERS refer to failover limitations if applicable NOT TO EXCEED 20-NODE	one 8-node or four 2-node	four clusters (assorted size) or five 2-node ³	five 2-node (see note) ³	2 X 2-node clusters	up to three 6-node clusters	up to three 6-node clusters	up to three 6-node clusters
MIXING SINGLE PATH AND DUAL PATH SERVERS ²	YES w/ restrictions. See footnote			Yes (see note 2)	yes	yes	yes
<p>(1) Performance can be substantially impacted by number of users and type of application</p> <p>(2) If a single path server is attached to an MSA that also has dual-path servers with any path failover, the single path servers will lose access to the MSA should its' controller become inactive. If a Linux server employs path failover, all servers attached also must employ the path failover</p> <p>(3) Up to 20 nodes in a SAN – Windows includes but not limited to the following configurations: an 8-node, a 4-node, and two 2-nodes OR five 2-node clusters attached to one MSA1500. Five 2-node clusters can be attached only if nothing else is attached to the MSA1500, otherwise four 2-node clusters are supported, up to ten (10) total MSA1500s per SAN. Clustered nodes can attach to up to two (2) MSA1500s.</p>							
SUPPORTED SERVERS							
IMPORTANT: user must refer to http://welcome.hp.com/country/us/eng/prodserv/servers.html to confirm latest support of server models and operating systems							
PARISC, INTEL, Opteron-Based SERVERS	<p><u>Additional models added as testing is completed.</u></p> <p>All ProLiant x86 and x86_64 servers fully supported (Note: ProLiant BL series servers w/ B-Series Switches only)</p> <p>ProLiant AMD64 Servers fully supported except ProLiant DL145-G1 not supported in BootFrom-SAN environment</p> <p>Integrity IA64 (Itanium) servers: rx1600 rx1620 rx2600 rx2620 rx4610 rx4640 rx5670 rx7620 rx8620 rx8800 rx9610 zx2000 zx6000 Integrity Superdome. Note BL60P: FC Mezzanine Card, FC passthru or internal McData/Brocade FC 4Gb Switch Cube</p> <p>HP-UX specific: rp24xx, rp34x0, rp4440, rp54xx, rp740x, rp7410, rp7420, rp8400, rp8420, SD16000, SD32-128A, SD32/64000, C3xxx, B2000, J5xxx, J6000, J7xxx, Kclass</p> <p>Note: A variety of Industry-standard servers (including IBM, Dell, Fujitsu, and others) are supported in standalone and designated cluster configurations. Must use HP branded server interface (Host Bus Adapter). Refer to MSA1500 Support CD for drivers and documentation.</p>						
IMPORTANT: refer to the Clustering and High Availability web-site for the latest guidelines							

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HOST BUS ADAPTERS							
refer to http://www.hp.com/go/SAN for complete Host Bus Adapter information							
FCA2101 245299-B21 32-bit (discontinued)		✓	✓				
FCA2214 281541-B21 32-bit		✓	✓		✓	✓	✓
FCA2214DC 321835-B21 32-bit		✓	✓		✓	✓	✓
AB466A Integrity servers dual chnl PCI-X	✓						
AB467A Integrity servers sngl chnl PCI-X	✓						
A6795A HP-UX HBA PCI 2GB				✓			
A9784A HP-UX PCI-X 2Gb FC/1000Base-T				✓			
A9782A HP-UX PCI-X 2Gb FC/1000Base-SX				✓			
A7387A dual chnl 64-bit		✓	✓				
A7388A sngl chnl 64-bit		✓	✓				
A6826A Integrity, Superdome dual chnl PCI-X				✓		✓	✓
A7560A 1050EX sngl chnl PCIe		✓	✓				
G2300 PCI-X A7538A Integrity Servers						✓	✓
A8002A FC2142SR 4Gb PCIe	✓	✓	✓		✓	✓	✓
A8003A FC2242SR DC 4Gb PCIe	✓	✓	✓		✓	✓	✓
AE311A FC1142 4Gb PCIe	✓	✓	✓		✓	✓	✓
AE312A FC1242 DC 4Gb PCIe	✓	✓	✓		✓	✓	✓
AD167A FC2143 4Gb PCI-X 2.0	✓	✓	✓		✓	✓	✓
AD168A FC2243 DC 4Gb PCI-X 2.0	✓	✓	✓		✓	✓	✓
FC Mezzanine Card for BL20P		✓	✓		✓		✓
FC Mezzanine Card for BL30P		✓	✓		✓		✓
Boot from SAN support	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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INTERCONNECTS							
refer to: http://www.hp.com/go/SAN for complete Fibre Channel switch information							
DIRECT CONNECT	✓	✓	✓	✓	✓	✓	✓
B SERIES SWITCHES	✓	✓	✓	✓	✓	✓	✓
C SERIES SWITCHES	✓	✓	✓	✓	✓	✓	✓
M SERIES SWITCHES	✓	✓	✓	not available at launch	✓	✓	✓
RELATED SOFTWARE							
Secure Path Workgroup Edition version				not available at launch			
HP MPIO Failover	HP Array Multi-Path Options Web Site						
Qlogic Failover					HP Array Multi-Path Options Web Site		
Service Guard clustering				✓	v11.16	v11.16	v11.15.01 v11.16
LifeKeeper clustering					5.1.2	5.1.2	5.1.2
HP OpenView Storage Virtual Replicator®		HP OpenView Storage Virtual Replicator Web Site					
HP OpenView Storage Mirroring®	HP OpenView Storage Mirroring Web Site						
SUPPORTED SERVERS							
IMPORTANT: user must refer to http://welcome.hp.com/country/us/eng/prodsrv/servers.html to confirm latest support of server models and operating systems							