

# Technical comparison MSA - EVA

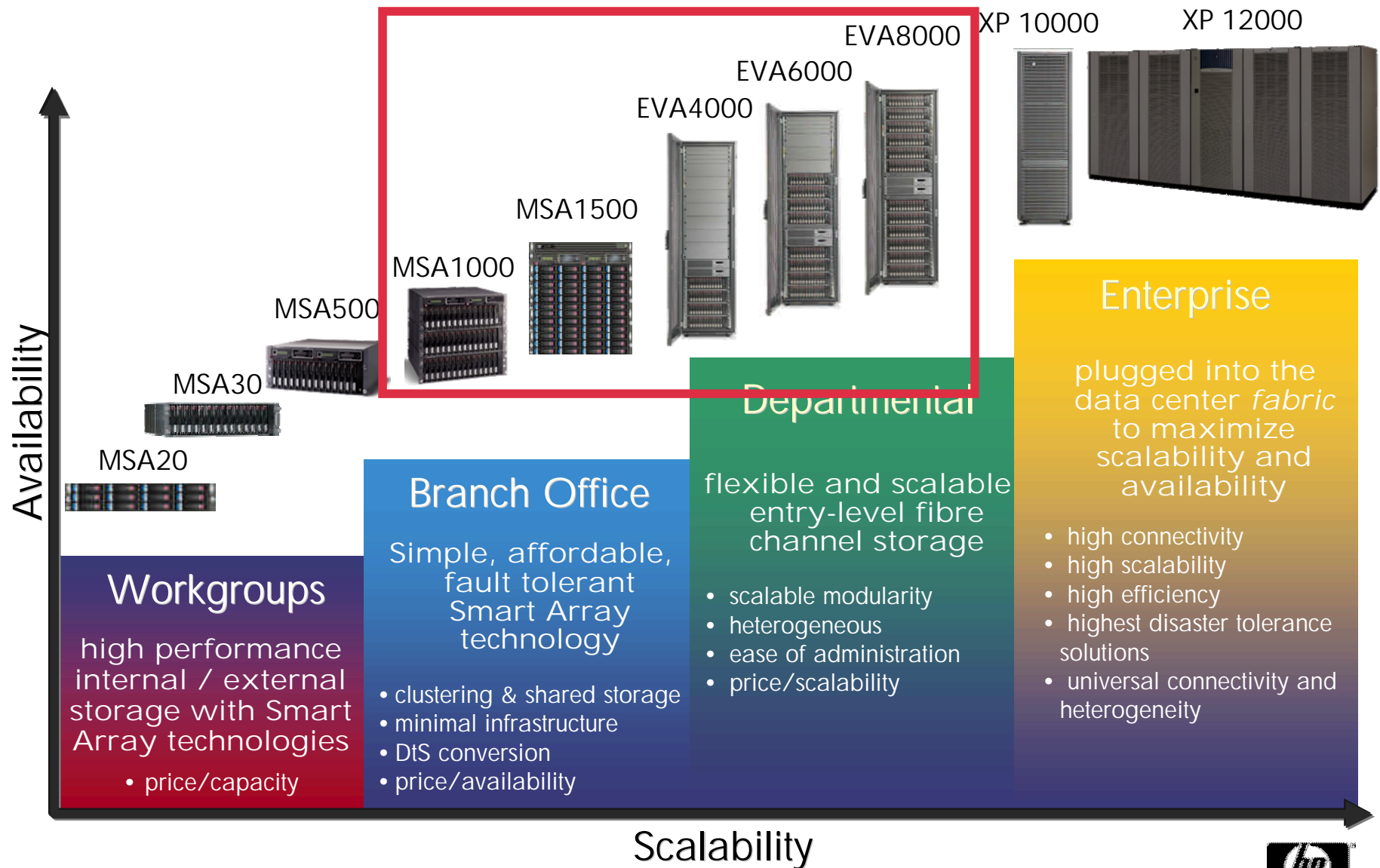
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# StorageWorks Market Coverage



# MSA – EVA – a comparison

## MSA1000/1500

- + Based on HP Smart Array Controller
  - + Same concept and same intuitive management (ACU) as with ProLiant
  - + RAID-Level Migration possible
  - + LUN growth
- + Universal SCSI Drive Support
- + Low-cost SATA Drive Support (MSA1500)
- + RAID6 (ADG) Support
- + Lower cost than EVA
- Lower performance than EVA
- Limited heterogeneity
- Limited scalability (32 LUNs max)
- No Array based replication
- Limited flexibility
  - Only the last LUN in an Array Group can be deleted (However, all LUNs can be resized and remapped)

## EVA4000/6000/8000

- + Inherent Virtualization
  - + Ease of management
  - + Automated load balancing
  - + LUN growth
- + Scalability
  - + Up to 240 Disks/120TB
  - + Up to 256 Server and 1024 LUNs
- + Performance
  - + Up to 55'900 backend IOPS
  - + Up to backend 1'430MB/s
- + Heterogeneous Multiplatform-Support
  - + Windows2000/2003, HP-UX, AIX, Solaris, Netware, Linux, OVMS, Tru64, VMWare
- + Replication support
  - + Business Copy EVA – local copy (SnapShot/SnapClone/MirrorClone)
  - + Continuous Access EVA – remote copy
- + Low-cost FATA Disk Support
  - + Concurrent support in same disk enclosures
- Higher cost than MSA

# Technical specifications

	MSA1000	MSA1500	EVA4000	EVA6000	EVA8000
Controller	Smart Array		HSV200		HSV210
Cache size	0.5 – 1GB		4GB		8GB
RAID Levels	0, 1, 10, 5, 6		VRAID0, VRAID1, VRAID5		
Supported OS	Windows, HP-UX, Linux, OpenVMS, Tru64, SCO, VMWare, Netware	Windows, HP-UX, Linux, SCO, VMWare, Netware	Windows, HP-UX, Linux, IBM AIX, OpenVMS, Tru64, SUN Solaris, VMWare, Netware		
Supported Drives	SCSI: 72 – 300GB	SCSI: 72 – 300GB SATA: 250, 500GB	FC: 72 - 300GB FATA: 500GB		
Host ports	FC: 2 14 mit int. Switches	FC: 2	FC: 4		FC: 8
Device ports	SCSI: 1 - 4		FC: 4		FC: 8
Max # of LUN	32		1024		
Max # of Server	32		256		
Max # of Drives	42 SCSI	56 SCSI oder 96 SATA	8 - 56	16 – 112	8 – 240
Max # of Enclosures	3	4 SCSI oder 8 SATA	1 – 4	4 - 8	2 – 18
Max Capacity	12TB SCSI	16.8TB SCSI oder 48TB SATA	16.8TB FC oder 28TB FATA	33.6TB FC oder 56TB FATA	72TB FC oder 120TB FATA
Backend Performance	3'200 IOPS 200 MB/s	5'000 IOPS 315 MB/s	13'700 IOPS 340 MB/s	27'100 IOPS 770 MB/s	53'600 IOPS 1'430 MB/s



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