

Dell™ High Availability Clusters Configuration Support Matrix

PowerEdge™ Cluster with PowerVault™ MD3200i/MD3220i iSCSI
Storage Array running Microsoft® Windows® Failover Cluster



Dell Cluster Configuration Support Matrix

PowerEdge Cluster with PowerVault MD3200i/MD3220i Array

Release Date: May, 2012



The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components: Up to 4 storage systems per cluster	Dell Storage System:		
	Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
	Enclosure Firmware:	07.80.41.60	1.01
	NVRAM Revision	N26X0-780890-001	
	Dell Servers:		
	Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, R910, R510, R620, R720, R720xd, and R820	
	Supported servers (Blade):	PowerEdge M610, M610x, M710, M710HD, M910, M915, and M620	
	Supported servers (Tower):	PowerEdgeT610 and T710	
	Operating System, Service Pack, and Hotfixes:		
	Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.	
	Microsoft Windows Server 2008, R2 Enterprise x64 Edition with Service Pack 1	Supported on any server listed above.	
	†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525		
	PowerVault Modular Disk Storage Manager Software:		
	Dell MDSM version	10.80.G6.47	
iSCSI components:	iSCSI initiator:		
	Microsoft iSCSI initiator software	RTM or later	
	iSNS:		
	Microsoft iSNS Server	3.0	
iSCSI interconnects:	Network Adapter (dedicated for iSCSI):		
	Any Gigabit or 10Gb on-board or add-on Ethernet Adapters (NICs) supported by the server and storage systems		
	Ethernet Switches (dedicated for iSCSI)		
	Any Gigabit or 10Gb Ethernet switch, including Ethernet switch I/O modules supported in the Dell PowerEdge blade enclosures		

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array](#)

Dell Cluster Configuration Support Matrix

PowerEdge Cluster with PowerVault MD3200i/MD3220i Array

Release Date: February, 2012



The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components: Up to 4 storage systems per cluster	Dell Storage System:		
	Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
	Enclosure Firmware:	07.80.41.60	1.01
	NVRAM Revision	N26X0-780890-001	
	Dell Servers:		
	Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, R910, R510, R620, R720, and R720xd	
	Supported servers (Blade):	PowerEdge M610, M610x, M710, M710HD, M910, M915, and M620	
	Supported servers (Tower):	PowerEdgeT610 and T710	
	Operating System, Service Pack, and Hotfixes:		
	Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.	
Server Components: up to 16 homogeneous nodes	Microsoft Windows Server 2008, R2 Enterprise x64 Edition with Service Pack 1	Supported on any server listed above.	
	†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525		
	PowerVault Modular Disk Storage Manager Software:		
	Dell MDSM version	10.80.G6.47	
	iSCSI components:		
	iSCSI initiator:		
	Microsoft iSCSI initiator software	RTM or later	
	iSNS:		
	Microsoft iSNS Server	3.0	
iSCSI interconnects:	Network Adapter (dedicated for iSCSI):		
	Any Gigabit or 10Gb on-board or add-on Ethernet Adapters (NICs) supported by the server and storage systems		
	Ethernet Switches (dedicated for iSCSI)		
	Any Gigabit or 10Gb Ethernet switch, including Ethernet switch I/O modules supported in the Dell PowerEdge blade enclosures		

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array](#)

Dell Cluster Configuration Support Matrix

PowerEdge Cluster with PowerVault MD3200i/MD3220i Array

Release Date: October, 2011



The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components: Up to 4 storage systems per cluster	Dell Storage System:		
	Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
	Enclosure Firmware:	07.80.41.60	1.01
	NVRAM Revision	N26X0-780890-001	
	Dell Servers:		
	Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, R910, and R510	
	Supported servers (Blade):	PowerEdge M610, M610x, M710, M710HD, M910, and M915	
	Supported servers (Tower):	PowerEdgeT610 and T710	
	Operating System, Service Pack, and Hotfixes:		
	Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.	
	Microsoft Windows Server 2008, R2 Enterprise x64 Edition with Service Pack 1	Supported on any server listed above.	
	†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525		
	PowerVault Modular Disk Storage Manager Software:		
	Dell MDSM version	10.80.G6.47	
iSCSI components:	iSCSI initiator:		
	Microsoft iSCSI initiator software	2.08	
	iSNS:		
	Microsoft iSNS Server	3.0	
iSCSI interconnects:	Network Adapter (dedicated for iSCSI):		NIC Driver version
	All supported non-blade servers	Inter Pro/1000 PT Single and Dual Port 1GbE NICs	12.5.2_A00 or later
		Intel 10 Gigabit AT Server Single Port NIC	12.5.2_A00 or later
		Broadcom 5708 Single Port 1GbE NIC with TOE	16.2.0_A01 or later
		Broadcom 5709 Single Port 1GbE NIC with TOE	16.2.0_A01 or later
		Broadcom 57710 Single Port 10GbE NIC with TOE	16.2.0_A01 or later
	M610, M710, M910, and M915	Broadcom 5709 1GbE NIC with TOE	16.2.0_A01 or later
	M610, M610x, M710, M710HD, M910, and M915	Broadcom 57110 10GbE Ethernet NIC with TOE	16.2.0_A01 or later
	Ethernet Switches (dedicated for iSCSI)		
	Any Gigabit Ethernet switch, including Gigabit Ethernet switch modules supported in the Dell PowerEdge blade enclosure		

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array](#)

Dell Cluster Configuration Support Matrix

PowerEdge Cluster with PowerVault MD3200i/MD3220i Array

Release Date: July, 2011



The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components:

Up to 4 storage systems per cluster

Dell Storage System:

Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
Enclosure Firmware:	07.75.14.61	1.01
NVRAM Revision	N26X0-775890-009	

Server Components:

up to 16 homogeneous nodes

Dell Servers:

Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, R910, and R510
Supported servers (Blade):	PowerEdge M610, M610x, M710, M710HD, M910, and M915
Supported servers (Tower):	PowerEdgeT610 and T710

Operating System, Service Pack, and Hotfixes:

Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.
Microsoft Windows Server 2008, R2 Enterprise x64 Edition with Service Pack 1	Supported on any server listed above.

†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525

PowerVault Modular Disk Storage Manager Software:

Dell MDSM version	10.75.36.16
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iSCSI components:

iSCSI initiator:

Microsoft iSCSI initiator software	2.08	
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iSNS:

Microsoft iSNS Server	3.0	
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iSCSI interconnects:

Network Adapter (dedicated for iSCSI):

		NIC Driver version
All supported non-blade servers	Inter Pro/1000 PT Single and Dual Port 1GbE NICs	12.5.2_A00 or later
	Intel 10 Gigabit AT Server Single Port NIC	12.5.2_A00 or later
	Broadcom 5708 Single Port 1GbE NIC with TOE	16.2.0_A01 or later
	Broadcom 5709 Single Port 1GbE NIC with TOE	16.2.0_A01 or later
	Broadcom 57710 Single Port 10GbE NIC with TOE	16.2.0_A01 or later
M610, M710, M910, and M915	Broadcom 5709 1GbE NIC with TOE	16.2.0_A01 or later
M610, M610x, M710, M710HD, M910, and M915	Broadcom 57110 10GbE Ethernet NIC with TOE	16.2.0_A01 or later

Ethernet Switches (dedicated for iSCSI)

Any Gigabit Ethernet switch, including Gigabit Ethernet switch modules supported in the Dell PowerEdge blade enclosure

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array](#)

Dell Cluster Configuration Support Matrix

PowerEdge Cluster with PowerVault MD3200i/MD3220i Array

Release Date: April, 2011



The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components:

Up to 4 storage systems per cluster

Dell Storage System:

Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
Enclosure Firmware:	07.75.14.61	A00
NVRAM Revision	N26X0-775890-009	

Server Components:

up to 16 homogeneous nodes for Windows Server 2008 x64bit SP2 and Windows Server 2008 R2 x64bit

Dell Servers:

Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, R910, and R510
Supported servers (Blade):	PowerEdge M610, M610x, M710, M710HD, and M910
Supported servers (Tower):	PowerEdge T610 and T710

Operating System, Service Pack, and Hotfixes:

Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.
Microsoft Windows Server 2008, R2 Enterprise x64 Edition with Service Pack 1	Supported on any server listed above.
†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525	

PowerVault Modular Disk Storage Manager Software:

Dell MDSM version	10.75.G6.12
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iSCSI components:

iSCSI initiator:

Microsoft iSCSI initiator software	2.08
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iSCSI interconnects:

Network Adapter (dedicated for iSCSI):

		NIC Driver version
All supported non-blade servers	Inter Pro/1000 PT Single and Dual Port 1GbE NICs	12.5.2_A00 or later
	Intel 10 Gigabit AT Server Single Port NIC	12.5.2_A00 or later
	Broadcom 5708 Single Port 1GbE NIC with TOE	16.2.0_A01 or later
	Broadcom 5709 Single Port 1GbE NIC with TOE	16.2.0_A01 or later
	Broadcom 57710 Single Port 10GbE NIC with TOE	16.2.0_A01 or later
M610, M710, and M910	Broadcom 5709 1GbE NIC with TOE	16.2.0_A01 or later
M610, M610x, M710, M710HD, and M910	Broadcom 57110 10GbE Ethernet NIC with TOE	16.2.0_A01 or later

Ethernet Switches (dedicated for iSCSI)

Any Gigabit Ethernet switch, including Gigabit Ethernet switch modules supported in the Dell PowerEdge blade enclosure

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array.](#)

Dell Cluster Configuration Support Matrix

PowerEdge Cluster with PowerVault MD3200i/MD3220i Array

Release Date: March, 2011



The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components:

Up to 4 storage systems per cluster

Dell Storage System:

Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
Enclosure Firmware:	07.75.10.60	A00
NVRAM Revision	N26X0-775890-009	

Server Components:

up to 16 homogeneous nodes for Windows Server 2008 x64bit SP2 and Windows Server 2008 R2 x64bit

Dell Servers:

Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, R910, and R510
Supported servers (Blade):	PowerEdge M610, M610x, M710, M710HD, and M910
Supported servers (Tower):	PowerEdgeT610 and T710

Operating System, Service Pack, and Hotfixes:

Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.
Microsoft Windows Server 2008, R2 Enterprise x64 Edition	Supported on any server listed above.

†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525

PowerVault Modular Disk Storage Manager Software:

Dell MDSM version	10.75.G6.12
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iSCSI components:

iSCSI initiator:

Microsoft iSCSI initiator software	2.08
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iSCSI interconnects:

Network Adapter (dedicated for iSCSI):

NIC Driver version

All supported non-blade servers	Inter Pro/1000 PT Single and Dual Port 1GbE NICs	12.0_A01 or later
	Intel 10 Gigabit AT Server Single Port NIC	12.0_A01 or later
	Broadcom 5708 Single Port 1GbE NIC with TOE	14.2.0_A03 or later
	Broadcom 5709 Single Port 1GbE NIC with TOE	14.2.0_A03 or later
	Broadcom 57710 Single Port 10GbE NIC with TOE	14.2.0_A03 or later
M610, M710, and M910	Broadcom 5709 1GbE NIC with TOE	14.2.0_A03 or later
M610, M610x, M710, M710HD, and M910	Broadcom 57110 10GbE Ethernet NIC with TOE	14.2.0_A03 or later

Ethernet Switches (dedicated for iSCSI)

Any Gigabit Ethernet switch, including Gigabit Ethernet switch modules supported in the Dell PowerEdge blade enclosure

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array](#)

Dell Cluster Configuration Support Matrix
PowerEdge Cluster with PowerVault MD3200i/MD3220i Array: High-Availability / Microsoft Cluster Services
Release Date: October, 2010

The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components:

Up to 4 storage systems per cluster

Dell Storage System:

Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
Enclosure Firmware:	07.70.06.63	A00
NVRAM Revision	N26X0-770890-005	

Server Components:

up to 16 homogeneous nodes for Windows Server 2008 x64bit SP2 and Windows Server 2008 R2 x64bit

Dell Servers:

Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, R910, and R510
Supported servers (Blade):	PowerEdge M610, M610x, M710, M710HD, and M910
Supported servers (Tower):	PowerEdgeT610 and T710

Operating System, Service Pack, and Hotfixes:

Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.
Microsoft Windows Server 2008, R2 Enterprise x64 Edition	Supported on any server listed above.
†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525	

PowerVault Modular Disk Storage Manager Software:

Dell MDSM version	10.70.36.06
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iSCSI components:

iSCSI initiator:

Microsoft iSCSI initiator software	2.08
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iSCSI interconnects:

Network Adapter (dedicated for iSCSI):		NIC Driver version
All supported non-blade servers	Inter Pro/1000 PT Single and Dual Port 1GbE NICs	12.0_A01 or later
	Intel 10 Gigabit AT Server Single Port NIC	12.0_A01 or later
	Broadcom 5708 Single Port 1GbE NIC with TOE	14.2.0_A03 or later
	Broadcom 5709 Single Port 1GbE NIC with TOE	14.2.0_A03 or later
	Broadcom 57710 Single Port 10GbE NIC with TOE	14.2.0_A03 or later
M610, M710, and M910	Broadcom 5709 1GbE NIC with TOE	14.2.0_A03 or later
M610, M610x, M710, M710HD, and M910	Broadcom 57110 10GbE Ethernet NIC with TOE	14.2.0_A03 or later
Ethernet Switches (dedicated for iSCSI)		
Any Gigabit Ethernet switch, including Gigabit Ethernet switch modules supported in the Dell PowerEdge blade enclosure		

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array](#)

Dell Cluster Configuration Support Matrix

PowerEdge Cluster with PowerVault MD3200i/MD3220i Array: High-Availability / Microsoft Cluster Services

Release Date: June, 2010

The storage and server components that are listed on this matrix have been tested and validated by Dell High-Availability Solutions Engineering for use in Windows Server Failover Clusters. Building a cluster using components from this list – and ensuring that the firmware and driver versions conform to those that are listed – ensures that the resulting cluster has been fully qualified by Dell and our partners.

Storage Components:

Up to 4 storage systems per cluster

Dell Storage System:

Dell PowerVault:	MD3200i/MD3220i	MD1200/MD1220
Enclosure Firmware:	07.70.06.63	A00
NVRAM Revision	N26X0-770890-005	

Server Components:

up to 16 homogeneous nodes for Windows Server 2008 x64bit SP2 and Windows Server 2008 R2 x64bit

Dell Servers:

Supported servers (Rack):	PowerEdge R610, R710, R810, R815, R715, and R910
Supported servers (Blade):	PowerEdge M610, M710, and M910
Supported servers (Tower):	PowerEdge T610 and T710

Operating System, Service Pack, and Hotfixes:

Microsoft Windows Server 2008, Enterprise x64 Edition with Service Pack 2†	Supported on any server listed above.
Microsoft Windows Server 2008, R2 Enterprise x64 Edition	Supported on any server listed above.

†: The following Windows Server 2008, Enterprise x64bit SP2 edition Hotfix is also required: KB970525

PowerVault Modular Disk Storage Manager Software:

Dell MDSM version	10.70.36.06
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iSCSI components:

iSCSI initiator:

Microsoft iSCSI initiator software	2.08
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iSCSI interconnects:

Network Adapter (dedicated for iSCSI):

		NIC Driver version
All supported non-blade servers	Inter Pro/1000 PT Single and Dual Port 1GbE NICs	12.0_A01 or later
	Intel 10 Gigabit AT Server Single Port NIC	12.0_A01 or later
	Broadcom 5708 Single Port 1GbE NIC with TOE	14.2.0_A03 or later
	Broadcom 5709 Single Port 1GbE NIC with TOE	14.2.0_A03 or later
	Broadcom 57710 Single Port 10GbE NIC with TOE	14.2.0_A03
M610, M710, and M910	Broadcom 5709 1GbE NIC with TOE	14.2.0_A03 or later
M610, M710, and M910	Broadcom 57110 10GbE Ethernet NIC with TOE	14.2.0_A03 or later

Ethernet Switches (dedicated for iSCSI)

Any Gigabit Ethernet switch, including Gigabit Ethernet switch modules supported in the Dell PowerEdge blade enclosure

[For detailed configuration information, please refer to the online documentation for the PowerEdge Cluster with PowerVault MD32XXi Array](#)