



HP StorageWorks Arrays

Family Guide



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HP StorageWorks solutions deliver easy-to-install, easy-to-manage and easy-to-support proven storage solutions that help you lower TCO and decrease the complexity of your storage environment.

HP StorageWorks arrays: putting information to work

Storage is on top of everyone's mind these days. From the largest corporation to the smallest business, everyone is subject to growing volumes of information which must be kept and accessed. Increasing regulations from governments or corporate headquarters dictate what needs to be kept, how long it needs to be kept and when it needs to be accessed. Therefore, it is critical for the life of your business that you have storage solutions that are up to the task and will grow with you as your business and needs change.

When implementing storage solutions into your existing environment, it is important to know that you're not simply using a stop-gap method for handling storage issues as they are currently. You need to know that you are investing in a long-term solution that will support your business well into the future and that all of the different components and options are compatible with one another. HP StorageWorks solutions deliver easy-to-install, easy-to-manage and easy-to-support proven storage solutions that help you lower TCO and decrease the complexity of your storage environment.

Networked storage helps you keep large amounts of information continuously protected and yet readily accessible to the people who power your business. Given the importance of storage, HP is committed to meeting the full range of your storage needs—whether it's an entry-level modular array, an enterprise-class disk array or an intelligent management software that enhances the potential of your hardware. This commitment has resulted in more customers choosing HP than any other vendor.

The HP StorageWorks disk array portfolio includes:

- **All-in-One Storage Systems**—providing simple, affordable networked storage (NAS and iSCSI SAN) with integrated data protection features and simplified management
- **Modular Smart Arrays**—low-cost, scalable, high-performance storage consolidation systems for entry-level to mid-range servers and storage area networks (SANs)
- **Enterprise Virtual Arrays**—an ideal storage solution for mid-range to enterprise-class environments that require high performance, high capacity and high availability
- **XP Disk Arrays**—enterprise-class storage systems that deliver the extreme reliability and availability needed for mission-critical applications and always-on environments

To gain the full value from your investments, you also need expert services across the IT lifecycle, intelligent software, advanced storage devices and system-enhancing options.

- **Services**—How important is it that your service partner provides a single point of ownership and accountability? Does your partner meet your service needs across your enterprise? Have you reached the mission-critical reliability you require to meet your business needs? From training and basic product support to selective outsourcing—our services help you realize the full potential of your technology and keep your environment up and running.
- **Management software**—Do you need a single interface to monitor and control your complex IT environment? Our management software allows you to align IT with business needs and automate error-prone processes, which simplifies and optimizes your infrastructure.
- **Storage**—Do you need help optimizing your storage resources, managing multi-vendor environments and evolving to open architectures? Our network and direct-attached storage devices help you keep large amounts of information protected and readily accessible to people when needed.
- **Options**—Do you have everything you need to meet your infrastructure needs? Our server options—including memory, drives, processors, racks, operating system software, power and cooling—help optimize your solution by enhancing system performance and functionality.

HP StorageWorks All-in-One Storage Systems

HP StorageWorks All-in-One Storage Systems are fully-integrated iSCSI shared storage and file-serving solutions with integrated data protection designed to be deployed and managed by IT generalists with no storage expertise.

Entry-level



HP StorageWorks 400 All-in-One Storage System (AiO400)
Four-drive, entry-level All-in-One network storage



HP StorageWorks 600 All-in-One Storage System (AiO600)
Six-drive All-in-One network storage with hardware redundancy and easy expandability



HP StorageWorks 1200 All-in-One Storage System (AiO1200)
Twelve-drive All-in-One network storage with high-performance internal capacity

Number of processors	1	1 (supports 2)	1
Processor	Dual-core Intel® Pentium® D (3.0 GHz) with 2 MB L2 cache	Dual-core Intel Xeon® 2.67 GHz/1333 MHz FSB with 4 MB L2 cache	Dual-core Intel Xeon 2.67 GHz/1066 MHz FSB with 4 MB L2 cache
iSCSI initiator support	Interoperable with standards-compliant iSCSI initiators including those from Microsoft®, Linux, BSD, AIX, Solaris and VMware	Interoperable with standards-compliant iSCSI initiators including those from Microsoft, Linux, BSD, AIX, Solaris and VMware	Interoperable with standards-compliant iSCSI initiators including those from Microsoft, Linux, BSD, AIX, Solaris and VMware
File serving support	CIFS and NFS	CIFS and NFS	CIFS and NFS
Memory	1 GB (4 GB maximum)	1 GB (4 GB maximum)	2 GB (4 GB maximum)
Remote management	iPMI 2.0	iLO	iLO
External storage expansion (via SmartArray Controller)	Modular Smart Array 20	Modular Smart Array 20, 30, 50, 60 and 70	Modular Smart Array 50, 60 and 70
Expansion slots	(2) PCI-X 64-bit, 133-MHz expansions slots	(3) x4 PCI-Express (x8 connectors) (1) 64-bit, 133-MHz 3.3 V PCI-X (2) 64-bit, 100-MHz 3.3 V PCI-X	(1) x8 full height PCI-Express (x8 connectors) (occupied by P400 controller) (1) x8 half-height PCI-Express x1
Internal hot-plug storage included (by model)	1 TB SATA (4 x 250 GB)	1.5 TB SATA (6 x 250 GB) 3.0 TB SATA (6 x 500 GB) 876 GB SAS (6 x 146 GB) 1.8 TB SAS (6 x 300 GB)	3.0 TB SATA (12 x 250 GB) 6.0 TB SATA (12 x 500 GB) 9.0 TB SATA (12 x 750 GB) 1.7 TB SAS (12 x 146 GB) 3.6 TB SAS (12 x 300 GB)
Rack height (form factor)	1U (rack)	5U (tower or rack)	2U (rack)
Warranty (parts/labor/on-site)	3-year/1-year/1-year	3-year/3-year/3-year	3-year/3-year/3-year
HP related offerings			
Services	Support Plus Service (higher support levels also available) Support Plus 24 Service (higher support levels also available)	Support Plus 24 Service (higher support levels also available) Proactive 24 Service (higher support levels also available)	Support Plus 24 Service (higher support levels also available) Proactive 24 Service (higher support levels also available)
Software	Storage Mirroring Data Protector Express	Storage Mirroring Data Protector Express	Storage Mirroring Systems Insight Manager
Tape	Ultrium 448 Tape Drive(s) 1/8 G2 Autoloader (with Ultrium 448) Tape Drive(s)	1/8 G2 Autoloader (with Ultrium 920) Tape Drive(s) Ultrium 920 Tape Drive(s)	1/8 G2 Autoloader (with Ultrium 920) Tape Drive(s) MSL2024 Tape Library [with Ultrium 920 and Ultrium 960 Tape Drive(s)]

HP StorageWorks Modular Smart Arrays

The HP StorageWorks Modular Smart Array (MSA) family is ideal for organizations looking for entry/mid-range SANs and low-cost DAS to SAN solutions.

Entry-level



HP StorageWorks 20 Modular Smart Array
SATA drive enclosure; capacity for direct attach or MSA

HP StorageWorks 30 Modular Smart Array
Hard drive enclosure (SB, DB and MI); capacity for direct attach or to an MSA

HP StorageWorks 50 Modular Smart Array
SAS storage enclosure supporting SAS and SATA

	HP StorageWorks 20 Modular Smart Array	HP StorageWorks 30 Modular Smart Array	HP StorageWorks 50 Modular Smart Array
Host attach	SCSI	SCSI	SAS
Maximum number of drives	Up to 12 SATA Large Form Factor (LFF) drives	Up to 14 SCSI drives	Up to 10 SAS and/or SATA Small Form Factor (SFF) drives
Hard drives supported	750 GB 1.5 Gb SATA 7.2K 3.5" 500 GB 1.5 Gb SATA 7.2K 3.5" 250 GB 1.5 Gb SATA 7.2K 3.5"	300 GB U320 10K 146 GB U320 10K 72 GB U320 10K 300 GB U320 15K 146 GB U320 15K 72 GB U320 15K 36 GB U320 15K	146 GB SAS 10K SFF 72 GB SAS 10K SFF 36 GB SAS 10K SFF 72 GB SAS 15K SFF 36 GB SAS 15K SFF 60 GB 1.5 Gb SATA 5.4K SFF 120 GB 1.5 Gb SATA 5.4K SFF
Operating systems supported	Microsoft® Windows® Server 2003 Microsoft Windows Server 2000 VMware Novell NetWare Red Hat Linux SuSE Linux SCO	Microsoft Windows Server 2003 Microsoft Windows Server 2000 Windows NT VMware Linux Novell NetWare Tru64 UNIX® OpenVMS HP-UX (MSA30 MI only)	Microsoft Windows Server 2003 Microsoft Windows Server 2000 VMware Linux Novell NetWare
Maximum storage	Up to 9 TB with SATA drives	Up to 4.2 TB with SCSI drives	Up to 1.44 TB with SAS drives Up to 1.2 TB with SATA drives
Rack height	2U	3U	1U
Warranty (parts/labor/on-site)	3-year/0/0	3-year/0/0	3-year/0/0
HP related offerings			
Services	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)
Software	Systems Insight Manager Array Configuration Utility (ACU)	Systems Insight Manager Array Configuration Utility (ACU)	Systems Insight Manager Array Configuration Utility (ACU)

HP StorageWorks Modular Smart Arrays (continued)

The HP StorageWorks Modular Smart Array (MSA) family is ideal for organizations looking for entry/mid-range SANs and low-cost DAS to SAN solutions.

Mid range



HP StorageWorks 60 Modular Smart Array
SAS/SATA drive enclosure for direct attach

HP StorageWorks 70 Modular Smart Array
SAS/SATA drive enclosure for direct attach

Host interface	SAS	SAS
Maximum number of drives	Up to 12 SATA LFF drives	Up to 25 SAS or SATA SFF drives
Hard drives supported	300 GB 15K SAS 3.5" 146 GB 15K SAS 3.5" 72 GB 15K SAS 3.5" 32 GB 15K SAS 3.5" 750 GB 1.5 Gb SATA 7.2K 3.5" 500 GB 1.5 Gb SATA 7.2K 3.5" 250 GB 1.5 Gb SATA 7.2K 3.5"	72 GB SAS 15K 2.5" 36 GB SAS 15K 2.5" 146 GB SAS 10K 2.5" 72 GB SAS 10K 2.5" 36 GB SAS 10K 2.5" 60 GB SATA 1.5 Gb 5.4K 2.5" 120 GB SATA 1.5 Gb 5.4K 2.5"
Operating systems supported	Microsoft Windows 2003/R2 Standard Microsoft Windows 2003/R2 Standard x64 Microsoft Windows 2003/R2 Enterprise Microsoft Windows 2003/R2 Enterprise x64 Microsoft Windows 2003/R2 Web Microsoft Windows 2003/R2 SBS Novell Open Enterprise Server, NetWare 6.5 SPS SCO OpenServer 5.0.7, 6 SCO UnixWare 7.1.3, 7.1.4 Red Hat Enterprise Linux SuSE Linux Enterprise Server	Microsoft Windows 2003/R2 Standard Microsoft Windows 2003/R2 Standard x64 Microsoft Windows 2003/R2 Enterprise Microsoft Windows 2003/R2 Enterprise x64 Microsoft Windows 2003/R2 Web Microsoft Windows 2003/R2 SBS Novell Open Enterprise Server, NetWare 6.5 SPS SCO OpenServer 5.0.7, 6 SCO UnixWare 7.1.3, 7.1.4 Red Hat Enterprise Linux SuSE Linux Enterprise Server
Maximum storage	Up to 3.6 TB with SAS drives Up to 9 TB with SATA drives	Up to 3.6 TB with SAS drives Up to 1.3 TB with SATA drives
Rack height	2U	2U
Warranty (parts/labor/on-site)	3-year/0/0	3-year/0/0
HP related offerings		
Services	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)
Software	Systems Insight Manager Array Configuration Utility (ACU)	Systems Insight Manager Array Configuration Utility (ACU)

HP StorageWorks Modular Smart Arrays (continued)

The HP StorageWorks Modular Smart Array (MSA) family is ideal for organizations looking for entry/mid-range SANs and low-cost DAS to SAN solutions.

Entry-level



HP StorageWorks 500 G2 Modular Smart Array
RAID storage for clustered server environments in SMB

HP StorageWorks 1000 Modular Smart Array
Entry-level Fibre Channel SAN array leverages ProLiant technology

Host interface	U320 SCSI	Fibre Channel
Maximum number of drives	Up to 14 SCSI	14, up to 42 SCSI with additional MSA30s (2)
Hard drives supported	72 GB U320 10K 146 GB U320 10K 300 GB U320 10K 36 GB U320 15K 72 GB U320 15K 146 GB U320 15K 300 GB U320 15K	72 GB U320 10K 146 GB U320 10K 300 GB U320 10K 36 GB U320 15K 72 GB U320 15K 146 GB U320 15K 300 GB U320 15K
Cache	256 MB, upgradeable to 512 MB per controller	256 MB, upgradeable to 512 MB per controller
Operating systems supported	Microsoft Windows Server 2003 Microsoft Windows Server 2000 VMware Linux Novell NetWare Red Hat Enterprise Linux SuSE Linux Enterprise Server	Microsoft Windows Server 2003 Microsoft Windows Server 2000 Windows NT HP-UX VMware Linux Novell NetWare OpenVMS Tru64 UNIX SCO
Maximum storage	4.2 TB with SCSI drives	12.6 TB with SCSI drives
Rack height	4U	4U
Warranty (parts/labor/on-site)	3-year/3-year/3-year	3-year/1-year/1-year
HP related offerings		
Services	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)
Software	Storage Essentials Standard Edition SRM Software	Storage Essentials Standard Edition SRM Software StorageWorks Storage Mirroring

HP StorageWorks Modular Smart Arrays (continued)

The HP StorageWorks Modular Smart Array (MSA) family is ideal for organizations looking for entry/mid-range SANs and low-cost DAS to SAN solutions.

Entry-level



HP StorageWorks 1500cs Modular Smart Array

Low-cost, high-capacity SAN array for Fibre Channel networks

HP StorageWorks 1510i Modular Smart Array

Entry-level iSCSI array for departments/remote offices

Host interface	Fibre Channel	2x1 GbE iSCSI
Maximum number of drives	Up to 56 SCSI drives in 4xMSA30 enclosures Up to 96 SATA drives in 8xMSA20 enclosures	Up to 56 SCSI drives in 4xMSA30 enclosures Up to 96 SATA drives in 8xMSA20 enclosures
Hard drives supported	72 GB U320 10K 146 GB U320 10K 300 GB U320 10K 36 GB U320 15K 72 GB U320 15K 146 GB U320 15K 300 GB U320 15K 250 GB 1.5 Gb SATA 7.2K 500 GB 1.5 Gb SATA 7.2K 750 GB SATA 7.2K	72 GB U320 10K 146 GB U320 10K 300 GB U320 10K 36 GB U320 15K 72 GB U320 15K 146 GB U320 15K 300 GB U320 15K 250 GB SATA 7.2K 500 GB SATA 7.2K 750 GB SATA 7.2K
Cache	256 MB, upgradeable to 512 MB per controller	256 MB, upgradeable to 512 MB per controller
Operating systems supported	Microsoft Windows Server 2003 Microsoft Windows Server 2000 and Advanced Server HP-UX Red Hat Linux SuSE Linux SLES VMware Novell NetWare OpenVMS Tru64 UNIX SCO	Microsoft Windows Server 2003 (32 and 64 bit) Microsoft Windows Server 2000 SP4 VMware
Maximum storage	Up to 16.8 TB SCSI Up to 64 TB SATA	Up to 16.8 TB SCSI Up to 64 TB SATA
Rack height	2U (controller shelf)	2U (controller shelf)
Warranty (parts/labor/on-site)	3-year/1-year/1-year	3-year/1-year/1-year
HP related offerings		
Services	Disk Array Installation and Startup Services Support Plus 24 Service (higher support levels also available)	Disk Array Installation and Startup Services Proactive 24 Service (higher support levels also available)
Software	Storage Essentials Standard Edition SRM Software StorageWorks Storage Mirroring	Storage Essentials Standard Edition SRM Software StorageWorks Storage Mirroring

HP StorageWorks Enterprise Virtual Arrays

HP StorageWorks Enterprise Virtual Array (EVA) devices provide outstanding total cost of ownership (TCO) to support business-critical processes.

Midrange

New



HP StorageWorks 4100 Enterprise Virtual Array
Entry EVA that has unparalleled simplicity and lowest TCO

New



HP StorageWorks 6100 Enterprise Virtual Array
Simple to deploy, strong performance with higher capacity

New



HP StorageWorks 8100 Enterprise Virtual Array
Simple to manage, highest performance for enterprises and scalability

Number of controllers	2	2	2
Hard drives supported	146 GB 10K rpm dual-port 2 Gb/s FC-AL 1" 300 GB 10K rpm dual-port 2 Gb/s FC-AL 1" 146 GB 15K rpm dual-port 2/4 Gb/s FC-AL 1" 300 GB 15K rpm dual-port 2/4 Gb/s FC-AL 1" 500 GB FATA disk dual-port 2 Gb FC Hybrid disk drive factory integrated	146 GB 10K rpm dual-port 2 Gb/s FC-AL 1" 300 GB 10K rpm dual-port 2 Gb/s FC-AL 1" 146 GB 15K rpm dual-port 2/4 Gb/s FC-AL 1" 300 GB 15K rpm dual-port 2/4 Gb/s FC-AL 1" 500 GB FATA disk dual-port 2 Gb FC Hybrid disk drive factory integrated	146 GB 10K rpm dual-port 2 Gb/s FC-AL 1" 300 GB 10K rpm dual-port 2 Gb/s FC-AL 1" 146 GB 15K rpm dual-port 2/4 Gb/s FC-AL 1" 300 GB 15K rpm dual-port 2/4 Gb/s FC-AL 1" 500 GB FATA disk dual-port 2 Gb FC Hybrid disk drive factory integrated
Maximum number of drives	8, 56 per controller pair	16, 112 per controller pair	8, 168 (one cabinet); Up to 240 (with utility cabinet)
Cache (per controller)	4 GB	4 GB	8 GB
Disk drives, interface	Dual-port 2/4 Gb/s FC-AL	Dual-port 2/4 Gb/s FC-AL	Dual-port 2/4 Gb/s FC-AL
Operating systems supported	Microsoft Windows XP 32-bit Microsoft Windows 2000 Server and Advanced Server Microsoft Windows 2003 Standard/Enterprise (32/64-bit) and Extended/DataCenter (64-bit) HP-UX Linux Tru64 UNIX OpenVMS Sun Solaris IBM AIX Novell NetWare VMware	Microsoft Windows 2000 Server and Advanced Server Microsoft Windows 2003 Standard/Enterprise (32/64-bit) and Extended/DataCenter (64-bit) HP-UX Linux Tru64 UNIX OpenVMS Sun Solaris IBM AIX Novell NetWare VMware	Microsoft Windows 2000 Server and Advanced Server Microsoft Windows 2003 Standard/Enterprise (32/64-bit) and Extended/DataCenter (64-bit) HP-UX Linux Tru64 UNIX OpenVMS Sun Solaris IBM AIX Novell NetWare VMware
Maximum storage	1.2 to 28 TB	1.2 to 56 TB	1.2 to 120 TB
Rack height	42U	42U	42U
Warranty (parts/labor/on-site)	2-year/2-year/2-year	2-year/2-year/2-year	2-year/2-year/2-year
HP related offerings			
Services	SAN Solution Service Backup and Recovery Solution Service	Backup and Recovery Solution Service Proactive 24 Service	SAN Solution Service Critical Service
Software	Continuous Access EVA Business Copy EVA	Command View EVA Storage Essentials Standard Edition SRM Software	Fast Recovery Solutions Cluster Extension EVA

HP StorageWorks XP Disk Arrays

The HP StorageWorks XP Disk Array family provides the best reliability, availability, performance and capacity to address your mission-critical applications.

High-end



HP StorageWorks XP10000 Disk Array
State-of-the-art reliability and “always-on” availability that starts at the size you need



HP StorageWorks XP12000 Disk Array
Enterprise-class reliability and “always-on” availability for mission-critical IT



HP StorageWorks XP24000 Disk Array
Bulletproof storage solution for large enterprises requiring constant access to mission-critical data

Maximum number of drives	0–240 in one to two racks (120 drives per rack)	9–1,152 in one to five cabinets	9–1,152 in one to five cabinets
Hard drives supported	All drives are dual-port FC-AL 73 GB 15K rpm 2/4 Gb/s 146 GB 10K rpm 2 Gb/s 146 GB 15K rpm 2/4 Gb/s 300 GB 10K rpm 2 Gb/s 300 GB 15K rpm 2/4 Gb/s	All drives are dual-port FC-AL 73 GB 15K rpm 146 GB 10K rpm 146 GB 15K rpm 300 GB 10K rpm 300 GB 15K rpm	All drives are dual-port FC-AL 73 GB 15K rpm 2/4 Gb/s 146 GB 15K rpm 2/4 Gb/s 300 GB 10K rpm 2 Gb/s 300 GB 15K rpm 2/4 Gb/s
Cache	Up to 64 GB	Up to 256 GB	Up to 256 GB
Maximum memory	1–6 GB	1–12 GB	1–24 GB
Operating systems supported	HP-UX Microsoft Windows Sun Solaris IBM AIX VMware Linux Open VMS Tru64 NonStop Mainframe	HP-UX Microsoft Windows Sun Solaris IBM AIX VMware Linux Open VMS Tru64 NonStop Mainframe	HP-UX Microsoft Windows Sun Solaris IBM AIX VMware Linux Open VMS Tru64 NonStop Mainframe
Maximum storage	288 GB–69 TB (raw) 144 GB–51.8 TB (usable)	576 GB–332 TB (raw) 288 GB–290 TB (usable)	576 GB–332 TB (raw) 288 GB–290 TB (usable)
Rack height	75.6 inches	73.2 inches	75.6 inches
Warranty (parts/labor/on-site)	2-year/2-year/2-year	2-year/2-year/2-year	2-year/2-year/2-year
HP related offerings			
Services	Critical Service Proactive 24 Service	Critical Service Proactive 24 Service	Critical Service Proactive 24 Service
Software	XP Command View Advanced Edition XP External Storage	XP Disk/Cache Partition XP Continuous Access Journal	XP Thin Provisioning XP Array Manager

HP StorageWorks arrays

Supported and recommended HP servers

		Entry-level								Mid-range			High-end			
		MSA20	MSA30	MSA50	MSA60	MSA70	MSA500 G2	MSA1000	MSA1500 cs	MSA1510i	EVA4100	EVA6100	EVA8100	XP1 0000 Disk Array	XP1 2000 Disk Array	XP2 4000 Disk Array
HP ProLiant Servers																
Entry-class	ML110 G3						o	o	o	o	o	o	o	o	o	o
	ML115						o	o	o	o	o	o	o	o	o	o
	DL140 G3						o	o	o	o	o	o	o	o	o	o
	DL145 G2						o	o	o	o	o	o	o	o	o	o
	ML150 G3						o	o	o	o	o	o	o	o	o	o
Mid-range	ML310 G3	●	o	o	o	o	o	o	o	o	o	o	o	o	o	o
	DL320 G4	●	o	o	o	o	●	o	o	o	o	o	o	o	o	o
	ML350 G5	o	●	o	o	o	o	o	●	o	●	o	o	o	o	o
	DL360 G5	o	o	●	o	o	o	●	o	o	o	o	o	o	o	o
	DL365	o	o	●	o	o	o	●	o	o	o	o	o	o	o	o
	ML370 G5	o	o	●	o	o	o	●	o	o	o	o	o	o	o	o
	DL380 G5	●	o	o	o	o	o	o	o	o	●	o	o	o	o	o
High-end	DL385	●	o	o	o	o	o	o	o	●	●	o	o	o	o	o
	ML570 G4	o	●	o	o	o	●	o	o	o	o	o	o	o	o	o
	DL580 G4	o	●	o	o	o	o	o	●	o	●	o	o	o	o	o
p-Class	DL585	o	o	o	o	o	o	o	o	●	●	o	o	o	o	o
	BL20p G4						o	o	o	o	o	●	o	●	o	o
	BL25p						o	o	o	o	o	●	o	o	●	o
	BL35p						o	o	o	o	o	●	o	o	●	o
	BL45p						o	o	o	o	o	o	●	o	●	●
c-Class	Integrity BL60p						o	o	o	o	o	o	o	●	●	●
	BL460c						o	o	o	o	●	●	●	●	o	o
	BL465						o	o	o	o	●	●	●	●	o	o
	BL480c						o	o	o	o	o	o	●	●	●	●
	BL685						o	o	o	o	o	o	●	●	●	●
HP Integrity Servers																
c-Class	BL860c							o	●		●	●	o	o	o	o
	Entry-class	rx2660							o	●	o	●	o	o	o	o
rx3600								o	●	o	●	o	o	o	o	o
rx6600								o	o	o	●	●	o	o	o	o
Mid-range	rx7640			o	o	o		o	o	o	o	o	●	●	o	o
	rx8640			o	o	o		o	o	o	o	●	●	o	●	●
High-end	Superdome			o	o	o		o	o	o	o	o	●	●	●	●
HP Integrity NonStop Servers																
Entry-class	NS1000													●	●	●
High-end	NS14000													●	●	●
	NS16000													●	●	●

● Recommended for this product (best capacity match)
o Supported for this product

Note: Please check with your HP account representative for support details.

HP StorageWorks arrays

Supported and recommended tape products

	Entry-level												Mid-range			High-end		
	AIO400	AIO600	AIO1200	MSA20	MSA30	MSA50	MSA60	MSA70	MSA500 G2	MSA1000	MSA1500 cs	MSA1510i	EVA4100	EVA6100	EVA8100	XP10000 Disk Array	XP12000 Disk Array	XP24000 Disk Array
HP StorageWorks Tape Products																		
1/8 Tape Autoloader	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1/8 G2 Tape Autoloader	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MSL 2024	○	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MSL 4048	○	○	○	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○
MSL 8096	○	○	○	○	○	○	○	○	○	●	●	●	○	○	○	○	○	○
EML 71e	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	○	○	○
EML 103e	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	○	○	○
EML 245e	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	○	○	○
EML 332e	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	○	○	○
EML 442e	○	○	○	○	○	○	○	○	○	○	○	○	●	●	●	○	○	○
ESL 712e	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	●
D2D Backup Solution 110/120	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
VLS1002i	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
VLS6105	○	○	○	○	○	●	●	●	●	●	○	○	○	○	○	○	○	○
VLS6109	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	○	○	○
VLS6510	○	○	○	○	●	●	●	●	●	●	○	○	●	●	●	○	○	○
VLS6518	○	○	○	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●
VLS6840	○	○	○	○	●	○	○	○	○	○	●	●	○	●	●	●	●	●
VLS6870	○	○	○	○	●	○	○	○	○	○	●	●	○	●	●	●	●	●
VLS300 EVA Gateway	○	○	○	○	●	○	○	○	○	○	●	●	○	●	●	●	●	●

- Recommended for this product (best capacity match)
- Supported for this product

HP StorageWorks array families¹

HP StorageWorks 400 All-in-One Storage System



HP StorageWorks 600 All-in-One Storage System rack



HP StorageWorks 1200 All-in-One Storage System



HP StorageWorks 20 Modular Smart Array



HP StorageWorks 30 Modular Smart Array



HP StorageWorks 50 Modular Smart Array



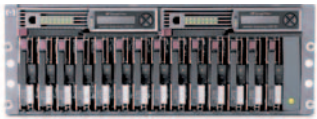
HP StorageWorks 60 Modular Smart Array



HP StorageWorks 70 Modular Smart Array



HP StorageWorks 500 G2 Modular Smart Array



HP StorageWorks 1000 Modular Smart Array



HP StorageWorks 1500cs Modular Smart Array



HP StorageWorks 1510i Modular Smart Array



HP StorageWorks 4100 Enterprise Virtual Array



HP StorageWorks 6100 Enterprise Virtual Array



HP StorageWorks 8100 Enterprise Virtual Array



HP StorageWorks XP10000 Disk Array



HP StorageWorks XP12000 Disk Array



HP StorageWorks XP24000 Disk Array



¹ Images are not to scale.

HP related offerings

To gain the fullest value from your array investment, you will benefit from intelligent software and expert services across the IT lifecycle.

HP software

HP provides software that allows you to align IT with business needs, automate error-prone processes and fine-tune your infrastructure.

Storage resource management	
Storage Essentials Enterprise Edition	HP Storage Essentials suite delivers integrated heterogeneous functionality for network (DAS, SAN, NAS) management, storage resource management, provisioning, backup reporting and application infrastructure monitoring. The suite consists of HP Storage Essentials Enterprise Edition and features a portfolio of value-added plug-ins.
Storage Essentials Standard Edition SRM Software	HP Storage Essentials Standard Edition helps midsize business with limited IT staff see the big picture, reduce complexity and gain control of their SAN infrastructure inventory for small to medium HP storage-based SANs consisting of HP EVA, HP MSA and HP NAS, HP EML E-series Tape, HBAs and switches, and affordably enjoy the benefits of Storage Resource Management software.
Systems Insight Manager	HP Systems Insight Manager (SIM), our unified server-storage management tool, helps increase IT staff efficiency and hardware platform availability for small and large server deployments alike. It is designed for end-user setup, and its modular architecture enables systems administrators to plug in additional functionality as needed.
Command View EVA	HP StorageWorks Command View EVA is a comprehensive software suite designed to simplify array provisioning and management of the high-performance HP StorageWorks Enterprise Virtual Array (EVA) family of storage array products. For managing EVA with heterogeneous networked SAN devices, including servers and infrastructure, you can use HP Systems Insight Manager to do the job.
XP Command View Advanced Edition	HP StorageWorks XP Command View Advanced Edition software provides centralized, web-based management for multiple XP disk arrays. It reduces the total cost of XP array ownership by increasing the efficiency of storage administrators and saves time in the management of external storage.
XP Thin Provisioning	HP StorageWorks XP Thin Provisioning software allows you to reduce costs, accelerate return on investment, and reduce environmental impact by supplying disk storage capacity to your applications from a pool of virtualized storage and automatically allocating physical capacity as needed. Configure all of the capacity you will need in the future, but only buy the capacity you need today.
XP Array Manager	HP StorageWorks XP Array Manager software provides configuration and management of HP StorageWorks XP24000 Disk Array data volumes, provides the ability to allocate disk array resources, provides configuration, management and security for disk array accesses, and provides enhanced data security.
Remote replication software	
Continuous Access EVA	HP StorageWorks Continuous Access EVA software is an array-based application that utilizes a powerfully simple graphical user interface (GUI) to create, manage and configure remote replication on entire EVA product family.
XP Continuous Access	HP StorageWorks XP Continuous Access software products are high-availability remote replication and disaster recovery solutions that deliver host-independent real-time remote data replication between HP StorageWorks XP Disk Arrays. With seamless integration into a full spectrum of remote replication-based solutions, HP XP Continuous Access software can be deployed in solutions ranging from data migration to high-availability server clustering.
Storage Mirroring	HP StorageWorks Storage Mirroring provides host-based, real-time continuous replication for small and midsize business customers seeking a low-cost alternative to expensive fabric or array-based solutions. Patented replication and failover technology continuously captures byte-level changes as they happen and replicates those changes to one or more target servers at any location without geographic limitations.
Local replication software	
Business Copy EVA	HP StorageWorks Business Copy EVA software is an array-based application that utilizes a powerfully simple HP StorageWorks Replication Solutions Manager user interface to create, manage and configure local replication on the full EVA product family to meet business continuity and regulatory requirements.
XP Business Copy	HP StorageWorks XP Business Copy software creates local copies of data for businesses that are concerned about business continuity, and that need to reduce the cost of backups, accelerate recovery from failures, and simplify development and testing.
Storage Virtual Replicator	HP Storage Virtual Replicator server-based virtualization enables users to erase the physical boundaries of their storage units and provide flexible, simplified storage management for Microsoft Windows environments.
Data protection and recovery software	
Data Protector	HP Data Protector software automates high-performance backup and recovery, from disk or tape, over unlimited distances, to enable 24x7 business continuity and increase IT resource utilization. Data Protector simplifies the use of complex backup and recovery procedures with the fastest installation, automated routine tasks and easy-to-use features.
Data Protector Express	HP Data Protector Express software provides simple and reliable backup and recovery for file servers, application servers and desktops that is suitable for organizations without dedicated IT staff.
Business continuity software	
Fast Recovery Solutions	HP StorageWorks Fast Recovery Solution (FRS) enables the instant recovery of Microsoft Exchange 2003 databases. Perfect for environments that require the highest level of availability, FRS is designed to allow application administrators to utilize the automated disaster recovery technologies built into HP StorageWorks Disk Arrays systems, without extensive storage training.
Cluster Extension EVA and XP	HP StorageWorks Cluster Extension EVA and XP software continues your critical applications within minutes or seconds after an event. It offers disaster tolerance against application downtime from fault, failure or site disaster by extending clusters between data centers. It works seamlessly with your open-system clustering software and XP storage systems to automate fail-over and fail-back between sites.
Storage device management software	
XP External Storage	HP StorageWorks XP External Storage allows you to host XP Disk Array volumes on select external storage subsystems. You can use storage tiers and provision an XP Disk Array solution to optimize return on IT investment—allocating high-performance/high-availability native XP Disk Array capacity to your most mission-critical data while hosting less critical data on cost optimized external storage subsystems.
XP Disk/Cache Partition	This software can reduce storage costs by dividing a large HP StorageWorks XP12000 into smaller segments suitable for departmental usage, while retaining superb performance and high availability.

HP Services

HP offers the world's broadest storage and server portfolio, backed by focused innovation, world-class partners and integrated with best-in-class software and services to form the best customer solutions. HP Services provides continuous care and support expertise with committed response times designed to meet your IT and business needs. To fully capitalize on your HP StorageWorks Array capabilities requires a service partner who thoroughly understands your storage and server technologies, as well as your systems environment. HP Services, an industry leader in the provision of multi-vendor support solutions, provides a range of services designed to meet the varying needs of your demanding business.

Backup and Recovery Solution Service	Scalable solution providing fast restore with reduced cost and reduced risk
SAN Solution Service	End technology services make the most of your investment
Critical Service	Reduces impact of unplanned downtime and improves IT operational efficiency
HP StorageWorks Disk Array Installation and Startup Service	Proper installation of your storage hardware is crucial to help realize the maximum ROI
Proactive 24 Service	Improve uptime with responsive hardware and software services available 24x7
Support Plus 24 Service	Increase availability of your MSA IT infrastructure with comprehensive 24x7 hardware and software services
HP Performance Analysis for the StorageWorks XP/EVA Disk Arrays	Increases performance, stability and availability by identifying potential bottlenecks

HP Care Pack Services

Scalable. Flexible. Reliable. Like your storage. Service made simple.

Customers can optimize technology operations, decrease risk and drive business outcomes with easy-to-buy, easy-to-use scalable support packages for servers, storage, networking, desktops, mobile computing, printing and imaging, and software.

HP Care Pack Services help you make the most of your hardware and software investments. They extend and expand your standard product warranty and let you choose the support levels that meet your business requirements, from basic to mission-critical while helping you to contain total cost of ownership.

HP Care Pack warranty extension can be purchased along with HP products to cost-effectively upgrade or extend your warranty. For many products, post warranty HP Care Pack Services are available when your original warranty has expired. For more information on these services, visit www.hp.com/services/storage_carepacks.

Additional HP Support Services

Provide support for your critical data

HP Services provides a broad spectrum of services to commercial and enterprise customers, including performance and availability services such as proactive mission-critical services, as well as support management services for deployment of the entire IT infrastructure, including HP and multi-vendor environments. For more information on these services, visit www.hp.com/hps/storage.

HP Education Services

Provide a strong commitment to training your work force

HP offers a variety of training methods to fit your needs including traditional instructor-led courses at one of our 120 training centers worldwide, on-site training customized to your needs in your facility, or remotely assisted instruction Learning that combines the best of traditional classroom training (including live instructor and labs) with the best of online training (no travel required). And, if you like learning on your own schedule at your own pace, make use of e-learning opportunities on the award-winning HP IT Resource Center, a learning community with extensive on-demand resources that can be accessed 24x7. For more information on these services, visit <http://education.hp.com/curr-storsan.htm>.

HP Factory Express

Get more from your IT investment

While your StorageWorks solution is in the HP factory, consider having HP do the labor-intensive tasks such as software loading, component installation and any needed customization, configuration or integration. HP Factory Express delivers your HP StorageWorks solution ready to go—right out of the box—with a portfolio of pre-defined and pre-priced factory-based solutions and deployment services that support HP StorageWorks devices and infrastructure. For more information on HP Factory Express, visit www.hp.com/go/factoryexpress.

HP Financial Services

The smartest way to invest in IT

HP makes it easy on the balance sheet to put the power of the HP portfolio to work for you through HP Financial Services. HP Financial Services offers a complete array of leasing and financial lifecycle management services in more than 50 countries around the world. HP can help you transition from existing equipment to the latest technology, acquire a new solution cost-effectively and manage that solution throughout its lifecycle. Our goal is to help you increase the return on your IT investment, reduce risk and get the most from your HP solution. For more information on HP Financial Services, visit www.hp.com/go/hpfinancialservices.

HP server portfolios

What kind of server best suits your needs? What level of high availability and performance do you require? How many users will be supported? What operating system will you be using? Whether it's a departmental server, an enterprise data center or anything in between, HP is committed to meeting your exact needs. This commitment has resulted in more customers choosing HP servers than any other vendor's servers.*

Our portfolio:

- **HP ProLiant servers**—offer a superior platform for your mainstream 32-bit and emerging 64-bit x86 applications. ProLiant servers are the world's top selling x86 industry-standard servers.*
- **HP Integrity servers**—the premier choice for your most demanding workloads and applications running on HP-UX, OpenVMS, Microsoft Windows Server 2003 and Linux.

- **HP Integrity NonStop servers**—ideal when user service levels are paramount. They deliver the highest levels of availability, fail-safe data integrity and linear scalability for ultimate business continuity.

What can you do to simplify a growing, multi-server environment? How do you integrate all the moving parts and deliver business solutions on time and under budget?

- **HP BladeSystem**—a simple, modular infrastructure that is consolidated up front to save you more time, energy and money—regardless of what you put inside. In one consolidated box, a BladeSystem supports ProLiant and Integrity server blades, StorageWorks storage offerings and a variety of virtual desktop and workstation solutions. With the essential IT elements built-in—compute, network, storage, management and power and cooling—the BladeSystem is a more efficient way to deliver reliable, cost-effective services to your business.

For more information

To learn more about HP StorageWorks Arrays, contact your local HP representative, your authorized HP reseller or visit: www.hp.com/go/arrays.

To learn more about HP server portfolios, contact your local HP representative, your authorized HP reseller or visit:

- www.hp.com/go/proliant
- www.hp.com/go/integrity
- www.hp.com/go/nonstop

* Source: IDC Worldwide Quarterly Server Tracker, February 2007

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To learn more, visit www.hp.com/go/storageworks

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