# HP StorageWorks 8000 Enterprise Virtual Array (EVA8000)

Data sheet





The HP StorageWorks 8000 Enterprise Virtual Array (EVA8000) is one of three next generation storage array products. Designed specifically for customers in the enterprise marketplace, the EVA8000 offers a high performance, high capacity and high availability "virtual" array storage solution that removes the time, space and cost boundaries of traditionally architected storage.

The HP StorageWorks EVA8000 is designed for the datacenter where there is a critical need for improved storage utilization and scalability. The EVA8000 meets application-specific demands for consistently high transaction I/O for the enterprise customer and provides easy capacity expansion, instantaneous replication and simplified storage administration. The EVA8000 combined with the HP StorageWorks Command View EVA software provides a comprehensive solution designed to simplify and maximize performance.

HP offers a full spectrum of HP StorageWorks EVA hardware and software product services. This ranges from the new Foundation Service Solution—the base level of service included with every EVA—to Critical Service, HP's support for mission critical environments.

#### What's nev

- New HP StorageWorks EVA4000/6000/8000 v5.0a controller media kit
- Completion of operating system qualifications
- Full feature support for Business Copy and Continuous Access EVA
- HP Systems Insight Manager included with the EVA8000

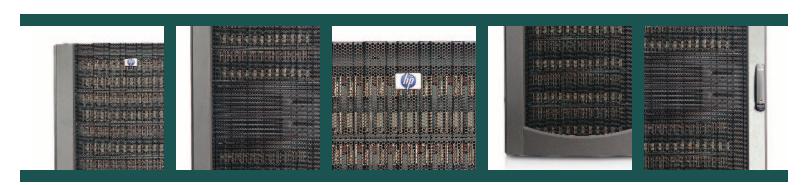
#### **Software solutions**

In conjunction with HP StorageWorks EVA hardware products, HP offers a wide range of software products to help you manage your environment and get the most from your EVA devices.

The HP StorageWorks 8000 Enterprise Virtual Array provides a powerfully simple storage solution for customers in the enterprise marketplace. With proven performance that eliminates the time, space and cost boundaries of traditional storage, the HP StorageWorks EVA8000 provides the scalability, flexibility and availability that you are looking for.



The HP StorageWorks EVA8000 supports from 50.4TB in a single cabinet and up to 72 TB with an expansion cabinet today (and more when larger disks are available) of versatile storage capacity, with any combination of high performance Fibre Channel (FC) and/or low cost Fibre Attached Technology Adapted (FATA) drives with any of the supported Vraid types.



- HP StorageWorks Command View EVA—Command
   View EVA is a comprehensive software suite designed
   to take advantage of EVA virtualization technology to
   simplify array management. It provides a powerfully
   simple storage management experience when compared
   to managing storage using traditional array approaches
   without compromising application availability. HP
   StorageWorks Command View EVA scales from SMB to
   enterprise. It offers storage administrators the industry's
   easiest approach to configuring and provisioning storage
   at the lowest cost. For more information please visit
   http://h18006.www1.hp.com/products/storage/
   software/cmdvieweva/index.html. This software suite
   is required with use of HP StorageWorks EVA devices.
- HP StorageWorks Business Copy EVA—Business
  Copy EVA is a unique, powerfully simple integrated
  management and point-in-time solution. It's an easy
  to use, efficient and cost-effective business continuance
  application offering quick implementation and
  accelerated payback. For more information please
  visit http://h18006.www1.hp.com/products/storage/
  software/bizcopyeva/index.html. This is an optional
  software package for use with HP StorageWorks
  EVA devices.
- HP StorageWorks Continuous Access EVA—Continuous
   Access EVA is an integrated manage and remote
   replication solution. It provides an easy to use, efficient
   and cost-effective business continuance application
   offering quick implementation and accelerated
   payback. For more information please visit
   http://h18006.www1.hp.com/products/storage/
   software/conaccesseva/index.html. This is an optional

- software package for use with HP StorageWorks EVA devices.
- HP StorageWorks Secure Path—Secure Path eliminates lost data or system downtime because of a lost connection to the host. The Secure Path products are targeted for Enterprise customers with mission-critical applications. Refer to http://h18006.www1.hp.com/products/storage/software/securepath/index.html for ordering information and part numbers for Secure Path. This is an optional software package for use with HP StorageWorks EVA devices.
- Multi-path failover software—There is different multipath software available for individual operating systems (OS). Some of these software packages are native to the OS, others are available on HP's website and can be downloaded free of charge. These are optional software packages for use with HP StorageWorks EVA devices.
- HP-UX—pvlinks native in HP-UX
- Windows®—full featured MPIO, available from HP
- Linux®-Qlogic Failover driver, available from Qlogic
- Tru64—native in OS
- OpenVMS—native in OS
- AIX-MPIO native in OS
- Solaris—MPxIO native in OS, Veritas DMP available from Veritas
- NetWare—MPIO native in OS (planned for support in Fall 2005)
- VMWare—MPIO native in OS (planned for support in Fall 2005)

ISEE, the remote service tool for HP StorageWorks EVA devices, provides, at no additional cost, event monitoring and proactive diagnostic capability via transmission of EVA status to the HP Service Center for proactive problem resolution.

Refer to http://h18006.www1.hp.com/products/ sanworks/multipathoptions/index.html for information on other multi-path options. These are optional software packages for use with HP StorageWorks EVA devices.

- HP StorageWorks Fast Recovery Solution for Windows 2003—Fast Recovery Solution for Windows 2003 software manages the recovery of Microsoft® Exchange and SQL databases from a single graphical user interface in minutes, without moving the data outside the disk array, while other databases remain online. For more information please visit http://h18006.www1.hp.com/ products/storage/software/frs2003/index.html. This is an optional software package for use with HP StorageWorks EVA devices.
- EVA with HP Systems Insight Manager—Enclosed as an accessory with all StorageWorks arrays is HP Systems Insight Manager (SIM). HP SIM is the foundation for HP's unified server-storage strategy—it is packaged as a no-cost, customer installable management application. HP SIM provides discovery and identification, fault management, security administration, asset reporting, and centralized configuration management across heterogeneous servers, storage and infrastructure. For more information please visit http://nimbus.cup.hp.com/prodinfo.html

For more information on storage software solutions, please visit <a href="http://h18006.www1.hp.com/storage/software.html">http://h18006.www1.hp.com/storage/software.html</a>

#### Key features and benefits

- Simplicity without compromise: HP StorageWorks EVA8000 combined with the HP StorageWorks Command View EVA Software Suite simplifies and automates large enterprise storage area networks (SANs) and lowers total cost of ownership. Allows online LUN growth without compromising application availability. The EVA family has proven that it provides excellent ease-of-use features to customers.
- Growth without limits: Increased throughput using new controllers that provide twice the host ports and double the cache mirroring ports for improved I/O

- performance. Outstanding virtualization features ensure all the disks in the array are used more efficiently, keeping them all busier and eliminating bottlenecks that lower performance. The HP StorageWorks EVA8000 also provides the ability to add physical disks online quickly with the capacity needed without the restrictions typically associated with adding disks online with traditional arrays.
- Virtualization: State-of-the-art design improves performance, disk usage and allows for easy dynamic storage expansion. When new disks are added to groups, the controller automatically distributes the data and removes potential hot spots.
- Virtually instantaneous Snapclone: Allows for immediate use of the clone copy, saving significant time.
- Virtually capacity-free Snapshot (Vsnap): Saves customers disk space and improves disk utilization efficiency.
- High capacity: Supports up to 50.4 TB in a single cabinet, and up to 72 TB, with an expansion cabinet, of versatile storage capacity, with any combination of high performance Fibre Channel (FC) and/or low cost Fibre Attached Technology Adapted (FATA) drives with any of the supported Vraid types. Can quickly and easily add physical disks online.
- Support: Enables effectiveness of deployment and delivers the proactive services required to help maintain a stable, highly available EVA8000 storage platform over time.
- Remote service tools: If you're managing a 24x7
  business with little tolerance for unplanned downtime,
  HP Instant Support Enterprise Edition (ISEE) with
  proactive remote monitoring can help keep your IT
  infrastructure highly available. ISEE, the remote service
  tool for HP EVA devices, provides, at no additional cost,
  event monitoring and proactive diagnostic capability
  via transmission of EVA status to the HP Service Center
  for proactive problem resolution.

#### **Technical specifications**

## HP StorageWorks 8000 Enterprise Virtual Array (EVA8000)



Temperature	Operating: $50^\circ$ to $95^\circ$ F/ $10^\circ$ to $35^\circ$ C, reduce rating by $1^\circ$ F for each $1000$ ft altitude ( $1.8^\circ$ C/ $1,000$ m) Non-operating: $-40^\circ$ to $150^\circ$ F/ $-40^\circ$ to $66^\circ$ C		
Dimensions (HxWxD)	EVA8000 2C2D, 2C6D, 2C12D (42U cabinet): 78.85 x 23.73 x 40.22 in (200.28 x 60.27 x 102.16 cm)		
Model differences  EVA8000 2C2D 60Hz (or 50Hz) 42U cabinet – up to 28 drives  EVA8000 2C6D 60Hz (or 50Hz) 42U cabinet – up to 84 drives  EVA8000 2C12D 60Hz (or 50Hz) 42U cabinet – up to 168 drives  With EVA expansion cabinet – up to 240 drives			
Maximum capacity	Using any combination of high performance drives and 250 GB low cost FATA drives, the EVA8000 can support up to a maximum capacity of 72 TB (with the largest capacity drives available) with any Vraid type supported. Total usable capacity will vary based upon the desired combination of disk redundancy chosen, Vraid 0, Vraid 1 and Vraid 5.		
Supported operating system platforms	HP-UX, HP Tru64 UNIX, HP OpenVMS, Windows 2000, Windows Storage Server 2003, Sun Solaris, Linux, IBM AIX, NetWare* and VMware* *Planned for Fall 2005		
Altitude	Operating:50° to 95°F/10° to 35C, reduce rating by 1°F for each 1000 ft altitude (1.8°C/1,000m) Non-operating: -40° to 151°F/-40° to 65°C		
Humidity range	Operating: 10% to 90% non-condensing; Non-operating: up to 95% non-condensing		
Data Protection with HP StorageWorks Enterprise Modular Library (EML) E-Series	cs Enterprise EML can be scaled to meet it. Adding HP OpenView Storage Data Protector completes the data protection solution. For more information on the		

#### Ordering information

Product number/SKU	Product name	Description		
AD518A		Two M5314A 3U dual-redundant Fibre Channel (FC) Loop 14-bay disk enclosures, 4U dual HSV210 controller assemblies, 42U cabinet, dual 60Hz Power Distribution Units (PDUs) with Foundation Services		
AD519A	HP EVA8000 2C2D 50Hz 42U Cabinet	Two M5314A 3U dual-redundant FC Loop 14-bay disk enclosures, 4U dual HSV210 controller assemblies, 42U graphite storage cabinet, dual 50Hz PDUs with Foundation Services		
AD520A	HP EVA8000 2C6D 60Hz 42U Cabinet	Six M5314A 3U dual-redundant FC Loop 14-bay disk enclosures, 4U dual HSV210 controller assemblies, four FC loop switches, 42U cabinet, dual 60Hz PDUs with Foundation Services		
AD521A	HP EVA8000 2C6D 50Hz 42U Cabinet	Six M5314A 3U dual-redundant FC Loop 14-bay disk enclosures, 4U dual HSV210 controller assemblies, four FC loop switches, 42U cabinet, dual 50Hz PDUs with Foundation Services		
AD522A	HP EVA8000 2C12D 60Hz 42U Cabinet	Twelve M5314A 3U dual-redundant FC Loop 14-bay disk enclosures, 4U dual HSV210 controller assemblies, four FC loop switches, 42U cabinet, dual 60Hz PDUs with Foundation Services		
AD523A	HP EVA8000 2C12D 50Hz 42U Cabinet	Twelve M5314A 3U dual-redundant FC Loop 14-bay disk enclosures, 4U dual HSV210 controller assemblies, four FC loop switches, 42U cabinet, dual 50Hz PDUs with Foundation Services		
T4256B	EVA4000/6000/8000 v5.0a controller media kit	EVA4000/6000/8000 v5.0a controller media (XCS) for dual HSV210 or HSV200 controllers		
	HP StorageWorks Command View EVA v4.1	Command View EVA.1 is required to operate with the components of the EVA4000/6000/8000 v5.0a controller media kit. For more information on this product please visit http://h18006.www1.hp.com/products/storage/software/cmdvieweva/index.html		
	HP StorageWorks Secure Path	Secure Path software is used to manage multiple paths between hosts and storage systems. It enables high availability through robust path management and optimizes performance with I/O load balancing. Secure Path support is available for multiple operating systems. visit http://h18006.www1.hp.com/products/storage/software/securepath/index.html for details.		
289191-B23	42U EVA5000 cabinet, 60Hz	EVA5000 utility cabinet		
289191-B24	42U EVA5000 cabinet, 50Hz	EVA5000 utility cabinet		

#### Ordering information

## HP StorageWorks 8000 Enterprise Virtual Array (EVA8000)



Product number/SKU	Product name	Description	
Options			
238921-B23 #0D1	72 GB 10K rpm FC disk Factory Integrated (Excluding EMEA)	72 GB 10K rpm dual-port 2Gb FC-AL 1-inch disk drive factory integrated	
238921-B22 #0D1	72 GB 10K rpm FC disk Factory Integrated (EMEA)	72 GB 10K rpm dual-port 2Gb FC-AL 1-inch disk drive	
238921-B22	72 GB 10K rpm FC disk Upgrade	72 GB 10K rpm dual-port 2Gb FC-AL 1-inch disk drive upgrade	
293556-B23 #0D1	146 GB 10K rpm FC disk Factory Integrated (Excluding EMEA)	146 GB 10K rpm dual-port 2Gb FC-AL 1-inch (2.54 cm) drive factory integrated	
293556-B22 #0D1	146 GB 10K rpm FC disk Factory Integrated (EMEA)	146 GB 10K rpm dual-port 2Gb FC-AL 1-inch disk drive	
293556-B22	146 GB 10K rpm FC disk Upgrade	146 GB 10K rpm dual-port 2Gb FC-AL 1-inch (2.54 cm) drive Upgrade	
364622-B23 #0D1	300 GB 10K rpm FC disk Factory Integrated (Excluding EMEA)	300 GB 10K rpm dual-port 2Gb FC-AL 1-inch (2.54 cm) drive factory integrated	
364622-B22 #0D1	300 GB 10K rpm FC disk Factory Integrated (EMEA)	300 GB 10K rpm dual-port 2Gb FC-AL 1-inch (2.54 cm) drive factory integrated	
364622-B22	300 GB 10K rpm FC disk Upgrade	300 GB 10K rpm dual-port 2Gb FC-AL 1-inch (2.54 cm) drive upgrade	
293568-B23 #0D1	72 GB 15K rpm FC disk Factory Integrated (Excluding EMEA)	72 GB 15K rpm dual-port 2Gb FC-AL 1-inch disk drive factory integrated	
293568-B22 #0D1	72 GB 15K rpm FC disk Factory Integrated (EMEA)	72 GB 15K rpm dual-port 2Gb FC-AL 1-inch disk	
293568-B22	72 GB 15K rpm FC disk Upgrade	72 GB 15K rpm dual-port 2Gb FC-AL 1-inch disk drive upgrade	
364621-B23 #0D1	146 GB 15K rpm FC disk Factory Integrated (Excluding EMEA)	146 GB 15K rpm dual-port 2Gb FC-AL 1-inch disk drive factory integrated	
364621-B22 #0D1	146 GB 15K rpm FC disk Factory Integrated (EMEA)	146 GB 15K rpm dual-port 2Gb FC-AL 1-inch disk drive	
364621-B22	146 GB 15K rpm FC disk Upgrade	146 GB 15K rpm dual-port 2Gb FC-AL 1-inch disk drive	
364437-B23*	250 GB Fibre Attached Technology Adapted (FATA) disk Factory Integrated (Excluding EMEA)		
364437-B22 #0D1	250 GB FATA disk Factory Integrated (EMEA)	250 GB FATA disk dual-port 2Gb FC hybrid disk drive factory integrated	
364437-B22*	250 GB FATA disk Upgrade	250 GB FATA disk dual-port 2Gb FC hybrid disk drive upgrade	
*Note minimum order require	ment, with the fist installation of 250 GB FATA	add-on drives on an EVA, a minimum of 8 FATA drives are required to create the new near-online disk group.	
AD542A	HP M5314A FC Drive Enclosure	M5314A 3U FC Drive Enclosure	
AD542A #0D1	HP M5314A FC Drive Enclosure Factory Integrated	M5314A 3U FC Drive Enclosure Factory Integrated	

#### Ordering information

### HP StorageWorks 8000 Enterprise Virtual Array (EVA8000)



Product number/SKU	Product name	Description		
AD553A	EVA8000 FC Loop Switch Option	Loop Switch Kit option for EVA8000 Factory Integrated (option for 2C2D)		
AD553A #0D1	EVA8000 FC Loop Switch Option	Loop Switch Kit option for EVA8000 (option for 2C2D)		
221692-B21	2-meter LC-LC Multi-Mode Fibre Cable	2-meter LC-LC Multi-Mode Fibre Cable used to interconnect EVA8000 to switches (with LC connectors) or switches to FC Host Bus Adapters (HBAs) (with LC connectors)		
221692-B22	5-meter LC-LC Multi-Mode Fibre Cable	5-meter LC-LC Multi-Mode Fibre Cable used to interconnect EVA8000 to switches (with LC connectors) or switches to FC HBAs (with LC connectors)		
221692-B23	15-meter LC-LC Multi-Mode Fibre Cable	15-meter LC-LC Multi-Mode Fibre Cable used to interconnect EVA8000 to switches (with LC connectors) or switches to FC HBAs (with LC connectors)		
221692-B26	30-meter LC-LC Multi-Mode Fibre Cable	30-meter LC-LC Multi-Mode Fibre Cable used to interconnect EVA8000 to switches (with LC connectors) or switches to FC HBAs (with LC connectors)		
221692-B27	50-meter LC-LC Multi-Mode Fibre Cable	50-meter LC-LC Multi-Mode Fibre Cable used to interconnect EVA8000 to switches (with LC connectors) or switches to FC HBAs (with LC connectors)		
345580-B21	Cable kit for the EVA5000 expansion cabinet	Cable kit for the EVA5000 expansion cabinet (also for EVA8000)		
	HP StorageWorks Continuous Access EVA	Continuous Access EVA v2.1 is a storage-based application that performs replication between HP StorageWorks Enterprise Virtual Arrays. Continuous Access EVA utilizes leading edge HP technologies to perform point-in-time local replication, highly available Fibre Channel multi-path support, dual FC fabric, nearline data protector and campus, metro or continental SAN extensions. For more information, visit http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html		
	HP StorageWorks Business Copy EVA	Business Copy EVA v3.0 is a storage-based application that performs local replication. It is sold by utilized capacity. For ordering information and part numbers, please visit <a href="http://h18006.www1.hp.com/storage/software.html">http://h18006.www1.hp.com/storage/software.html</a>		
	HP StorageWorks SAN components	The HP StorageWorks SAN integrates best-in-class networking components to deliver a complete connectivity platform for end-to-end network storage solutions. HP's fabric portfolio includes: HBAs, directors, switches, SAN extenders, NAS heads, iSCSI routers, and fabric software. HP SAN Infrastructure components deliver the network storage infrastructure for an Adaptive Enterprise. For details on SAN infrastructure components and storage compatibility information, please visit http://h18006.www1.hp.com/storage/saninfrastructure.html		
	Host Bus Adapters (HBAs) and SAN switches	For complete information of supported SAN components please visit www.hp.com/go/san		
	EVA iSCSI Solution	A powerful solution which provides iSCSI connectivity to an EVA without the need for extensive Fibre Channel infrastructure. EVA in an iSCSI environment offers the EVA high availability features and can be connected to both an iSCSI network and a Fibre Channel SAN. Basic Business Copy local data replication and basic Continuous Access functionality within the EVA can be used for data acquired over the iSCSI link. HP Proliant DL380 G4 or DL585 Storage Server and the HP Proliant iSCSI Feature Pack product combination are the perfect platforms from which to run Command View EVA for easy EVA management, iSCSI connectivity, EVA management and NAS file and print serving capabilities all in the same server. The iSCSI storage solution t is capable of hosting application storage (block), file, and print services on a single platform. This approach delivers single-platform manageability, easy scalability, and centralized backup. It provides investment protection by enabling low-cost storage consolidation using industry-standard hardware and software on existing Ethernet infrastructure. For more information: http://h18006.www1.hp.com/products/storage/software/inas/smbconsolidation.html http://h18006.www1.hp.com/storage/storage/software/inas/index.html		

What's included

The EVA8000 includes: four 2U graphite cabinet; dual Power Distribution Units with power cords; dual HSV210 controller pair; drive enclosures; four FC loop switches (for 2C6D and 2C12D models); FC interconnect cables between the internal modules; power cords for all modules; and mounting hardware for all models.

#### Warranty and support

#### HP StorageWorks 8000 Enterprise Virtual Array (EVA8000)



#### Warranty and services included with the EVA

EVA factory warranty includes Array Installation and Startup Service, 2-year hardware support, with 4-hour response on a 24x7 basis, as well as 2-year, 24x7 XCS phone-in support and updates. HP warrants only that the software media will be free of physical defects for a period of ninety (90) days from delivery. In countries where available, your HP Limited Warranty includes Customer Self Repair warranty services. Please refer to HP's Limited Warranty Statement for further details: http://h18006.www1.hp.com/products/storageworks/warranty.html. For more information about HP's Global Limited Warranty and Technical Support, visit ftp://ftp.compaq.com/pub/products/storageworks/warranty/EN\_321708-008.pdf

#### **HP Care Pack Services**

HP Care Pack Services offer upgraded service levels to extend and expand your standard product warranty with easy to buy, easy to use support packages that help you make the most of your hardware and software investments. They let you choose the support levels that meet your business requirements, from basic to mission-critical. They help you contain total cost of ownership. HP Care Pack warranty extensions 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. HP Care Pack availability may vary by country and product.

Why purchase an HP Care Pack service? Your standard warranty protects against product defects. HP Care Pack Services help you guard against unplanned downtime, which can reduce your productivity and profitability. You benefit from these convenient service packages as they provide consistent, predictable levels of support across your entire department or business; ease budget planning with fixed-cost support that includes parts and labor; and give you direct access to proven technical and problem-solving expertise.

Supporting your Adaptive Enterprise journey: HP Services helps you make an Adaptive Enterprise real for your organization. The breadth, depth and quality of HP hardware and software support services can help you improve the performance of your IT support processes and resolve the complex software and hardware problems that tax user productivity. HP Care Pack services help you increase IT environment stability, efficiency and agility from the desktop to the data center and improve the productivity of your employees.

Extend your product warranty with a wide choice of cost-saving support packages. HP Care Pack Services are sold by HP and HP authorized enterprise and commercial resellers. Services for customers purchasing via direct and enterprise resellers are quoted using HP order configuration tools. Additional information about HP Care Pack Service features and benefits is available at www.hp.com/hps/carepack/services/.

Key for HP Care Pack Service availability in the table below:

 ${f E}=$  Service available for customers purchasing direct and via enterprise resellers

C = Service available for customers purchasing via commercial resellers

na = Service not applicable

HP Care Pack Services Deployment and Per E HP Installation HP Installation & Startup HP Implementation	vent Services	<b>Service Availab</b> na Included E	le	
HP Care Pack Services Availability Services	1 yr	3 yr	4 yr	5 yr
HP 4-hour, 24x7 Hardware Support	n/a	E/C	E/C	E/C
HP Software Support	E/C	E/C	E/C	E/C
HP Software Support 24x7	E/C	E/C	E/C	E/C
HP Support Plus	E/C	E/C	E/C	E/C
HP Support Plus 24	E/C	E/C	E/C	E/C
HP Proactive Essentials 24x7 Unlimited	E/C	E/C	E/C	E/C
HP Proactive 24 Service	É	É	É	É
HP Critical Service	Е	Е	Е	Е

To find HP Care Pack Services available via HP authorized commercial resellers, visit http://h30125.www3.hp.com/csn/salesmktg/elfpack/elf\_nonlkup\_ctrylang.asp?code=ELNL

#### Recommended services

HP SAN Solution Service: Quickly realize the benefit of your SAN investment while reducing overall cost of ownership; fast, expert implementation that guards against unexpected compatibility issues, minimizes disruption to your business and optimizes performance; and provides a fully installed, configured and documented SAN with scalability that allows for additional capacity as your business grows.

HP Critical Services: Boost business productivity through increased server, storage, networking, and applications availability; minimize business losses caused by IT downtime; reduce risk and improve efficiency by proactively managing changes across your IT environment; resolve complex problems quickly through direct access to HP Services expertise and hands-on assistance; rapidly access single-source support from a team familiar with your business and technology infrastructure; and free your IT staff to focus on strategic business issues.

HP Proactive 24: Enhanced operational effectiveness and availability with proactive problem identification and solutions recommendations; partner with technical experts who help coordinate support, provide hands-on assistance, and share industry best practices and HP know-how with your staff; rapidly access single-source support spanning your environment from servers to storage to networking; obtain personalized services tailored to your business environment and objectives; anticipate necessary change—and execute it correctly the first time; and efficiently manage infrastructure resources to meet your performance objectives.

## HP StorageWorks 8000 Enterprise Virtual Array (EVA8000)

Recommended services (continued)	HP Support Plus 24: 24x7 4-hour on-site hardware support; material and parts included; work to completion for hardware support; 24x7 2-hour response XCS phone-in assistance; remote problem diagnosis and support; escalation management; software product and documentation updates; license to use and copy software product updates; and software electronic support.  HP Software Maintenance Service: Improve the productivity of system managers and operators; improve system performance and reduce downtime due to software defects; expedite problem resolution through expert-level technical resources; enjoy consistent service coverage across geographically dispersed sites; update HP and selected third-party software at a predictable cost; take advantage of subscription savings on software updates; and keep your license compliancy up-to-date.	
Deployment and per event ervice descriptions	Availability Assessment for SANs: Recommendations for reducing or eliminating risks to the availability of your SAN infrastructure.  SAN Solution Service: You get a powerful network storage solution up-and-running quickly and efficiently with minimum disruption and rapid returns on your SAN investment.  Data Migration: Transfers your critical information to a new or reconfigured storage array in an open systems environment—across a data center or around the world.  Data Replication Solution Service: Ensures a timely, cost-effective deployment of your data replication solution cuts risk and shortens your time-to-results.	
eSupport	HP eSupport is a portfolio of technology-based services that assist you with managing your business environment—from the desktop to the data center.  Support portal: The HP support portal provides one-stop access to the information, tools and services you need to manage the daily operations of your IT environment. Features include: Access to self-solve tools (including search technical knowledge base); efficient logging and tracking of support cases; collaboration with other business and IT professionals; download of patches and drivers; access to diagnostic tools; and proactive notification of relevant information. Access to certain features of the support portal requires an HP service agreement. To access the support portal visit www.hp.com/support  HP Instant Support Enterprise Edition (ISEE) provides a single remote monitoring and support solution for your IT data center. ISEE uses continuous hardware event monitoring and automated notification to identify and prevent potential critical problems. ISEE is a feature of HP Hardware Support Onsite Service with Next-Day response or better, Proactive Essentials, Proactive 24, Critical Service and warranty support for the selected products. For more information or to download ISEE, visit www.hp.com/go/instantsupport.	
P education services	Training for the Enterprise Virtual Array is now offered as part of HP comprehensive curriculum of HP Storage, Storage Management, and IT Service Management courses. These courses will provide the training required to realize the full potential of your HP EVA Virtual Array storage solutions, optimize your systems and SAN for highest efficiency, and achieve better return on your IT investments. For more information about HP Education Services for Storage and SAN, visit http://education.hp.com/curr-storsan.htm.	
Additional services information	For more information about Deployment, Per Event, Consulting and Education services for HP Storage, visit www.hp.com/hps/storage/ For more information about HP Care Pack Services for Storage, visit www.hp.com/hps/carepack/storage/cp_networked.html For more information about HP Storage Software, services and updates, visit http://h18006.www1.hp.com/storage/software.html If you have specific questions, contact your local HP representative. Contact information for a representative in your area can be found at "Contact HP" on www.hp.com.	
Awards	HP IT Resource Center (ITRC) and HP Business Support Center (BSC) were selected as two of the Association of Support Professional's (ASP) Top Ten award winners in its seventh annual Ten Best Web Support Sites competition for 2004, an award that showcases excellence in online service and support. www.hp.com/hpinfo/newsroom/press/2004/040616a.html HP earned the No. 1 ranking in customer satisfaction among vendors of corporate information technology (IT) service and support, according to the newly released Technology Business Research Inc.'s Corporate IT Service and Support survey covering the first quarter of 2004. www.hp.com/hpinfo/newsroom/press/2004/040624a.html	
inancial Services	HP Financial Services provides innovative financing and financial asset management programs to help you cost-effectively acquire, manage, and ultimately retire your HP solutions. For more information on these services, please contact your HP sales representative or find us on the web at: www.hp.com/go/hpfinancialservices	
IP Customer Support	HP Customer Support provides a broad spectrum of services to commercial and enterprise customers, including performance and availability services such as proactive mission-critical services and support management services for deployment of the entire IT infrastructure, including HP and multivendor environments. For more information on these services, contact your HP sales representative or visit www.hp.com/hps/support.	
For more information	For more information on the HP StorageWorks Enterprise Virtual Array 8000, visit www.hp.com/go/EVA8000	

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