

HP StorageWorks All-in-One Storage Systems

Data sheet



HP StorageWorks 400 All-in-One Storage System



HP StorageWorks 600 All-in-One Storage System



Unbelievably simple. Uniquely affordable.
Unquestionably reliable.

HP StorageWorks All-in-One (AiO) Storage Systems are radically simple, integrated and affordable network storage solutions that enable small and mid-size companies to easily manage, grow and protect their data. The HP StorageWorks AiO400 and AiO600 Storage Systems provide shared storage expansion for application servers (iSCSI SAN), enhanced file serving for end-user clients (Windows NAS), and comprehensive data protection features to ensure that your business is both safe and secure. These fully integrated solutions are designed to be deployed on the existing TCP/IP network or sub-net and offer everything you need to lower the cost and complexity associated with rapidly growing data environments.

The easy-to-use All-in-One Storage Manager interface reduces the time, expense and expertise required to keep up with rapidly growing applications like Microsoft® Exchange. Designed for IT generalists, not storage experts, this tool handles all underlying storage tasks and presents capacity in application-centric terms, giving administrators new found levels of control. Data migration tools for Microsoft Exchange Server 2003 and Microsoft SQL Server 2000 and 2005 include “best practice” recommendations which allow any IT generalist to look like a storage expert. Other setup tools for “user defined” data types such as Oracle® enable flexible deployment in many different environments. Administrators can quickly and easily setup or backup policies, setup end-user file shares and more.

HP All-in-One Storage Systems are ideal for growing small and mid-sized companies that need the management, consolidation and data protection features typically reserved for higher-priced and more complex storage architectures.

Features and benefits

- **Lowers the cost and complexity of data management**—The intuitive All-in-One Storage Manager radically simplifies the growth, management and protection of data. Designed for IT generalists with no storage expertise, these systems can be setup and actively serving files in less than 30 minutes.
- **Affordable and cost-effective solution for growing application environments**—Managed through a single interface, they provide shared application storage (iSCSI SAN), file serving (NAS) and data protection below the cost of separate products and without the need to change your infrastructure.
- **Application-centric storage management simplifies operation and lowers costs**—The All-in-One Storage Manager provides an application-centric framework that hides the complexities associated with storage. It is easier to learn and costs less to operate because it utilizes terms and functions that are familiar to application administrators.
- **“Best practice” toolkit makes every IT Administrator look like a storage expert**—Building on HP’s leadership in Microsoft® solutions, HP All-in-One Storage Systems include tools to easily migrate and manage data using best practice settings. For example, a Microsoft Exchange Storage Group can be migrated in less than 10 mouse clicks.
- **Shared storage for growing application servers (iSCSI SAN) enables efficient use of capacity**—Sharing storage between servers is more efficient and costs less to manage over time when compared against adding additional drives to individual servers. Sharing storage maximizes investments in additional capacity while enabling easier growth.
- **Enhanced file serving for end-user clients (NAS) to improve productivity and collaboration**—Built on Microsoft Windows® Storage Server 2003 R2, these solutions are tuned for file serving performance beyond standard Windows servers while improving capacity utilization by reducing duplicate files within shared volumes. Includes CIFS and NFS client access.
- **Comprehensive and integrated data protection to ensure easy roll-back and disaster recovery**—Data protection features include disk-based snapshots for easy roll-back, integrated data protection software for offsite and archive, hot plug disk drives (RAID) and hardware redundancy. Microsoft DFS-Replication functionality allows data to be replicated on a scheduled basis to another system.
- **Easy to deploy and manage so you can focus on your core business**—HP All-in-One Storage Systems use the iSCSI interface so they can be installed on existing TCP/IP networks (application subnet recommended). Standard hardware and drive enclosures offer easy support and future growth. The All-in-One Storage Manager quickly walks administrators through all setup and management tasks.
- **Award winning warranty, support and troubleshooting tools to ensure worry-free operation**—HP All-in-One Storage Systems can send alerts for various events such as an impending disk failure. HP’s world class support organization and partner network enable you to quickly recover in the case of a problem. Support is available 24/7/365 and HP even offers online chat/e-mail services.

HP Services

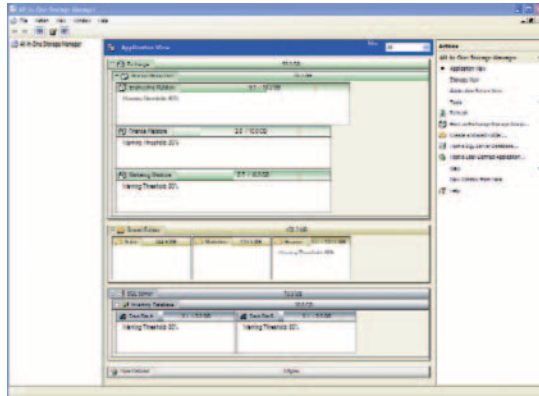
HP Services provide continuous care and support expertise with committed response designed to meet your IT and business needs. To fully capitalize on your HP StorageWorks All-in-One Storage System capabilities requires a service partner who thoroughly understands your server technology and systems environment. HP Services, an industry leader in provision of multivendor support solutions provides a range of services designed to meet the varying needs of business.

HP has a number of HP All-in-One Storage System support offers to help you speedily deploy and maximize system uptime:

- **Support Plus Service**—Minimum recommended service support offer designed to ensure you have access to expert assistance, whenever needed.
- **Support Plus 24 Service**—Cost-effective combined hardware and software support service designed to extend HP Services committed response and to speed more complex interoperability problem resolution.
- **Proactive 24 Service**—Highest HP Support service level recommended to help increase IT performance and availability, improve IT management with comprehensive, consistent and integrated proactive and reactive hardware and software support services.
- **Deployment Services**—HP Installation Service designed to take time, risk and worry out of the deployment of ProLiant servers—and free your IT team to focus on what they do best, meeting your business needs.

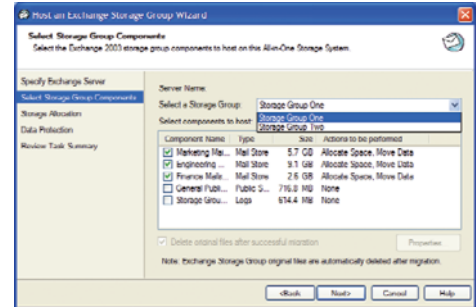
All-in-One Storage Manager.

A single interface to manage storage and data protection from an application-centric point of view.



Setup and migration tools.

IT generalists can quickly and easily setup storage and migrate data using “best practice” wizards.



Technical specifications



HP StorageWorks 400 All-in-One Storage System



HP StorageWorks 600 All-in-One Storage System

Processor	Dual-core Intel® Pentium® D (3.0 GHz)	Dual-core Intel Xeon 2.67 GHz/1333 MHz FSB
Cache	2 x 2MB L2	1 x 4MB L2
RAM standard/maximum	1 GB/4 GB	1 GB/4 GB
Storage included	1 TB (4 x 250 GB SATA, hot plug)	1.5 TB (6 x 250 GB SATA, hot plug) 3.0 TB (6 x 500 GB SATA, hot plug) 876 GB (6 x 146 GB Serial Attached SCSI (SAS) hot plug)
Remote management	iPMI 2.0	iLO
Redundant power/fans	No	Standard
Form factor	1U (rack)	5U (tower or rack)
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
Network controller	Embedded Dual Port Broadcom 5751 and 5721 10/100/1000	Embedded NC373i Multifunction Gigabit Network Adapter with TCP/IP Offload Engine plus Additional Dual port NC7170 10/100/1000T
Replication features	Scheduled replication to 2nd AiO400/600 via Microsoft DFS-R	Scheduled replication to 2nd AiO400/600 via Microsoft DFS-R
Storage controller	4 port hardware RAID controller (RAID 0/1/5/10)	Smart Array E200i Controller w/128 MB BBWC (RAID 0/1/5/10)
File serving support	CIFS and NFS	CIFS and NFS
iSCSI initiator support	Compliant with iSCSI industry standards including iSCSI initiator support for Microsoft, Linux, BSD, AIX and Solaris	Compliant with iSCSI industry standards including iSCSI initiator support for Microsoft, Linux, BSD, AIX and Solaris
Operating system	Microsoft Windows® Storage Server 2003 R2 (Standard Edition)	Microsoft Windows® Storage Server 2003 R2 (Standard Edition)
Data protection features	<ul style="list-style-type: none"> • Hardware RAID (0, 1, 5, 10) • Snapshots (512 per volume) • Integrated tape backup software (HP Data Protector Express) • Optional SCSI HBA for connection to tape backup hardware 	<ul style="list-style-type: none"> • Hardware RAID (0, 1, 5, 6, 10) • Snapshots (512 per volume) • Integrated tape backup software (HP Data Protector Express) • Optional SCSI HBA for connection to tape backup hardware
Hardware warranty	3-year parts exchange, 1-year labor, 1-year on-site next business day response	3-year parts exchange, 3-year labor, 3-year on-site next business day response
Software support	1-year, 9-hours/day, 5-days a week of software advisory and remedial software telephone support	1-year, 9-hours/day, 5-days a week of software advisory and remedial software telephone support

Warranty and services

Included with the Product HP basic Software warranty provides that the Software media will be free of physical defects for a period of ninety (90) days from delivery. In addition to this basic Software warranty HP also includes, as part of the product, a 1-year, Software Support Care Pack that provides phone in support for 9-hours/day, 5-days/week for all the bundled software including the WSS2003 R2 operating system including the iSCSI functionality, and the Data Protector Express application, and the enhanced All-in-One Storage Manager (ASM) GUI.

The HP AiO600 comes with a 3-3-3 hardware warranty (3-years parts exchange, 3-years labor, and 3-years on-site, next business day response) for product hardware.

The HP AiO400 comes with a 3-1-1 hardware warranty (3-years parts exchange, 1-year labor, and 1-year on-site, next business day response) for product hardware.

HP warrants only that the software media will be free of physical defects for a period of ninety (90) days from delivery. For more information about HP's Global Limited Warranty and Technical Support, visit: www.hp.com/products/storageworks/warranty.

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. For more information on these services, contact your local HP sales representative, authorized HP business partner, or visit: www.hp.com/go/storage/carepacks.

Additional HP support services

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 multivendor environments. For more information on these services, contact your HP sales representative, authorized HP business partner, or visit: www.hp.com/hps/storage.

Education services

HP offers a variety of training methods to fit your needs including traditional instructor-led courses at one of our 120 training centers worldwide, onsite training customized to your needs, in your facility, or even Remotely Assisted Instruction Learning that combines the best of traditional classroom training (including its live instructor and labs) with the best of online training (no traveling 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, contact your HP sales representative, authorized HP business partner, or visit: <http://education.hp.com/curr-storsan.htm>.

Financial services

HP Financial Services provides innovative financing and financial asset management programs to help customers cost-effectively acquire, manage, and ultimately retire their HP solutions. For more information on these services, please contact your HP sales representative or visit: www.hp.com/go/hpfinancialservices.

For more information

For more information about the HP StorageWorks All-in-One Storage Systems, visit www.hp.com/go/AiOStorage.

HP's channel partners work cooperatively to bring solutions to market that provide our customers with the most support and value available. To find out more, visit: www.hp.com/go/AiOStorage or contact your local HP channel partner.

Intel and Pentium are registered trademarks of Intel Corporation or its subsidiaries in the U.S. and other countries. Oracle is a registered U.S. trademark of Oracle Corporation, Redwood City, California. Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation.

© 2006 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

For more information, visit www.hp.com/go/AiOStorage

4AA0-6894ENW Rev. 2, September 2006

