HP X5000 G2 NETWORK STORAGE SYSTEMS

Designed to deliver advanced storage features for Windows IT environments that demand 24x7 access to data.

Data sheet

Are you scrambling to cope with an overload of data?

A surging number of businesses today are struggling to deal with the explosive growth of file content. Unstructured data can result in increased costs and lowered availability. The new HP X5000 G2 Network Storage Systems is ideal for midsize companies with Windows®-centric environments to help control this file and data growth cost-effectively. The solution—a two-node Network Attached Storage (NAS) cluster with shared storage built on HP BladeSystem technology and integrated into a converged 3U chassis—provides high availability and greater storage density in one platform.

HP X5000 G2 Network Storage Systems use Microsoft® Windows Storage Server 2008 R2 Enterprise Edition operating system, and are designed to deliver a better file-serving experience. Storage technologies, such as file deduplication and iSCSI, provide unique storage features for these converged file and block I/O NAS appliances. The HP and Windows Storage Server 2008 R2 management software provides simplified deployment and management.

Key features and benefits

Comprehensive, highly available NAS Appliance
- Two-node, active/active midrange NAS cluster and shared storage in a single system
- File and block storage capable—CIFS/SMB, NFS, iSCSI, HTTP, FTP, and WebDAV
- Advanced storage management features—file deduplication, File Classification Infrastructure, hosted BranchCache, file screening, storage quotas, and storage reporting
- All-inclusive software license

Simple deployment and management
- All standard hardware and software pre-installed in the system
- Power-on to file serving time—less than an hour
- 100 percent compatible with Windows IT infrastructure—Active Directory, Distributed File System, and Microsoft System Center
- Can be remotely managed for lights-out data center or remote office locations

Scalable and affordable
- Capable of supporting over 10,000 users on a single system—user numbers based on system configuration
- Provides up to 32 TB of capacity inside the system, expands to over 100 TB externally with HP D2000 Disk Enclosures
- File deduplication feature can recover up to 40 percent of disk space
- File Classification Infrastructure feature provides insight into your data to help you manage it more effectively, reduce costs, and mitigate risks based on the data's business value
- Eliminates the need to buy additional hardware for antivirus screening—any antivirus software that is compatible with Windows Server 2008 R2 runs right on the system

Built on Windows Server 2008 R2 file services
- Enables administrators to provide fast access to files while lowering the effort required to manage distributed data—offering users access to information that can be managed more easily by IT professionals
- Provides better control over data, using familiar management tools
- Helps centralize data management, which reduces administrative overhead while providing insightful information on file infrastructures

HP X5000 G2 Network Storage Systems

Product name	HP X5000 G2 Network Storage Systems
Model differentiator	Two X5460sb server blades and eight 1 TB 6G 7.2K LFF MDL SAS HDDs in 3U chassis Two X5460sb server blades and eight 2 TB 6G 7.2K LFF MDL SAS HDDs in 3U chassis Two X5460sb server blades and sixteen 2 TB 6G 7.2K LFF MDL SAS HDDs in 3U chassis Two X5460sb server blades and sixteen 600 GB 6G 15K LFF ENT SAS HDDs in 3U chassis
Drive description	8 LFF SAS and 4 SFF SAS 16 LFF SAS and 4 SFF SAS 2 SFF SAS per server blade included for O/S mirror only
Drive type	Supports 300 GB 6G 10K SFF Dual-port ENT SAS 600 GB 6G 15K LFF Dual-port ENT SAS 1 TB 6G 7.2K LFF Dual-port MDL SAS 2 TB 6G 7.2K LFF Dual-port MDL SAS
Processor	Standard two Intel® Xeon® (4 core); one Intel Xeon E5620 per X5460sb server blade, maximum two per server blade
Processor cache	12 MB L3 per processor per X5460sb server blade
Memory	Standard 48 GB DDR3 registered (RDIMM) with ECC capabilities; 24 GB per X5460sb server blade, maximum up to 96 GB per server blade
Capacity	Maximum 32 TB Raw Internal SAS, depending on model
Storage expansion options	Up to four D2600 or four D2700 Disk Arrays, cannot be intermixed
Network controller	Two 10GbE NC553i FlexFabric, 2 ports per controller Two 1GbE NC365T, 4 ports per controller One 1GbE NC382m Multifunction, 2 ports per controller
Storage controllers	Two Smart Arrays P410i/256 MB Two P1210m 6 Gbps SAS Controller 1 GB FBWC One SA P410i per server blade for internal SAS drives (O/S mirror); One P1210m per server blade for internal and external SAS data drives
Expansion slots	Two PCI slots—occupied by NC365T NICs
Number of users	100–10000 range, depending on number of drives, RAID and LUN configurations
Compatible operating systems	Windows Storage Server 2008 R2 (SP1), Enterprise x64 edition pre-installed
Management	MMC-based management interface accessible via HTTPS, Remote Desktop, Integrated Lights-Out (iLO) remote management
Form factor	3U
Warranty (parts-labor-onsite)	3/3/3

The total package— Solution value statements	HP Insight Foundation	Managing the growing number of servers can be complex and expensive for your organization. IT managers need to address changing business needs with tools that meet the challenges of managing today's complex data centers. HP provides management solutions that are designed to simplify a server's installation, configuration, and maintenance throughout the entire server lifecycle. This provides the customer with higher levels of operational efficiency and highly reliable systems. For more information visit, http://www.hp.com/go/foundation.	Opt.
	HP Insight Control	HP Insight Control, a product option, delivers essential infrastructure management that can help save time and money. It works by making it easy to deploy, migrate, monitor, remote control, and manage your IT infrastructure through a single, simple management console. For more information, visit http://www.hp.com/go/insightcontrol.	Opt.
The total package—Software	HP Data Protector software	HP data protection software reduces backup and recovery complexity and cost by protecting virtual and physical applications—whether you have one server or thousands. For more information, visit http://www.hp.com/go/dataprotector.	Opt.
	HP Storage Mirroring software	HP Storage Mirroring software provides host-based replication and failover for enterprise and midrange customers seeking a flexible, cost-effective protection strategy. This software does not need special hardware to run and utilizes existing LAN or WAN infrastructure thus saving time, additional investment, and maintenance. For more information, visit http://h18006.www1.hp.com/products/storage/software/sm/index.html?jumpid=reg_R1002_USEN.	Opt.

Included services with warranty	HP X5000 G2 Network Storage Systems come with a standard 3-3-3 warranty plus 1 year of HP Software Support, standard 9x5 business hours
QuickSpecs URL	http://h18000.www1.hp.com/products/quickspecs/14154_div/14154_div.pdf

HP Services

Tap into the HP support services advantage, backed by the strategic and technical know-how of our consulting experts—for a single source solution that makes the most of your investments. Depending on your individual support requirements, choose from three levels of care that cover the entire lifecycle to better address your needs:

Optimized Care service recommendations
Delivers best performance and stability through deployment and proactive management practices
• HP Installation and Startup Service for X5000 G2 Storage Systems
• 3-Year HP Support Plus 24
• Proactive Select—90 credits
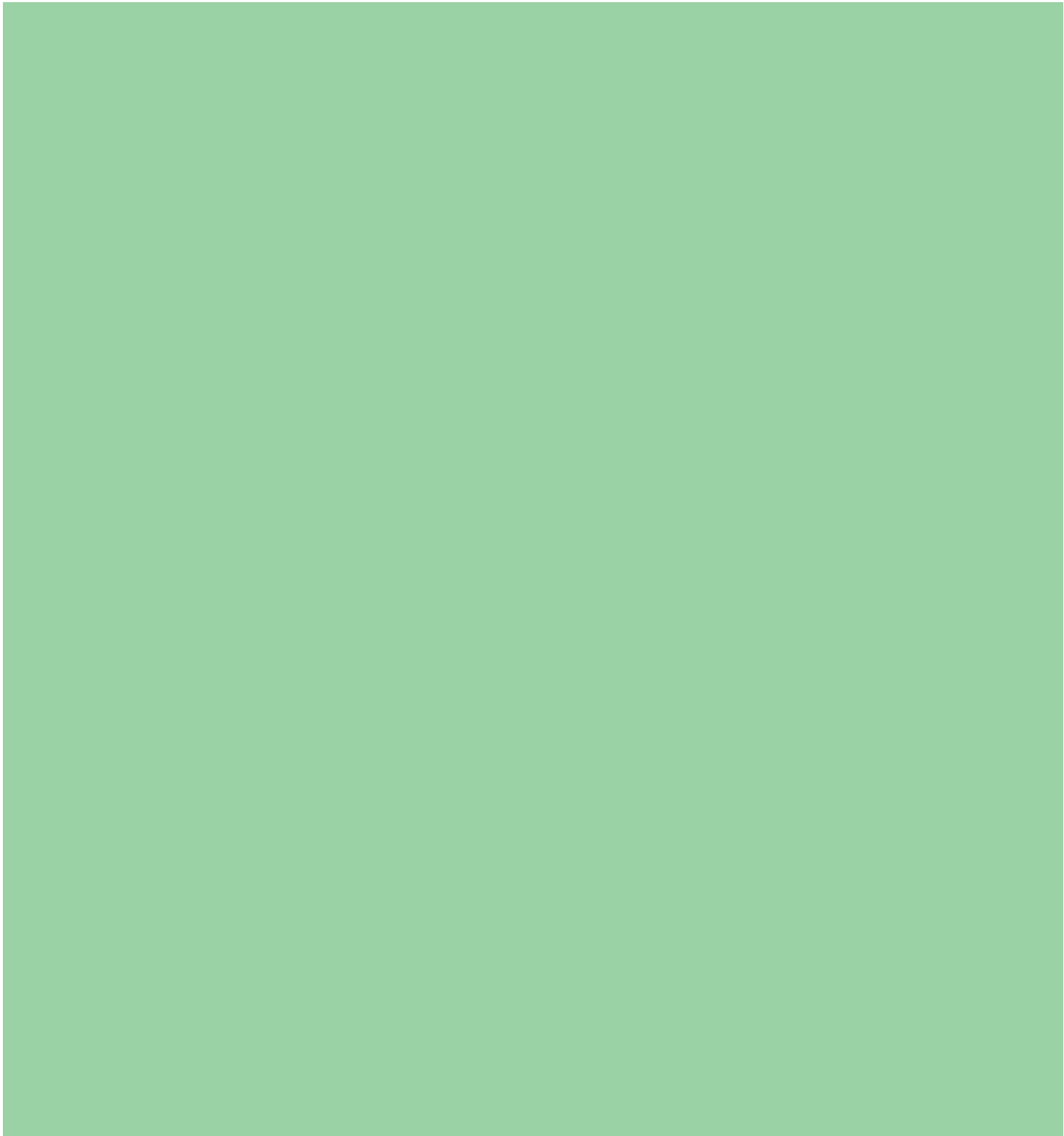• Optional related services: HP Entry Storage Data Migration Service for Windows

Standard Care service recommendations
Maintains high level of uptime, along with expert help to cut the cost and complexity of implementation and support
• HP Installation and Startup Service for X5000 G2 Storage Systems
• 3-Year HP Support Plus 24
• Proactive Select—60 credits
• Optional related services: HP Entry Storage Data Migration Service for Windows

Basic Care service recommendations
Minimum recommended support
• HP Installation and Startup Service for X5000 G2 Storage Systems
• 3-Year HP Support Plus 24
• Proactive Select—30 credits
• Optional related services: HP Entry Storage Data Migration Service for Windows

If none of our support recommendations meet your needs, we can tailor a service solution for your unique support requirements. Only HP brings together expertise, proactive and business critical support, and a strong partner network. Additionally, we offer a full set of infrastructure services designed to power a converged infrastructure. For more information about storage used by business critical applications running on virtualized and x86 infrastructures, please visit **http://www.hp.com/services/storage**.

Redefine the way in which your data is managed while managing costs more effectively. Visit **www.hp.com/go/x5000-g2**