

HP Storage Operations Manager

Software Version: 10.01

Windows® and Linux® operating systems

Device Support Matrix

Document Release Date: June 2015
Software Release Date: June 2015



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Acknowledgements

This product includes software developed by the Apache Software Foundation.
(<http://www.apache.org>)

This product includes software developed by the Indiana University Extreme! Lab.
(<http://www.extreme.indiana.edu>)

This product uses the j-Interop library to interoperate with COM servers.
(<http://www.j-interop.org>)

Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
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STORAGE DEVICES

Legend:	Y	Supported
	N	Not supported
	NA	Not Applicable

VENDOR	STORAGE ARRAY/ SWITCH	SUBSYSTEM/ MODEL	DEVICE BUNDLE VERSION	PRE-REQUISITE SOFTWARE		FEATURES			
				DEVICE INTERFACE	VERSION	PERFORMANCE METRICS	VIRTUALIZATION (EXTERNAL STORAGE)	THIN PROVISIONING	REMOTE REPLICATION
HP	XP	24000, P9500	10.01.019	RMI-API	N/A	Y	Y	Y	Y
		XP7	10.01.019	RMI-API	N/A	N	Y	Y	Y
	EVA	4000, 6000, 8000 4100, 6100, 8100 4400, 6400, 8400 P6300, P6500	10.01.002	CV EVA	10.2, 10.3	Y	NA	Y	Y
	3PAR StoreServ	F200/F400, T400/T800, V400/V800 StoreServ 10400/10800 StoreServ 7200/7400	10.01.004	SMI-S	3.1.2 MU2, 3.1.2(MU5), 3.1.3 MU1, 3.2.1 (MU1), 3.2.1(MU2)	Y	NA	Y	Y
EMC	Clariion	CX4	10.01.003	SMI-S	4.6.x	Y	NA	Y	Y
	VNX Block	VNX 5100, 5300, 5500, 5700, 7500	10.01.003	SMI-S	4.6.x	Y	NA	Y	Y
	VNX Filer	VNX 5300, 5500, 5700, 7500	10.00.000	DART	7.1.74-5, 7.1.76-4	N	NA	Y	Y
	Symmetrix DMX	DMX 3 DMX 4	10.00.000	SMI-S	4.6.x	Y	N	Y	Y
	Symmetrix VMAX	VMAX 10K	10.01.011	SMI-S	4.6.x	Y	N	Y	Y
	VPLEX	VS1, VS2	10.00.000	REST API	5.1.0.03.00.07, 5.1.0.04.00.04, 5.2.1.02.00.03, 5.3.0.02.00.05	N	Y	NA	Y
	Isilon	S-Series, X-Series, NL-Series	10.01.002	REST API	OneFS v7.0.2.1, v7.1.0.0, v7.1.0.3, v7.2.0.2	N	NA	NA	Y
NetApp	ONTAP	7 Mode	10.01.018	ONTAPi	8.1.x, 8.2.x	Y	NA	N	Y
NetApp	ONTAP	C Mode	10.01.022	ONTAPi	8.1.4, 8.2.x, 8.3	Y	NA	N	Y
Hitachi	HUS (Block)	110, 130, 150,VM	10.01.019	HDvM	7.6	N	N	N	Y
	Hitachi Universal Storage Platform	USP	10.01.019	HDvM	7.6	N	Y	N	Y
Brocade	Switches	All models* supported by specified BNA versions *ONLY FC based switches are supported *Brocade Access Gateway is supported * Performance metrics is not supported for Brocade Access Gateway	10.01.018 10.01.010 (Access Gateway)	BNA	12.0, 12.1.5, 12.3.x, 12.4.0	Y	NA	NA	NA
CISCO	Switches	All models* supported by specified NX-OS Versions *ONLY FC based switches are supported	10.01.004	SNMP v2, v3	NX-OS 5.0(1a), 5.0(4), 5.0(4b), 5.0(4d) 5.2(1), 5.2(2) NX-OS 6.2(1), 6.0, 6.1	Y	NA	NA	NA

HP-UX HOSTS, MULTIPATHING, VOLUME MANAGEMENT, HBA, CLUSTER

Legend: Y Supported
N Not supported
NA Not Applicable

VENDOR	OS	VERSIONS/EDIT	ARCHITECTURE	SP	PERFORMANCE		MULTI-PATH			VOLUME MANAGER			MULTIPATHING AND VOLUME MANAGER COMBINATIONS SUPPORTED	HBA		CLUSTER						
					AGENT	AGENTLESS	NAME	VERSION	AGENT	AGENTLESS	NAME	VERSION		AGENT	AGENTLESS	VENDOR	MODELS	NAME	VERSION			
HP	HP-UX	11iv2	IA/PA	11.23	Y	N	HP-UX PV Links	N/A	Y	Y	LVM1	N/A	<ul style="list-style-type: none"> • PV Links with LVM1 • Veritas DMP with VxVM • PowerPath with LVM1 	HP - Emulex	AH402A AH403A 456972-B21 AT094A AD299A AD355A AD221A AD222A 403621-B21 AD393A	MC Service Guard Cluster	11.19					
							PowerPath	5.2, 5.2 P04, 6.0	Y	N												
							Veritas DMP	5, 6.0.1	Y	N	VxVM	5.0, 6.0.1						Y	N	HP - Qlogic	403619-B21 AD300A 451871-B21 AH400A AH401A A9782A AB378B AB379A AB379B AD193A AD300A	*Supported with Agent ONLY
							HP-UX Native Multipath	N/A	Y	Y												
	11iv3	IA/PA	11.31	Y	N	HP-UX PV Links	N/A	Y	Y	LVM1	N/A	Y	Y	<ul style="list-style-type: none"> • HP-UX PV Links with LVM1 or LVM2 • Veritas DMP with VxVM • HP-UX Native Multipath with LVM1 or LVM2 • PowerPath with LVM1 or LVM2 	HP - Emulex	AH402A AH403A 456972-B21 AT094A AD299A AD355A AD221A AD222A 403621-B21 AD393A	MC Service Guard Cluster	11.19, 11.20				
						HP-UX Native Multipath	N/A	Y	Y													
						PowerPath	5.2, 5.2 P04, 6.0	Y	N	LVM2	N/A	Y	Y						HP - Qlogic	403619-B21 AD300A 451871-B21 AH400A AH401A A9782A AB378B AB379A AB379B AD193A AD300A	Veritas Cluster Service (VCS)	6.0.100.000
						Veritas DMP	5.1 SP1, 6.0.1, 6.0.3	Y	N	VxVM	5.1 SP1, 6.0.1, 6.0.3	Y	N									

WINDOWS HOSTS, MULTIPATHING, VOLUME MANAGEMENT, HBA, CLUSTER

Legend: Y Supported
N Not supported
N Not Applicable

VENDOR	OS	VERSIONS/EDITION	ARCHITECTURE	SP	PERFORMANCE		MULTI-PATH			VOLUME MANAGER			MULTIPATHING AND VOLUME MANAGER COMBINATIONS SUPPORTED	HBA		CLUSTER				
					AGENT	AGENTLESS	NAME	VERSION	AGENT	AGENTLESS	NAME	VERSION		AGENT	AGENTLESS	VENDOR	MODELS	NAME	VERSION	
Microsoft	2008	Standard, Datacenter, Enterprise	x86, x64, IA64	SP1, SP2	Y	Y	HDLM	7.6.0, 8.0.0	Y	N	LVM	N/A	Y	N	<ul style="list-style-type: none"> • Powerpath with Native LVM • Veritas DMP with VxVM • HP MPIO with VxVM • HDLM with VxVM • HP MPIO with Native LVM • HDLM with Native LVM • Microsoft MPIO with VxVM 	Brocade	415, 425 815, 825, 804	Microsoft Cluster Server	N/A	
							PowerPath	5.7 SP1, SP4	Y	N						Qlogic	QLA2460, QLA2462 QLE2560, QLE2562, QLE2564			
							Microsoft MPIO	N/A	Y	Y						Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250			
	HP MPIO	4.02.00, 4.01.00 4.00.00	Y	Y	VxVM	5.1, 6.0.2, 6.1	Y	Y	Qlogic	QLA2460, QLA2462 QLE2560, QLE2562, QLE2564										
	Veritas DMP	5.1, 6.0.2, 6.1	Y	Y																
	2012	Standard, Datacenter	x64			Y	Y	HDLM	7.6.0, 8.0	Y	N	LVM	N/A	Y		Y	<ul style="list-style-type: none"> • Powerpath with Native LVM • Veritas DMP with VxVM • HP MPIO with VxVM • HDLM with VxVM • HP MPIO with Native LVM • HDLM with Native LVM • Microsoft MPIO with VxVM 	Emulex		LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250
								HP MPIO	4.03, 4.04	Y	Y									
								Microsoft MPIO	N/A	Y	Y									
								Veritas DMP	5.1, 6.0.2, 6.1	Y	Y									
	2012 R2	Standard, Datacenter	x64			Y	Y	HDLM	7.6.0, 8.0	Y	N	VxVM	5.1, 6.0.2, 6.1	Y	Y	<ul style="list-style-type: none"> • Powerpath with Native LVM • Veritas DMP with VxVM • HP MPIO with VxVM • HDLM with VxVM • HP MPIO with Native LVM • HDLM with Native LVM • Microsoft MPIO with VxVM 		Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250	Microsoft Cluster Server
								HP MPIO	4.04	Y	Y									
								Microsoft MPIO	N/A	Y	Y									
PowerPath									Y	N										
Veritas DMP								5.7 SP1, SP4	Y	N										
Veritas DMP	5.1, 6.0.2, 6.1	Y	Y	Brocade	415, 425 815, 825, 804															

RED HAT HOSTS, MULTIPATHING, VOLUME MANAGEMENT, HBA, CLUSTER

Legend: Y Supported
N Not supported
N Not Applicable

VENDOR	OS	VERSIONS/EDITION	ARCHITECTURE	SP	PERFORMANCE		MULTI-PATH			VOLUME MANAGER			MULTIPATHING AND VOLUME MANAGER COMBINATIONS SUPPORTED	HBA		CLUSTER			
					AGENT	AGENTLESS	NAME	VERSION	AGENT	AGENTLESS	NAME	VERSION		AGENT	AGENTLESS	VENDOR	MODELS	NAME	VERSION
RedHat software	RHEL	5.9, 5.10,	x86, x64, IA64	N/A	Y	Y	HDLM	7.6.1, 8.0.0	Y	N	LVM	N/A	<ul style="list-style-type: none"> • HDLM with VxVM • PowerPath with VxVM • Veritas DMP with VxVM • HDLM with Native LVM • PowerPath with Native LVM • Device Mapper with Native LVM 	Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250	No cluster support	N/A		
							PowerPath	5.6, 5.7 SP5	Y	N	VxVM	5.1 SP1,6.0, 6.0.4, 6.1							
							Veritas DMP	5.1 SP1, 6.0, 6.0.4, 6.1	Y	Y									
							Linux Device Mapper	N/A	Y	Y	Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250							
	RHEL	6.4, 6.5	x86, x64	N/A	Y	Y	HDLM	7.6.1, 8.0.0	Y	N			LVM	N/A	<ul style="list-style-type: none"> • HDLM with VxVM • PowerPath with VxVM • Veritas DMP with VxVM • HDLM with Native LVM • PowerPath with Native LVM • Device Mapper with Native LVM 	Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250	No cluster support	N/A
							PowerPath	5.6, 5.7 SP5	Y	N			VxVM	5.1 SP1,6.0, 6.0.4, 6.1					
							Veritas DMP	5.1 SP1, 6.0, 6.0.4, 6.1	Y	Y									
							Linux Device Mapper	N/A	Y	Y	Qlogic	QLA2460, QLA2462, QLE2560, QLE2562, QLE2564							
RHEL	6.4, 6.5	x86, x64	N/A	Y	Y	HDLM	7.6.1, 8.0.0	Y	N	VxVM			5.1 SP1,6.0, 6.0.4, 6.1	<ul style="list-style-type: none"> • HDLM with VxVM • PowerPath with VxVM • Veritas DMP with VxVM • HDLM with Native LVM • PowerPath with Native LVM • Device Mapper with Native LVM 	Qlogic	QLA2460, QLA2462, QLE2560, QLE2562, QLE2564	No cluster support	N/A	
						PowerPath	5.6, 5.7 SP5	Y	N										
						Veritas DMP	5.1 SP1, 6.0, 6.0.4, 6.1	Y	Y										
						Linux Device Mapper	N/A	Y	Y	Brocade	415, 425, 815, 825, 804								

SUSE HOSTS, MULTIPATHING, VOLUME MANAGEMENT, HBA, CLUSTER

Legend: Y Supported
N Not supported
N Not Applicable

VENDOR	OS	VERSIONS/EDITION	ARCHITECTURE	SP	PERFORMANCE		MULTI-PATH			VOLUME MANAGER			MULTIPATHING AND VOLUME MANAGER COMBINATIONS SUPPORTED	HBA		CLUSTER						
					AGENT	AGENTLESS	NAME	VERSION	AGENT	AGENTLESS	NAME	VERSION		AGENT	AGENTLESS	VENDOR	MODELS	NAME	VERSION			
SUSE	SLES	10	x86, x64, IA64	SP4	Y	Y	HDLM	7.6.1, 8.0.0	Y	N	LVM	N/A	Y	Y	<ul style="list-style-type: none"> • HDLM with LVM • PowerPath with LVM • DeviceMapper with LVM 	Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250	No cluster support	N/A			
							PowerPath	5.6, 5.7 SP1 P03	Y	N										Qlogic	QLA2460, QLA2462, QLE2560, QLE2562, QLE2564	
							Device Mapper	N/A	Y	Y												Brocade
		11	x86, x64, IA64	SP1, SP2, SP3	Y	Y	HDLM	7.6.1, 8.0.0	Y	N	LVM	N/A	Y	Y		<ul style="list-style-type: none"> • HDLM with LVM • PowerPath with LVM • DeviceMapper with LVM 	Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250	No cluster support	N/A		
							PowerPath	5.6, 5.7 SP1 P03	Y	N											Qlogic	QLA2460, QLA2462, QLE2560, QLE2562, QLE2564
							Device Mapper	N/A	Y	Y												

ORACLE HOSTS, MULTIPATHING, VOLUME MANAGEMENT, HBA, CLUSTER

Legend: Y Supported
N Not supported
N Not Applicable

VENDOR	OS	VERSIONS/EDITION	ARCHITECTURE	SP	PERFORMANCE		MULTI-PATH			VOLUME MANAGER			MULTIPATHING AND VOLUME MANAGER COMBINATIONS SUPPORTED	HBA		CLUSTER								
					AGENT	AGENTLESS	NAME	VERSION	AGENT	AGENTLESS	NAME	VERSION		AGENT	AGENTLESS	VENDOR	MODELS	NAME	VERSION					
Oracle	Solaris	10	SPARC, x86	U8, U9	Y	N	Sun StorEdge Traffic Manager (MPxIO)	N/A	Y	Y	SVM	N/A	• Sun Storage Traffic Manager (MPxIO) with SVM	Emulex	LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250	No cluster support	N/A							
							HDLM * Applicable ONLY for SPARC	8.0, 8.1	Y	N	VxVM	5.1, 6.0.2, 6.1, 6.2						Y	N	Brocade	415, 425 815, 825, 804			
							PowerPath	5.3	Y	N	ZFS	N/A						Y	Y			Qlogic	QLA2460, QLA2462, QLE2560, QLE2562, QLE2564	
							VxDMP	5.1, 6.0.2, 6.1, 6.2	Y	N														
	Solaris	11	SPARC, x86	Base	Y	N	Sun StorEdge Traffic Manager (MPxIO)	N/A	Y	Y	SVM	N/A		• Sun Storage Traffic Manager (MPxIO) with SVM	Emulex			LP 1150, LP11002, LP11000, LPe11000, LPe11002, LPe11004, LPe1150, LPe12000, LPe12002, LPe12004, LPe1250	No cluster support	N/A				
							HDLM * Applicable ONLY for SPARC	8.0, 8.1	Y	N	VxVM	6.0.2, 6.1, 6.2									Y	N	Qlogic	QLA2460, QLA2462, QLE2560, QLE2562, QLE2564
							PowerPath	5.5	Y	N	ZFS	N/A									Y	Y		
							VxDMP	6.0.2, 6.1, 6.2	Y	N														

VIRTUAL SERVERS AND HOSTS

Legend:

Y	Supported
N	Not supported
NA	Not Applicable

VENDOR	OS	VERSIONS	GUEST OS	PLATFORM	NOTES
VMWare	ESXi	5.0, 5.1, 5.5	Windows	2008 2008 R2 2008 R2 SP1 2012 2012 R2	<ul style="list-style-type: none"> • Refer to the "Hosts-Multipath-VoIMgmt-HBA" section in this Device Support Matrix for specific OS versions and service pack/update information. • For host discovery, VM Tools must be running on the guest OS. If VM Tools is not running on the guest OS, all discovered virtual hosts are unmanaged in SOM. • Raw Device Mapping (RDM) of virtual disks is supported. • VMs with the same UUID are not supported. • Automatic cluster discovery of VMware DRS Clusters is supported with Virtual Center discovery only.
			RHEL	5, 6	
			SUSE	10, 11	

Change Log

Release 10.01 (Jun 2015) Support matrix version 10.1

Added support for:

Brocade AG

NetApp->

- * Added support for NetApp- c-mode
- * Added support for Performance pack of NetApp 7-mode and NetApp c-mode

EMC -> Added EMC VMAX Performance pack support

XP -> Added XP Performance pack support

Hosts -> Added support for Solaris Agent and HP-UX agentless

Hitachi -> Added support for HUS 110

Windows 2012 R2

- * EMC Powerpath 5.7 SP1 & Native VM
- * EMC Powerpath 5.7 SP4 & Native VM
- * EMC Powerpath 5.7 SP1 & VXVM 6.1
- * EMC Powerpath 5.7 SP4 & VXVM 6.1

Solaris 10 U8/U9:

- * Vxvm/VxDmp 5.1, 6.0.2, 6.1, 6.2
- * HDLM 8.0, 8.1
- * ZFS – Native
- * SVM - Native
- * MPXio - Native

Solaris 11:

- * PowerPath 5.5
- * VxVM/VxDMP - 6.0.2, 6.1, 6.2
- * HDLM 8.0, 8.1
- * ZFS Native
- * SVM Native
- * MPXio – Native

HP-UX 11.31:

- * VCS 6.0
- * Powerpath 6.0 with LVM1/LVM2
- * VxDMP with VxVM 6.0.1
- * Powerpath 5.2 P04 with LVM1

BNA Version 12.3.4, 12.4.0

Isilon OneFS v7.2.0.2

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Feedback on Device Support Matrix, June 2015 (Storage Operations Manager 10.01)

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