HP ProLiant DL380 G4 Data Protection Storage Server

Data sheet

The HP ProLiant DL380 G4 Data Protection Storage Server is a NAS appliance that uses Microsoft® System Center Data Protection Manager (DPM) to provide rapid and reliable recovery, near continuous data protection, and operational simplicity for disk based backup of Windows® file servers.

Disk-based backup and end user restore makes DPM one of the fastest and most cost effective methods to recover file data lost to user error or equipment corruption. HP has worked closely with Microsoft to develop DPM configurations that are optimized for disk-based backup and recovery of Windows file servers. The HP ProLiant Data Protection Storage Server family offers an easy to deploy DPM solution that provides immediate business value.

This SCSI-based solution is available in a 9 TB configuration suitable for customers wanting to protect a high number of corporate and branch office file servers. The server platform features redundant power and cooling systems as well as lights out remote management (iLO).

The DL380 G4 Data Protection Storage Server complements existing IT data protection infrastructures and is non-disruptive to IT environments. It can be extended into the data protection value chain through optional SCSI interface and tape backup software to deliver a complete disk-to-disk-to-tape data protection framework.

HP offers the broadest portfolio of data protection solutions to keep your data safe so you can put your information to work.

Key features and benefits

• **Backup solution that delivers**—90 percent faster recovery than tape backup with fewer IT resources. Backup to disk is the most reliable way to recover lost data files. Users can instantly recover previous versions of their own files, increasing productivity and allowing IT resources to concentrate on other tasks.

• **No more failed recoveries**—Disk-based backup offers a higher level of reliability versus tape backup solutions. The HP ProLiant Storage Server platform, RAID configured Modular Smart Array storage, and online verification and administrative alert functionality gives IT administrator's peace of mind.

• **Near continuous protection**—This integrated solution can be used for backup at fixed intervals based on business policy so that critical data can be protected at all times, thus reducing risk exposure and minimizing potential data loss between backups to an hour, a 96 percent reduction over daily tape backups.

An easy to deploy disk-based backup solution optimized to provide near continuous protection for corporate and branch office Windows file servers while allowing end users to restore their own files.

The HP ProLiant DL380 G4 Data Protection Storage Server is a NAS appliance that utilizes Microsoft System Center Data Protection Manager 2006 to provide rapid and reliable recovery, near continuous data protection, and operational simplicity for disk-based backup of Windows-based file servers. Disk-based backup is the fastest and most cost effective method to recover data lost to user error or equipment corruption.

- **End-user file restore**—Enables end users to perform their own file recoveries from Windows® XP or Microsoft Office for accidental file deletion or corruption. Snapshot technology allows users to restore point-in-time recoveries from previous versions of individual files.

- **Ease of installation and set-up**—DL380 G4 Data Protection Storage Server is fully pre-configured and optimized for out of the box deployment. Automatically discovers and alerts administrators that unprotected servers are on the network and the comprehensive wizard interface reduces the time it takes to protect valuable file data.

- **Low total cost of ownership (TCO)**—Estimates put 70 percent of the cost of backup and recovery related to manual labor. This solution integrates within the existing Windows environment, automates much of the backup/restore function, and overcomes many deficiencies and costs associated with tape only backup systems.

- **Integrates easily**—Designed to work with existing tape backup and data protection strategies as well as file servers running Windows Server 2000 or 2003. Also works natively with Windows Storage Server 2003 based products such as the HP ProLiant Storage Server family. Supports network throttling to maximize network performance.

- **Eliminates backup window issues**—Eliminates the need to plan backup windows for production file servers. Storage growth due to regulatory compliance, business expansion, and increasing globalization has caused businesses to no longer have open time for backup and for those backups to take longer than the time available.

- **Flexible backup scheduling and verification**—Production file server replication and shadow copy settings can be independently managed to meet the recovery objectives of individual customers. Verification is as easy as browsing the disk on the Data Protection Storage Server.

- **Powerful platform for growth**—Features a 3.4 GHz Xeon Processor, up to 4 GB of memory, redundant power and cooling systems, hardware RAID, and lights out remote management via iLO.

Technical specifications

HP ProLiant DL380 G4 Data Protection Storage Server

Form factor	2U for DL380 G4 base 6U for two external Modular Storage Array (MSA) 30 storage cabinets
Processor	One Intel® Xeon® Processor 3.4 GHz/ 800 MHz FSB standard (up to 2 supported)
Cache memory	1 MB L2 cache 128 MB write wache via 6402 Smart Array controller
Memory	1 GB 2-way interleaved PC2-3200R 400 MHz DDR2 SDRAM (standard) up to 4 GB (maximum)
Network controller	NC7782 dual port PCI-X Gigabit NIC (embedded)
Storage controller	Ultra 320 Smart Array 6i controller (integrated on system board) Ultra 320 6202 Smart Array controller with 128 MB battery backed up write cache for connection to external storage
Internal storage	Two 36.4 GB Ultra320 15K 1" drives Four 300 GB Ultra320 10K 1" drives
External storage	Two MSA 30 SCSI enclosures, each with dual power supply and fourteen (14) 300 GB 1" Ultra320 10K RPM drives
Total raw capacity	9 TB
Operating system	Windows Storage Server 2003 Standard Edition
Integrated software	Microsoft System Center Data Protection Manager 2006
RAID	Fully preconfigured with RAID 5 across DPM storage pool
Data protection profile	Should protect approximately 5 TB of production data with remaining capacity going to RAID and Microsoft DPM snapshot overhead.
Microsoft Data Protection Management Licenses	3 DPML's. Additional DPML's required for each additional production server protected by Microsoft DPM.
Fault Tolerant Features	Two hot pluggable 100 MHz slots 2 x 400-Watt Hot Plug Power Supplies Dual OS partition for data protection battery-backed write cache Hot swappable drives with single hot spare drive per MSA30
Tape Backup Support	Optional SCSI HBA can be used to connect to a wide array of HP StorageWorks Tape drives. Microsoft DPM supports a number of third party applications for backing up file data to tape

Ordering information

Product number/SKU	Product name	Description
398893-B21	HP ProLiant DL380 G4 9 TB Data Protection Storage Server	9 TB of raw storage comprised of internal drives as well as two MSA30 enclosures each with 14 x 300 GB SCSI hard drives (one hot swap spare), 6402 Smart Array Controller with 128 MB write cache and hardware RAID. Includes Microsoft DPM license to protect three Windows file servers. Can protect approximately 5 TB of file data.

Options:

403557-B21	Microsoft® SC Data Protection Management LTU 2006	License for one additional DPM Server Agent. One Server Agent license needed per protected Server.
268351-B21	Dual channel SCSI HBA	64-Bit/133 MHz Dual Channel Ultra320 SCSI Adapter
374654-B21	Single channel SCSI HBA	64-Bit/133 MHz Single Channel Ultra320 SCSI HBA G2
343055-B21	1 GB additional memory	1 GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory kit (2 x 512 MB)
343056-B21	2 GB additional memory	2 GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory kit (2x1024 MB)
343057-B21	4 GB additional memory	4 GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory kit (2x 2048 MB)

What's included	3.4 GHz Xeon processor, 1 GB RAM, dual port Gigabit NIC, DVD-ROM, two Modular Smart Array 30 storage cabinets and SCSI cables, 28 x 300 GB SCSI hard drives (14 in each MSA30), Documentation CD with user guide, Warranty card.

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Warranty and services	The HP ProLiant DL380 G4 Data Protection Server comes with a 3-3-3 warranty (3 years parts exchange, 3 years labor, and 3 years on-site, next business day response) for product hardware.
	The HP ProLiant DL100 G2 Data Protection Servers each come with a 3-1-1 warranty (3 years parts exchange, 1 year labor, and 1 year on-site, next business day response) for product hardware.
	Note that standard HP warranty ensures Software media will be free of physical defects for a period of 90 days from delivery. However the HP ProLiant Data Protection Manager products all come with a full year of 9x5 software advisory and remedial software telephone support, new version license rights, and media and documentation distribution service.
	The HP ProLiant Data Protection Manager product software support can be uplifted to include: • SW Phone-In, 24x7, 2 hour call back • SW Support for Storage, 24x7, 2 hour call back
	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 offers a portfolio of services ranging from Storage Design and Architecture that provides a complete multi-site design and implementation, to various levels of on-going maintenance support. Additionally the basic warranty service can be enhanced and/or HP Installation services can be purchased.
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. These convenient service packages: • Protect your investment in HP products • Provide consistent, predictable levels of support across your entire department or business • Ease budget planning with fixed-cost support that includes parts and labor • Give you direct access to proven technical and problem-solving expertise • Offer a choice of response-time and repair-time commitments • Deliver prompt, measurable results • Are available whenever and wherever you do business *HP Care Pack availability may vary by country and product.*
	Additional information about HP Care Pack Service features and benefits is available at **http://www.hp.com/hps/carepack/services**
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**
HP education services	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**
Financial 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**
HP 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 ProLiant DL380 G4 Data Protection Storage Server, visit **http://h18006.www1.hp.com/products/storageworks/dl380g4dpstorageserver/index.html**

For more information visit www.hp.com/go/dpm

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