



HP Cluster Configuration Support Matrix

For Microsoft Windows Server 2003, X64 Editions & HP StorageWorks EVA 8000, EVA 6000, EVA 4000

| Config | Supported Servers* | Host Bus Adapters (HBAs)* | Multi Path Software | Storage Information | Interconnects (Switches)* | Other |
|-----------------------------------|---|---|--|--|--|---|
| Windows Server 2003, x64 Editions | <p>Max supported nodes = 8</p> <p>ProLiant</p> <ul style="list-style-type: none"> • BL20p G3^{^^} • BL35p^{^^} • BL25p^{^^^} • BL45p^{^^^} • DL360 G4, DL360 G5 • DL360 G4p • DL365 • DL380 G4, DL380 G5 • DL580 G3, DL580 G4 • DL585, DL585 G2 • DL385, DL385 G2 • ML370 G4, ML370 G5 • ML570 G3, ML570 G4 • BL460c • BL480c • BL465c • BL685c <p>*Note: Servers can be used homogeneously or heterogeneously within a cluster.</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>Server Software: SmartStart Ver: 7.60 (Install non-RBSU servers using SmartStart 5.5 and then apply PSP 7.4)</p> | <p>HBA Family 1 StorPort Driver: 7-1.20a7 FW: 1.91a5 BIOS: 1.71a0</p> <ul style="list-style-type: none"> • FCA2404 • FCA2404DC • A7387A • A7388A <p>HBA Family 2 StorPort Driver: 7-1.20a7 FW: 1.91a5 BIOS: 1.71a0</p> <ul style="list-style-type: none"> • E-FC Balcony Card ^^ • E-FC Adapter Card ^^ <p>^^For the BL25p, BL35p, & BL45p use E-FC Balcony Card. ^^^For the BL20p G3 use E-FC Adapter Card</p> <p>HBA Family 3 StorPort Driver: 9.1.3.16 FW: NA BIOS: 1.48</p> <ul style="list-style-type: none"> • FCA2214 • FCA2214DC • FC Balcony card • FC Mezz card ^ <p>^For the BL20p G3 use: BIOS: 1.45 bl20p G3</p> <p>HBA Family 4 StorPort Driver: 9.1.3.16 FW: N/A BIOS: 1.48</p> <ul style="list-style-type: none"> • HPBALCF105 for BL25p, BL45p <p>HBA Family 5 StorPort Driver: 7-1.20a7 FW: 2.50a6 BIOS: 1.71a0</p> <ul style="list-style-type: none"> • FC2142 • FC2242 <p>HBA Family 6 StorPort Driver: 7-1.20a7 FW: 2.10a10 BIOS: 1.71a0</p> <ul style="list-style-type: none"> • FC2143 • FC2243 <p>HBA Family 7 StorPort Driver: 7-1.11x1 FW: 2.50a8 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • LPe1105 <p>HBA Family 8 StorPort Driver: 9.1.3.16 FW: Loaded from driver BIOS: 1.16</p> <ul style="list-style-type: none"> • FC1143 • FC1243 <p>HBA Family 9 StorPort Driver: 9.1.0.18 FW: Loaded from driver BIOS: 1.16</p> <ul style="list-style-type: none"> • QMH2426 <p>HBA Family 10</p> | <p>Windows MPIO DSM for EVA Ver: 2.00.02</p> | <p>StorageWorks 8000 Enterprise Virtual Array Array Controller Firmware 6.000</p> <p>StorageWorks 6000 Enterprise Virtual Array Array Controller Firmware 6.000</p> <p>StorageWorks 4000 Enterprise Virtual Array Array Controller Firmware 6.000</p> <p>CLX EVA for Windows 1.01.01</p> <p>Continuous Access EVA Software Version 2.1</p> <p>Command View Supported: V6.0</p> <p>Recommended: V6.1</p> | <p>B-Series StorageWorks SAN Switches (8/16 ports 2GB) FW: 3.2.1b</p> <ul style="list-style-type: none"> • SAN Switch 2/16 <p>FW: 5.2.0</p> <ul style="list-style-type: none"> • SAN Switch 2/32 • SAN Switch 2/8V • SAN Switch 2/16V • SAN Switch 2/16N FF • SAN Director 2/128 <p>StorageWorks SAN Switches (>32 ports) FW: 5.2.0</p> <ul style="list-style-type: none"> • Core Switch 2/64 <p>StorageWorks SAN Switches (4GB) FW: 5.2.0</p> <ul style="list-style-type: none"> • 4/8 SAN Switch • 4/16 SAN Switch • 4/32 SAN Switch • 4/256 SAN Director <p>M-Series StorageWorks Director and Edge Switches FW: 09.00.00</p> <ul style="list-style-type: none"> • Director 2/64 • Director 2/140 • Edge Switch 2/12 • Edge Switch 2/24 • Edge Switch 2/32 <p>C-Series Cisco Switches FW: 3.0(3)</p> <ul style="list-style-type: none"> • MDS 9120 • MDS 9140 • MDS 9216 • MDS 9506 • MDS 9509 | <p>Product Page</p> <p>Supporting Documentation</p> <p>MSCS Support Matrix - archive</p> <p style="text-align: right;">January 2006</p> |

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| | | <p>StorPort Driver: 9.1.3.16 FW: Loaded from driver BIOS: 1.16</p> <ul style="list-style-type: none">• FC1142• FC1242 <p>*Note 1: 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>*Note 2: Refer to Server QuickSpecs for confirmation on supported HBAs.</p> <p>*Note 3: Check Microsoft site for hotfixes.</p> | | | | |
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| Config | Supported Servers* | Host Bus Adapters (HBAs)* | Multi Path Software | Storage Information | Interconnects (Switches)* | Other |
|---|---|--|---|---|---|---|
| #1 Windows Server 2003, x64 Editions | <p>Max supported nodes = 8</p> <p>ProLiant</p> <ul style="list-style-type: none"> • BL20p G3^{^^} • BL25p^{^^^} • BL35p^{^^} • BL45p^{^^^} • DL360 G4, DL360 G5 • DL360 G4p • DL380 G4, DL380 G5 • DL580 G3, DL580 G4 • DL585 • DL385 • ML370 G4, ML370 G5 • ML570 G3, ML570 G4 • BL460c • BL480c <p>*Note: Servers can be used homogeneously or heterogeneously within a cluster.</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>Server Software: SmartStart Ver: 7.51 (Install non-RBSU servers using SmartStart 5.5 and then apply PSP 7.4)</p> | <p>HBA Family 1 StorPort Driver: 7-1.11x1 FW: 1.91a1 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • FCA2404 • FCA2404DC • A7387A • A7388A <p>HBA Family 2 StorPort Driver: 7-1.11x1 FW: 1.90a4 BIOS: 1.70a1</p> <ul style="list-style-type: none"> • A7560A(1050EX) <p>HBA Family 3 StorPort Driver: 7-1.11x1 FW: 1.91a2 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • E-FC Balcony Card ^^ • E-FC Adapter Card ^^ <p>^^For the BL25p, BL30p, BL35p, & BL45p use E-FC Balcony Card.</p> <p>^^^For the BL20p G3 use E-FC Adapter Card</p> <p>HBA Family 4 StorPort Driver: 7-1.11x1 FW: 3.93a0 BIOS: 1.70a3</p> <p>FCA2101 FCA2355</p> <p>HBA Family 5 StorPort Driver: 9.1.0.18 FW: NA BIOS: 1.45</p> <ul style="list-style-type: none"> • FCA2214 • FCA2214DC • FC Balcony card • FC Mezz card ^ <p>^For the BL20p G3 use: BIOS: 1.45 bl20p G3</p> <p>HBA Family 6 StorPort Driver: 9.1.0.18 FW: N/A BIOS: 1.48</p> <p>HPBALCF105 for BL25p, BL45p</p> <p>HBA Family 7 StorPort Driver: 7-1.11x1 FW: 2.50a2 BIOS: 1.70a3</p> <p>FC2142 FC2242</p> <p>HBA Family 8 StorPort Driver: 7-1.11x1 FW: 2.50a2 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • FC2143 • FC2243 <p>HBA Family 9 StorPort Driver: 7-1.11x1 FW: 2.50a8</p> <p>LPe1105 QMH2462</p> <p>*Note 1: 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>Windows MPIO DSM for EVA Ver: 2.00.00</p> <p>Windows MPIO DSM for EVA Ver: 1.00.02</p> | <p>StorageWorks 8000 Enterprise Virtual Array Array Controller Firmware 6.000</p> <p>StorageWorks 6000 Enterprise Virtual Array Array Controller Firmware 6.000</p> <p>StorageWorks 4000 Enterprise Virtual Array Array Controller Firmware 6.000</p> <p>HP OpenView Storage Operations Manager Version 1.2</p> <p>CLX EVA for Windows 1.01.01</p> <p>Continuous Access EVA Software Version 2.1</p> <p>Command View V5.0</p> | <p>B-Series StorageWorks SAN Switches (8/16 ports 2GB) FW: 3.2.1</p> <ul style="list-style-type: none"> • MSA SAN Switch 2/8^ • SAN Switch 2/16 <p>FW: 5.1.0</p> <ul style="list-style-type: none"> • SAN Switch 2/32 • SAN Switch 2/8V • SAN Switch 2/16V • SAN Switch 2/16N FF • SAN Director 2/128 <p>StorageWorks SAN Switches (>32 ports) FW: 5.03b</p> <ul style="list-style-type: none"> • Core Switch 2/64 <p>StorageWorks SAN Switches (4GB) FW: 5.1.0</p> <ul style="list-style-type: none"> • 4/8 SAN Switch • 4/16 SAN Switch • 4/32 SAN Switch • 4/256 SAN Director <p>M-Series StorageWorks Director and Edge Switches FW: 08.01.01</p> <ul style="list-style-type: none"> • Director 2/64 • Director 2/140 • Edge Switch 2/12 • Edge Switch 2/24 • Edge Switch 2/32 <p>C-Series Cisco Switches FW: 3.0(1)</p> <ul style="list-style-type: none"> • MDS 9120 • MDS 9140 • MDS 9216 • MDS 9506 • MDS 9509 <p>Other Switches and Hubs</p> <p>MSA Hub 2/3^^</p> <p>*Note: Fibre Channel switch included in the ProLiant DL380 G3 & G4 Packaged Cluster for MSA1000 product.</p> <p>^^Note: Not supported with BL server line.</p> <p>*Note: BL30p server supported with B-series switches only.</p> | <p>Product Page</p> <p>Supporting Documentation</p> <p>MSCS Support Matrix - archive</p> <p>June 2006</p> |

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| | | <p>*Note 2: Refer to Server QuickSpecs for confirmation on supported HBAs.</p> | | | | |
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| Config | Supported Servers* | Host Bus Adapters (HBAs)* | Multi Path Software | Storage Information | Interconnects (Switches)* | Other |
|---|--|---|---|--|---|---|
| #1 Windows Server 2003, x64 Editions | <p>Max Supported nodes = 8</p> <p>ProLiant</p> <ul style="list-style-type: none"> • BL20p G3^^ • BL25p^^^ • BL35p^^ • BL45p^^^ • DL360 G4 • DL360 G4p • DL380 G4 • DL580 G3 • DL585 • DL385 • ML370 G4 • ML570 G3 <p>*Note: Servers can be used homogeneously or heterogeneously within a cluster.</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>Server Software: SmartStart Ver: 7.4 (Install non-RBSU servers using SmartStart 5.5 and then apply PSP 7.4)</p> | <p>HBA Family 1 StorPort Driver: 7-1.11x1 FW: 1.91a1 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • FCA2408 • A7387A • A7388A <p>HBA Family 2 StorPort Driver: 7-1.11x1 FW: 1.91a2 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • E-FC Balcony Card ^^ • E-FC Adapter Card ^^ <p>^^For the BL25p, BL30p, BL35p, & BL45p use E-FC Balcony Card.</p> <p>^^^For the BL20p G3 use E-FC Adapter Card.</p> <p>HBA Family 3 StorPort Driver: 9.1.0.18 FW: NA BIOS: 1.45</p> <ul style="list-style-type: none"> • FCA2214 • FCA2214DC <p>HBA Family 4 StorPort Driver: 9.0.2.16 FW: NA BIOS: 1.45</p> <ul style="list-style-type: none"> • FC Balcony card • FC Mezz card ^ <p>HBA Family 5 StorPort Driver: 9.0.2.16 FW: NA BIOS: 1.48</p> <p>HPBALCF105 for BL25p, BL45p</p> <p>HBA Family 6 StorPort Driver: 7-1.11x1 FW: 2.50a2 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • FC2142SR • FC2242SR DC <p>HBA Family 6 SCSIport Driver: 9.1.0.18 FW: NA BIOS: 1.06</p> <ul style="list-style-type: none"> • FC1142SR • FC1242SR DC <p>HBA Family 7 StorPort Driver: 7-1.11x1 FW: 2.10a7 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • FC2143 • FC2243 DC <p>*Note 1: 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>*Note 2: Refer to Server QuickSpecs for confirmation on supported HBAs.</p> | <p>Windows MPIO DSM for EVA Ver: 2.00.00</p> <p>Windows MPIO DSM for EVA Ver: 1.00.02</p> | <p>StorageWorks 8000 Enterprise Virtual Array Array Controller Firmware 5.100</p> <p>StorageWorks 6000 Enterprise Virtual Array Array Controller Firmware 5.100</p> <p>StorageWorks 4000 Enterprise Virtual Array Array Controller Firmware 5.100</p> <p>HP OpenView Storage Operations Manager Version 1.2</p> <p>Continuous Access EVA Software Version 2.1</p> <p>Command View V5.0</p> | <p>B-Series StorageWorks SAN Switches (8/16 ports 2GB) FW: 3.2.1</p> <ul style="list-style-type: none"> • SAN Switch 2/16 <p>FW: 5.0.3</p> <ul style="list-style-type: none"> • SAN Switch 2/8V • SAN Switch 2/16V • SAN Switch 2/16N FF <p>StorageWorks SAN Switches (>32 ports) FW: 5.0.3</p> <ul style="list-style-type: none"> • SAN Switch 2/32 • Core Switch 2/64 • SAN Director 2/128 <p>StorageWorks SAN Switches (4GB) FW: 5.0.1d</p> <p>4/8 SAN Switch 4/16 SAN Switch 4/32 SAN Switch 4/256 SAN Director</p> <p>M-Series StorageWorks Director and Edge Switches FW: 08.01.01</p> <ul style="list-style-type: none"> • Director 2/64 • Director 2/140 • Edge Switch 2/12 • Edge Switch 2/24 • Edge Switch 2/32 <p>C-Series Cisco Switches FW: 2.1(2b)</p> <ul style="list-style-type: none"> • MDS 9120 • MDS 9140 • MDS 9216 • MDS 9506 • MDS 9509 | <p>Product Page</p> <p>Supporting Documentation</p> <p>MCS Support Matrix - archive</p> <p>March 2006</p> |

| Config | Supported Servers* | Host Bus Adapters (HBAs)* | Multi Path Software | Storage Information | Interconnects (Switches)* | Other |
|---|---|---|---|--|--|---|
| #2 Windows Server 2003, x64 Editions | <p>Max Supported nodes = 8</p> <p>ProLiant</p> <ul style="list-style-type: none"> • BL20p G3^{^^} • BL25p^{^^^} • BL35p^{^^} • BL45p^{^^^} • DL360 G4 • DL360 G4p • DL380 G4 • DL580 G3 • DL585 • DL385 • ML370 G4 • ML570 G3 <p>*Note: Servers can be used homogeneously or heterogeneously within a cluster.</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>Server Software: SmartStart Ver: 7.4 (Install non-RBSU servers using SmartStart 5.5 and then apply PSP 7.4)</p> | <p>HBA Family 1 StorPort Driver: 7-1.11a0 FW: 1.91a1 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • FCA2408 • A7387A • A7388A <p>HBA Family 2 StorPort Driver: 7-1.11a0 FW: 1.91a2 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • E-FC Balcony Card ^^ • E-FC Adapter Card ^^ <p>^^For the BL25p, BL30p, BL35p, & BL45p use E-FC Balcony Card.</p> <p>^^^For the BL20p G3 use E-FC Adapter Card.</p> <p>HBA Family 3 StorPort Driver: 9.0.2.16 FW: NA BIOS: 1.45</p> <ul style="list-style-type: none"> • FCA2214 • FCA2214DC • FC Balcony card • FC Mezz card ^ <p>HBA Family 4 StorPort Driver: 9.0.2.16 FW: NA BIOS: 1.48</p> <p>HPBALCF105 for BL25p, BL45p</p> <p>HBA Family 5 StorPort Driver: 7-1.11a0 FW: 2.50a2 BIOS: 1.70a3</p> <ul style="list-style-type: none"> • FC2142 • FC2242 <p>*Note 1: 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>*Note 2: Refer to Server QuickSpecs for confirmation on supported HBAs.</p> | <p>Windows MPIO DSM for EVA Ver: 1.00.02</p> | <p>StorageWorks 8000 Enterprise Virtual Array Array Controller Firmware 5.030</p> <p>StorageWorks 6000 Enterprise Virtual Array Array Controller Firmware 5.030</p> <p>StorageWorks 4000 Enterprise Virtual Array Array Controller Firmware 5.030</p> <p>HP OpenView Storage Operations Manager Version 1.2</p> <p>Continuous Access EVA Software Version 2.1</p> <p>Command View V4.1</p> | <p>B-Series StorageWorks SAN Switches (8/16 ports 2GB) FW: 3.2.0a</p> <ul style="list-style-type: none"> • SAN Switch 2/16 <p>FW: 5.01b</p> <ul style="list-style-type: none"> • SAN Switch 2/8V • SAN Switch 2/16V • SAN Switch 2/16N FF <p>StorageWorks SAN Switches (>32 ports) FW: 5.01b</p> <ul style="list-style-type: none"> • SAN Switch 2/32 • Core Switch 2/64 • SAN Director 2/128 <p>M-Series StorageWorks Director and Edge Switches FW: 07.01.02-4</p> <ul style="list-style-type: none"> • Director 2/64 • Director 2/140 • Edge Switch 2/12 • Edge Switch 2/24 • Edge Switch 2/32 <p>C-Series Cisco Switches FW: 2.1(2b)</p> <ul style="list-style-type: none"> • MDS 9120 • MDS 9140 • MDS 9216 • MDS 9506 • MDS 9509 | <p>Product Page</p> <p>Supporting Documentation</p> <p>MSCS Support Matrix - archive</p> <p>November 2005</p> |

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|---|---|---|--|---|---|--|
| #3 Windows Server 2003, x64 Editions | <p>Max Supported nodes = 8</p> <p>ProLiant</p> <ul style="list-style-type: none"> • BL20p G3^^^ • BL25p^^^ • BL35p^^ • DL360 G4 • DL360 G4p • DL380 G4 • DL580 G3 • DL585 • DL385 • ML370 G4 • ML570 G3 <p>*Note: Servers can be used homogeneously or heterogeneously within a cluster.</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>Server Software: SmartStart Ver: 7.2 (Install non-RBSU servers using SmartStart 5.5 and then apply PSP 7.2)</p> | <p>HBA Family 1</p> <p>StorPort Driver: 7-1.03a10 FW: 1.90a4 BIOS: 1.70a1</p> <ul style="list-style-type: none"> • FCA2404 • FCA2404DC • A7560A <p>HBA Family 2</p> <p>StorPort Driver: 7-1.03a10 FW: 1.90a4 BIOS: 1.70a1</p> <ul style="list-style-type: none"> • A7387A • A7388A <p>HBA Family 3</p> <p>StorPort Driver: 9.0.2.16 FW: NA BIOS: 1.45</p> <ul style="list-style-type: none"> • FCA2214 • FCA2214DC • FC Balcony card • FC Mezz card ^ <p>^For the BL20p G3 use: BIOS: 1.45 bl20p G3</p> <p>HBA Family 4</p> <p>StorPort Driver: 9.0.2.16 FW: NA BIOS: 1.48</p> <p>HPBALCF105 for BL25p</p> <p>*Note 1: 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>*Note 2: Refer to Server QuickSpecs for confirmation on supported HBAs.</p> | Windows MPIO DSM for EVA Ver: 1.0 | <p>StorageWorks 8000 Enterprise Virtual Array Array Controller Firmware 5.020</p> <p>StorageWorks 6000 Enterprise Virtual Array Array Controller Firmware 5.020</p> <p>StorageWorks 4000 Enterprise Virtual Array Array Controller Firmware 5.020</p> <p>HP OpenView Storage Operations Manager Version 1.2</p> <p>Continuous Access EVA Software Version 2.1</p> | <p>B-Series StorageWorks SAN Switches (8/16 ports 2GB) FW: 3.2.0</p> <ul style="list-style-type: none"> • SAN Switch 2/8V • SAN Switch 2/16 • SAN Switch 2/16V • SAN Switch 2/16N FF <p>StorageWorks SAN Switches (>32 ports) FW: 4.4.0b</p> <ul style="list-style-type: none"> • SAN Switch 2/32 • Core Switch 2/64 • SAN Director 2/128 <p>M-Series StorageWorks Director and Edge Switches FW: 07.00.00-84</p> <ul style="list-style-type: none"> • Director 2/64 • Director 2/140 • Edge Switch 2/12 • Edge Switch 2/24 • Edge Switch 2/32 <p>C-Series Cisco Switches FW: 2.0(1b)</p> <ul style="list-style-type: none"> • MDS 9120 • MDS 9140 • MDS 9216 • MDS 9506 • MDS 9509 | <p>Product Page</p> <p>Supporting Documentation</p> <p>MSCS Support Matrix - archive</p> |

July, 2005