

Updated: September 2009

**NOTE:** All information in this document references Brocade Data Migration Manager (DMM) 3.2.1a unless otherwise noted.

Contact your Brocade Sales Representative about migration using any hardware or software not listed here.

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## Definitions

The following definitions are used in this document:

### **Certified**

- Fully tested devices deemed to interoperate with the Brocade Data Migration Manager (DMM). These devices and this software are supported by Brocade in environments with other *Certified* or *Validated Configurations*.

### **Validated**

- Devices and/or software components that are tested based on the Request for Product Qualification (RPQ) process.
- The Brocade Systems Assurance Form (SAF) must be submitted with every validation request.
- The time required to complete the validation process is typically two to three weeks.
- Validated items are typically certified in the next major release.

### **Supported**

- The devices and software components are expected to interoperate based on their architectural similarity to the ones that are already certified with Brocade DMM.
- Brocade supports these devices and software combinations.

## M-EOS Support

Brocade DMM Migration Mode	Interop Mode (IM)	M-EOS Version	Fabric OS Version
Online DIRECT	IM-2 only	9.9.2 or later	6.0.0 or later
Online Proxy	IM-2 and IM-3	9.9.2 or later	6.0.0 or later
Offline	IM 2 and IM 3	9.9.2 or later	6.0.0 or later

The following Brocade M-EOS switches can be supported for online DIRECT migration with interop mode IM 2:

- Brocade M6140 (Intrepid 6140 ED-6140)
- Brocade Mi10K Director (Intrepid 10000)
- Brocade M4400 (Sphereon 4400)
- Brocade M4700 (Sphereon 4700)

## Edge Fabric Compatibility

DMM Migration Mode	FOS Version on Edge Fabric
Online DIRECT	2G/4G platforms: 5.3.1b or later 2G/4G platforms: 6.1.1a or later (only for host cluster/San Boot LUN/ ESX migrations) 8G platforms: 6.1.2 or later
Online Proxy	Any supported FOS version
Offline	Any supported FOS version

## Virtual Fabrics Support (L2 switches only)

Brocade DMM interoperates with VF-capable switches in the fabric (and Logical Fabrics). See the *Brocade DMM Deployment Guide* for details.

## Host Cluster Platforms

**NOTE:** All cluster-based migration is supported *only in online DIRECT mode*. And an edge switch to which hosts are connected must be running FOS 6.1.1a or later.

Cluster Software Version	OS Version	MPIO Software	HBA Type
MSCS 5.2	Windows Server 2003 Enterprise SP1	PowerPath 5.2	Emulex FC Port LSI Logic LSI_FC
MSCS 5.2	Windows Server 2003 R2 Enterprise SP2	PowerPath 4.6	QLogic Storport
VCS 5.0	Solaris 5.10	VxVM 5.0	Sun Leadville (QLC) QLogic QLA Sun Leadville (EMLXS)
VCS 5.0	Solaris 5.10	SUN MPxIO	Sun Leadville (QLC) Sun Leadville (EMLXS)

Cluster Software Version	OS Version	MPIO Software	HBA Type
VCS 5.0	RHEL5 Update2	VxVM 5.0	HP QLogic (QMH)
VCS 5.0	SUSE10 SP2	VxVM 5.0	QLogic driver
VCS 5.0	Windows Server 2003 Enterprise SP2	VxVM 5.0	Emulex STORPort
VCS 5.0	AIX 5.3	PowerPath	IBM Emulex
HACMP 5.1	AIX 6.1	PowerPath	IBM Emulex
MC Service Guard A11.18	HP-UX 11.31	PVLinks	HP-QLogic (QMH)

**NOTE:** For detailed information, see the “Host Bus Adapters (HBAs)” section later in this document.

## VMware

VMware is supported *only in online DIRECT mode* as follows.

ESX Server Version	HBA	Guest OS	LUN Mode
ESX Server 3.5, Update 1	QLogic QLE2462 Brocade 825	Windows Server 2003 Enterprise SP1 SLES 10 SP2	NPIV and VMFS

**NOTE:** VMware ESX Server clusters and VM host clusters are not supported in this release of Brocade DMM.

## Storage Arrays

Storage Array	Firmware Tested
<b>EMC</b>	
AX100	02.08.100.5.014
AX150	02.20.150.5.017
Symmetrix 8530	5568 (15C0AA01)
DMX1000	5671
DMX3	5771
CX300	2.19.300.5.030030 and 2.26.300.5.025
CX600	2.19.600.5.044
CX700	2.19.700.5.034
CX3-40	Firmware: 3.26.40.5.010 PROM: 3.58

Storage Array	Firmware Tested
<b>Hitachi Data Systems (HDS)</b>	
9200	055L
9500	065A/N
USP 100	Main: 50-03-93-00/00 SVP: 50-03-92/00 Server: 04_03_10
AMS1000	0781/A-H
USP-Vm	Main: 60-04-06-00/02 SVP: 60-04-08/02
<b>HP</b>	
EVA 5000	3025, CROC33vcsp-4004
EVA 6000	CR0D63xc3p-6000
EVA 6100	6110
EVA 4400	Main: 9.00300
XP-128	21-14-33
XP512	01-19-99
XP12000	Main: 50-09-74
XP20000	Main: 60-02-18-00/12
XP24000	Main: 60-03-05
MSA 2000	2042, 3019
<b>IBM</b>	
ESS800	LIC 2.4.1.62
DS8000	5.3.1.104
DS8100 (Model 921 and 931)	Bundle 62.42.77.0 (LMC 5.2.420.531)
DS4400 (FAST700)	06.12.40.00
DS4800	06.60.22.00
<b>Fujitsu</b>	
ETERNUS 4000	v30L28-0000
ETERNUS 8000	v11L52-0000
<b>NetApp</b>	
FAS 3140	7.3
<b>3PAR</b>	
S400 (2 Node Clustered Controller RAID)	InForm OS 2.3.1

## Multipath Software

Software	Operating System
<b>AIX SDDPMC</b>	
IBM SDDPMC 2.1.2.5	AIX 5.3
IBM SDDPMC 2.2.0.0	
AIX Native MPIO	
<b>EMC PowerPath</b>	
PowerPath 4.5.0.132	Windows Server 2003 SP1
PowerPath 4.6.0.170	
PowerPath 5.2.0	
PowerPath 4.5.1.2	Windows Server 2003 SP2
PowerPath 5.3.0	
PowerPath 4.3.1	Windows 2000 SP4
PowerPath 4.6.0	Windows Server 2003 R2 Enterprise SP2
PowerPath 4.4.0	Solaris 9 (SPARC)
PowerPath 4.3.0	IBM AIX 5.3/AIX 5.2
PowerPath 4.5.0	
PowerPath 5.3.0	
<b>HP SecurePath</b>	
SecurePath 3.0f SP2 (CPQswsp and HPswsp)	HP-UX 11iv2 (11.23)
SecurePath Manager 4.0c SP2	Windows Server 2003 SP2
<b>HP PVLlinks</b>	
PVLlinks (Online Proxy mode)	HP-UX B.11.23 U ia64
PVLlinks	HP-UX B.11.31.0803
<b>HP MPIO DSM*</b>	
EVA DSM v3.00.00 (EVA4000/6000/8000)	Windows Server 2003 SP1
XP DSM v3.00.00	
<b>Veritas DMP</b>	
Veritas Volume Manager 4.1 REV=02.17.2005.21.28	Solaris 10 (1/06 s10s_u1wos_19a SPARC)
Veritas Volume Manager 4.1, Ver=3.2.559.0 (DSM)	Windows Server 2003 SP1
Veritas Volume Manager 4.3.0.219 (ASL)	Windows Server 2003 Standard Edition SP2
Veritas Volume Manager 5.0 MP3	Solaris 10 (patch:137111-01)'
Veritas Volume Manager 5.0 (DSM)	Windows Server 2003 Enterprise Edition SP2
Veritas Volume Manager 5.0	RHEL5 Update2
Veritas Volume Manager 5.0	SUSE10 SP2

Software	Operating System
<b>DevMapper</b>	
Linux DevMapper	Red Hat Enterprise Linux Server release 5 Kernel 2.6.9-67.ELsmp
Linux DevMapper	SUSE10 SP2
<b>HDLM (Hitachi Dynamic Link Manager)</b>	
HDLM 5.9	HP-UX IA64) B.11.23.0512
HDLM 5.8	Windows 2003 Enterprise Server SP2
<b>Fujitsu*</b>	
Fujitsu GR Multipath Driver v1.07	Solaris 8 (R08111)
Fujitsu GR Multipath Driver v2.0L14	Windows 2003 Server SP1
Fujitsu GR Multipath Driver v2.0L12	RHEL4.2 (MU2)
<b>Sun*</b>	
Traffic Manager (MPxIO)	Solaris 10 (with Sun-QLogic, and Sun-Emulex)

\* Software does not support online proxy mode due to limitations in MPIO stack

## Host Bus Adapters (HBAs)

The following HBAs are certified for online migration host support.

HBA	Driver	HBA BIOS/EFI
<b>Agilent</b>		
Agilent HP A6826-60001	B.11.23.08	ISP Code version = 3.3.171
Agilent HP 2432	B.11.31.0803	ISP Code version = 4.2.2
<b>Emulex</b>		
Emulex LP9002	SUNW emlxs (Leadville) SFS version:1.1.10.0 Driver version: v2.31h, 2.31p	3.93a0
Emulex LP10000DC	LPFC 6.02h	1.91a1
LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050, LP1050DC, LP9802DC, LP9802, LP982, LP9402DC, LP9002L, LP9002DC, LP9000, LP952L, LP8000, LP8000DC	FC Port 5-2.42a0	3.90a7
LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050, LP1050DC, LP9802DC, LP9802, LP982, LP9402DC, LP9002L, LP9002DC, LP9000, LP952L, LP8000, LP8000DC	FC Port 5-2.41a1	3.93a0
LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050, LP1050DC, LP9802DC, LP9802, LP982, LP9402DC, LP8000, LP8000DC	FC Port 5-2.41a1	2.10a10
LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050, LP1050DC, LP9802DC, LP9802, LP982, LP9402DC, LP8000, LP8000DC	FC Port 5-2.41a1	1.90a4

HBA	Driver	HBA BIOS/EFI
LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050, LP1050DC, LP9802DC, LP9802, LP982, LP9402DC, LP9002L, LP9002DC, LP9000, LP952L, LP8000, LP8000DC	FC Port 5-2.42a0	1.63a2
LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050, LP1050DC, LP9802DC, LP9802, LP982, LP9402DC, LP9002L, LP9002DC, LP9000, LP952L, LP8000, LP8000DC	FC Port 5-2.42a0	2.72a2
LPe12002, LPe12000, LPe1250, LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050DC, LP1050, LP9802DC, LP9802, LP982, LP9402DC, LP9002L, LP9002DC, LP9000	FC Port 5-2.10A7	2.72a2
LPe12002, LPe12000, LPe1250, LPe11002, LPe11000, LPe1150, LP11002, LP11000, LP1150, LP10000DC, LP10000, LP1050DC, LP1050, LP9802DC, LP9802, LP982, LP9402DC, LP9002L, LP9002DC, LP9000	STOR port 5-2.10a7	2.72a2
<b>IBM</b>		
IBM FC 5716	devices.pci.df1000fa.rte 5.3.0.50 devices.pci.df1000f7.com 5.3.0.61	1.91A5
IBM FC 5716, 1977, 1957 (FRU 03N7067, 03N7068, 03N7069, 03N6441, 80P4543, 80P4544)	df1000fa (AIX 5.2/5.3)	1.91A5
IBM FC 6239 (FRU 00P4295, 00P4297, 80P4382, 80P6416)	df1080f9 (AIX 5.2/5.3)	
IBM FC 5759	df1000fd (AIX6.1) 6.1.1.0 df1000fd (AIX5.3) 5.3.9.1	2.71X4 2.71X10
<b>LSI Logic</b>		
LSI7404XP	LSI_FC 1.26.01	1.3.5

HBA	Driver	HBA BIOS/EFI
<b>QLogic</b>		
QLA200, QLA2310, QLA2312, QLA2342	STOR 9.1.2.19	3.03.19
QLA2342	STOR 9.1.4.15	3.03.21
QLA2342	qla-5.01	3.3.21
QLA2462	qla-5.01	4.0.23
QLA2462	qla-5.03	4.00.26
QLE2462	STOR Miniport 9.1.4.15	1.12/1.04, Firmware 4.00.18
QLE2462	8.02.14.01 (SUSE10 SP2)	BIOS: 2.02 EFI: 2.00
QLA2300/2310	STOR 9.1.4.15	1.04
QMH2462	v8.02.14.01, 8.02.23 (RHEL v5.2)	1.26
SG-XPCI2FC-QF4 (QLA2462-S)	SUNWqlc (Leadville) SFS version:11.10.0 Driver version: v2.26	FW: 4.02.02 BIOS: 1.24
	SUNWqlc (Leadville) SFS version:11.10.0 Driver version: v2.29	BIOS: 1.24 EFI: 1.08
<b>Fujitsu</b>		
PW008-FC3	Driver version: Fipfca3.0 (Solaris 8 R08111)	
PG-FC202	Driver version: 8.0.16.17-5 (Windows Server 2003 SP1)	FW: 2.10a7
MC-08FC41	Driver version: 8.0.16.17-5 (RHEL4.2)	FW: 2.10a7
<b>Brocade</b>		
Brocade 825/425	bfa1.1.0.1	FCHBA1.1.0.a

## Supported Storage Arrays

Storage Array	Certified Array within Same Family
<b>EMC</b>	
Symmetrix DMX800	Symmetrix DMX1000
Symmetrix DMX2000	
Symmetrix DMX4000	
Symmetrix 8230	Symmetrix 8530
Symmetrix 8430	
Symmetrix 8730	
Symmetrix 8830	
CX200/CX200LC	CX300, CX600, CX700
CX300i	CX300
CX400	CX600, CX700
CX500/500i	
<b>Hitachi Data Systems (HDS)*</b>	
HDS 9970	HP XP128
HDS 9960	HP XP512
<b>HP</b>	
EVA3000	EVA5000
EVA8000	EVA6000
<b>IBM</b>	
DS4100 (FAStT100)	DS4400 (FAStT700)
DS4100 Express (FAStT100)	
DS4300 (FAStT600)	
DS4300 Express (FAStT600)	
DS4500 (FAStT900)	
DS8300	DS8000
<b>Fujitsu</b>	
ETERNUS 3000	ETERNUS 4000
ETERNUS 6000	ETERNUS 8000

\* Supports offline migration only

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## Related Web Sites

Brocade Web sites:

- List of Brocade products: <http://www.brocade.com/products-solutions/products/index.page>
- Current compatibility and interoperability matrix documents:  
<http://www.brocade.com/compatibility>

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## Sending Feedback

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