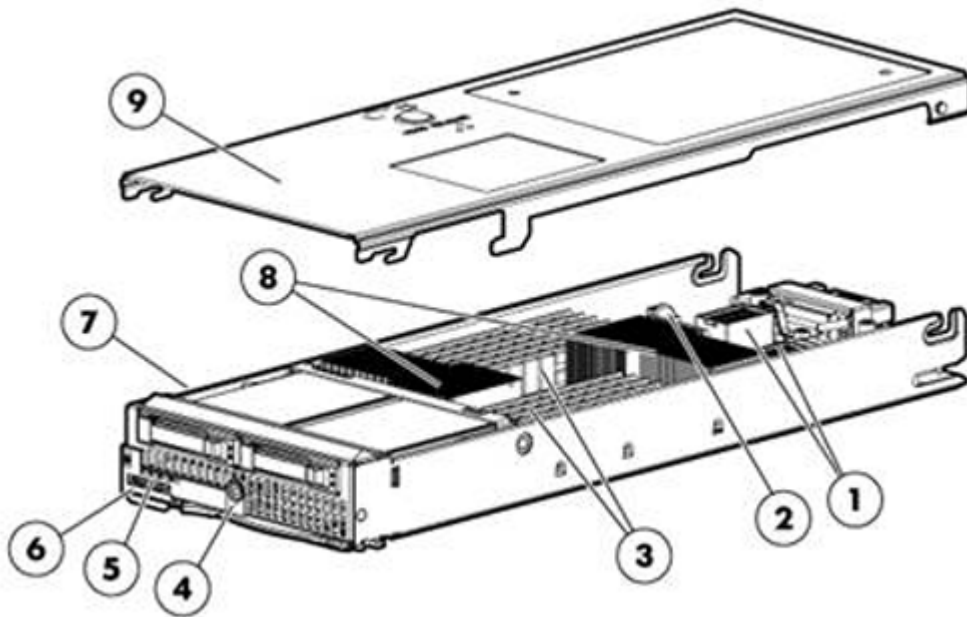


Overview

Do you have islands of storage that you need to consolidate, or tier two applications that would benefit from centralized storage? You need a flexible NAS/SAN gateway that increases the efficiency of your existing infrastructure. The X3800sb Network Storage Gateway Blade is used to access FC, SAS, or iSCSI SAN storage, translating file data from the server into blocks for storage to provide consolidated file, print, and management hosting services in a cluster-able package.

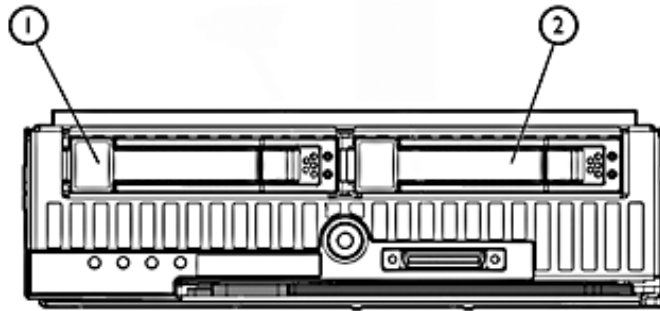
Built on the HP ProLiant BL460c Server Blade, the HP StorageWorks X3800sb Network Storage Gateway Blade is a ready to deploy SAN gateway solution, with Microsoft Storage Server 2008, Enterprise x64 Edition pre-installed. The HP Rapid Start-up Wizard accelerates new deployments by walking you through basic system settings step-by-step. The X3800sb also includes a Microsoft Cluster Server (MSCS) license and Microsoft iSCSI Software Target.



The X3800sb is built on the BL460c G6 Server Blade

1. Two (2) mezzanine I/O expansion slots
2. Internal USB connector
3. The X3800sb has 8GB (2 x 4GB) PC3-10600R pre-installed
4. HP Smart Array P410i Controller
5. 2 x 146GB SFF SAS 10k hot plug hard drives with Microsoft Windows Storage Server 2008, Enterprise X64 Edition pre-installed (in a RAID 1 configuration)
6. Local I/O Connector
7. Internal SD card slot
8. Two Quad-Core Intel® Xeon® Processors L5520 (2.26 GHz, 60w) pre-installed
9. Access Panel

Overview



Front View

- 1-2 2 x 146GB SFF SAS 10k hot plug hard drives with Microsoft Windows Storage Server 2008, Enterprise X64 Edition pre-installed (in a RAID 1 configuration)

At A Glance

- SAN gateway translates file data from the server into blocks for storage
- Access FC, SAS, or iSCSI SAN storage
- Built on the HP ProLiant BL460c G6 server, the X3800sb includes two quad core Intel Processors L5520 (2.26GHz, 60w), 8GB of PC3-10600R memory, and 2 x 146GB SFF 3G SAS 10K HDDs (for mirrored OS image)
- Pre-installed Microsoft® Windows Storage Server 2008 Enterprise x64 Edition operating system with Microsoft iSCSI Software Target and a Microsoft Cluster Server (MSCS) license included

Models

HP StorageWorks X3800sb Network Storage Gateway

AP806A

Features and Benefits

- Add more data services to your array or SAN** HP X3800sb Network Storage Gateway is a file and iSCSI bridge into a Fibre Channel or SAS array, or into a Fibre Channel SAN. The X3800sb adds IP-based data services, including file serving and iSCSI, in a package that can be clustered for high-availability and can host array management utilities.
- Manage, expand, and protect a single centralized storage pool** If you're already consolidating your block storage into your array or SAN, complete the job by adding file and iSCSI services to your storage pool with an X3800sb Gateway. You'll have a unified solution that can serve files to your clients and blocks to your servers via multiple protocols (FC/iSCSI or SAS/iSCSI), and you'll drive a better return-on-investment for your array/SAN up by centralizing all of your storage-not just that for your mission-critical servers. You can do the same on a smaller scale for more cost-conscious environments list small and remote offices: create a highly-available unified solution combining X3800sb Gateway nodes with MSA or other entry array.
- Optimized file services for clients** In a Windows (SMB/CIFS) environment, there's no better way to serve files. Windows Storage Server 2008 delivers better file serving performance than standard Windows Server, has exclusive features like Single Instance Storage (SIS) file de-duplication, and supports Volume Shadow Copy Service snapshots. In mixed environments, you get the flexibility of heterogeneous support for additional protocols like NFS, HTTP, FTP, and WebDAV.
- Ready for High Availability** With the included Microsoft Cluster Server (MSCS) license, you can cluster multiple X3800sb Gateways to enable high availability and scalable performance.
- Seamless integration into your Windows environment** It's running Windows, so it integrates natively into your Active Directory and DFS environments, runs your favorite antivirus, backup, and storage management applications, and the Microsoft Management Console (MMC) user interface has a familiar look and feel.
- HP ProLiant industry-standard hardware** Relax -- your investment is protected because you're not locked into proprietary platforms. The X3800sb Network Storage Gateway is built on the HP ProLiant BL460c G6 server.
- Intelligent storage services** Make more efficient use of storage space using the file de-duplicating Single-instance Storage (SIS) feature and enjoy the benefits of other storage-specific tools like Indexed Search, Quotas, File Screening, Storage Reporting, and Distributed File System (DFS) Replication.
- Remote and Enterprise manageability** You can manage and troubleshoot from outside the office at both the operating system level (with Remote Desktop or HTTPS) and at the platform level (using Integrated Lights-Out 2 with the included Advanced Pack). The X3800sb Network Storage Gateway also integrates with HP Systems Insight Manager (HP SIM) and support ProLiant Support Pack.
- Array / SAN Management** An X3800sb Gateway can host a variety of storage management applications, including HP StorageWorks Command View EVA. Once you add an X3800sb Gateway for file/iSCSI services, it's like getting an array or SAN manager for free.

Features and Benefits

Operating Systems

Microsoft Windows Storage Server 2008, Enterprise x64 Edition

- 64-bit processing (compatible with 32-bit applications)
- Microsoft Cluster Server (MSCS) license included
 - **NOTE:** X3000 Network Storage Gateways may be clustered only with gateways also running Microsoft Windows Storage Server 2008, Enterprise x64 Edition operating system (HP recommends like hardware as well).
- Optimized for File Serving: Up to 20% faster file serving performance than a general-purpose Windows Server 2008 installation on the same hardware.
- HP-enhanced File Server Management Console: Features the familiar look and feel of the Microsoft Management Console (MMC).
- HP StorageWorks Rapid Startup: Simplifies and accelerates new device deployment by presenting basic system settings on your first boot.
- Single-instance Storage (SIS): Recovers up to 35% of disk space by de-duplicating files and reducing the amount of redundant data stored. Identifies identical files, stores a single copy of the file in a central repository, and replaces the files with pointers to the file in the SIS common store.
- Search Enhancements: Indexing Service extracts the information from a set of documents and organizes it in a way that makes it quick and easy to access that information through the Search function for computers running Windows 2000 or Windows XP.
- File Server Resource Manager (FSRM): Provides both on-demand and scheduled reports detailing storage use, allows administrators to create and manage folder and volume quotas, and permits both name-based screening of files and allowing/disallowing file creation on specified folder trees.
- Storage Manager for SANs (SMfS): Natively provides basic SAN management (such as device discovery, LUN creation, and storage allocation) for SAN gateway installations. Moreover, SMfS enables shared storage solutions and clustering.
- Unified Share and Storage Management Snap-in: With a consistent and familiar interface, simplifies management of shares and volumes by unifying SMB and NFS share provisioning, integrating share and storage provisioning, and providing an overview of storage and shares.
- Distributed File System (DFS) Management Console: Updated DFS namespace failover, failback and prioritization controls.
- Distributed File System Replication (DFS-R): State-based, multi-master replication engine that supports replication scheduling and bandwidth throttling. DFS-R uses a new compression algorithm that efficiently updates files over limited bandwidth networks by replicating only the changes needed to ensure global file consistency.
- Full support of Volume Shadow Copy Service, which creates point-in-time copies of files and folders at predetermined time intervals that can then be accessed from client computers.
- Unlimited Client Access Licenses (CALs) included
- Microsoft Services for Network File System (NFS)
- Simultaneous support for multiple file serving protocols, including SMB/CIFS, NFS, HTTP, FTP, and WebDAV
- Print Management Console: Manage multiple printers (license for unlimited printer support) from a single console, whether locally or over the WAN
- Support for any number of SATA or SAS drives and multiple network ports
- Support for up to 1TB of SDRAM

Features and Benefits

Microsoft iSCSI Software Target

- Compliant with iSCSI industry standards and compatible with industry standard iSCSI initiators. Interoperability has been verified for Windows 2000, Windows Server 2003, Windows Server 2008 (including Hyper-V), VMware ESX Server 3/3.5, SUSE Linux Enterprise Server 10, RedHat Enterprise Linux 5, and Qlogic 40xx series iSCSI hardware HBAs
- IETF-ratified iSCSI specification compliant
- IPv6 support
- iSNS integration
- IPSec encryption
- CHAP authentication
- Seamless integration into Microsoft Management Console (MMC) user interface
- LUN resizing
- IP Take-Over support
- Multi-Path I/O (MPIO) support
- Application-aware snapshots with Microsoft Volume Shadow Copy Service (VSS)
NOTE: Limit of 512 snapshots per independent iSCSI/Application volume and 64 snapshots for file share volumes. If iSCSI LUNs and file shares are on a common volume the iSCSI snapshot limit is 448.
- Compatible with backup applications certified with Microsoft Windows Server 2008
- Sample Application Server Compatibility: Microsoft Exchange 2000, 2003, and 2007 Servers; Microsoft SQL Server 2000, 2005, and 2008
- Sample Virtual Environment Compatibility: Microsoft Hyper-V, VMWare, Xen

HP Management Enhancements

Microsoft Management Console (MMC)-based user interface (also accessible via HTTPS)

- Features the familiar look and feel of the Microsoft Management Console (MMC). Access to HP tools such as ACU are centralized on the HP Storage Server Management console.

HP Rapid Start-up Wizard

- Simplifies and accelerates new device deployment by walking you through basic system settings step-by-step.

System Specifications

HP StorageWorks X3800sb Network Storage Blade includes:	Server + Processor	<ul style="list-style-type: none">● BL460c G6 server with 2 Quad-Core Intel® Xeon® Processors L5520 (2.26 GHz, 60w) pre-installed● NOTE: All BL460c G6 options are supported by the X3800sb and will ship as separate components unless otherwise noted.
	Memory	<ul style="list-style-type: none">● 8GB (4 x 2GB) PC3-10600R pre-installed
	Storage Controller	<ul style="list-style-type: none">● HP Smart Array P410i Controller (RAID 0/1)
	Internal Drive Support	<ul style="list-style-type: none">● 2 x 146GB SFF SAS 10k hot plug hard drives with Microsoft Windows Storage Server 2008, Enterprise X64 Edition pre-installed (in a RAID 1 configuration)
	Network Controller	<ul style="list-style-type: none">● Embedded NC532i Dual Port Flex-10 10GbE Multifunction Server Adapter● NOTE: Each port is autosensing 1 Gb/10Gb, and can interoperate with 1Gb HP BladeSystem c-Class interconnect components.● One (1) additional 10/100 server adapter dedicated to iLO 2 Management
	Mezzanine Support	<ul style="list-style-type: none">● Two (2) I/O expansion mezzanine slots● Supports up to (2) mezzanine cards<ul style="list-style-type: none">○ Dual-Port Fibre Channel Mezzanine options for SAN connectivity (Choice of Emulex or QLogic)○ iSCSI Ethernet mezzanine option for optimized iSCSI connectivity○ Ethernet server adapter mezzanine options for additional network ports○ 4X DDR InfiniBand (IB) Mezzanine (20 Gb/s) options for low latency server interconnectivity (based on Mellanox technology)
	Host Bus Adapter (HBA) Support	<ul style="list-style-type: none">● HBA selection is left as your choice based on existing infrastructure and/or desired array support.● NOTE: The following options are available factory-integrated:<ul style="list-style-type: none">○ HP BLc NC512m 10GbE 440910-B21○ BLc Emulex LPe1205 8Gb FC HBA 456972-B21○ BLc QLogic QMH2562 8Gb FC HBA 451871-B21○ HP Smart Array P700M/256 SAS 507925-B21○ HP Smart Array P700M/512 SA 508226-B21
	Form Factor	<ul style="list-style-type: none">● The X3800sb is based on the HP ProLiant BL460c G6, which is a half-height server blade that plugs into the HP BladeSystem c3000 and c7000 enclosures
	Management:	<ul style="list-style-type: none">● HP ProLiant Onboard Administrator (powered by the Integrated Lights-Out 2 management processor) provides virtual KVM graphical remote console, virtual media, simplified server setup, and core server control functions out of the box.● Unlock the full capabilities of the HP ProLiant Onboard Administrator with iLO Advanced for BladeSystem to take advantage of capabilities such as boot and failure sequence replay, on-demand video record and playback, and multi-user console for up to four users. Learn more at www.hp.com/go/iLO

System Specifications

Warranty and software support

Warranty

- The X3800sb comes with a standard 3-3-3 warranty (3 years parts exchange, 3 years labor and 3 years onsite next business day response)

Software support

- One year of HP Software Support, standard 9x5 business hours (software technical support and software product and documentation updates).

Optional Software

Optional Software to Enhance X3800sb

HP StorageWorks Storage Mirroring Software - HP StorageWorks Storage Mirroring offers a host-based application that performs remote copy over an IP LAN/WAN. Key features include asynchronous replication that can be scheduled to a fine granular level, Logical Unit Number (LUN), file or byte level. Other features include multiple replication configuration options including peer-to-peer and many-to-one. In addition, Storage Mirroring is a very cost effective disaster recovery alternative from one host to another within a LAN, storage center, or between direct attached storage in metro offices and regional centers. Additional configurations allow replication from small office environments to ensure business continuity without an outside IT staff.

For more information on HP Storage Mirroring Software:
<http://www.hp.com/go/storageworks/storagemirroring>

HP Data Protector Software - HP Data Protector Software is enterprise data protection and disaster recovery, ensuring recovery from any disruption. Data Protector integrates a variety of techniques to eliminate backup and recovery windows. The capabilities to eliminate planned downtime range from online backup and backup of open files to zero-downtime, zero-impact backup. The software provides industry-leading instant recovery as well as several disaster recovery alternatives to eliminate unplanned downtime, allowing recovery of entire data centers in minutes.

Data Protector is enabling organizations to reduce costs by automating routine tasks to maximize the effectiveness of the data protection staff. For the price of an entry-level product, it provides the enterprise functionality customers need. Data Protector scales from single server to distributed enterprise, covering an extensive range of heterogeneous applications, operating environments and storage configurations with a single solution.

For more information on HP Data Protector:
<http://h18006.www1.hp.com/products/storage/software/dataprotector/index.html>

Command View EVA software - Command View EVA software provides a comprehensive software suite designed to simplify, enhance, and maximize the high performance EVA family of storage array products. And it provides a powerfully simple storage management experience when compared to managing traditional array storage management products. HP X3000 Network Storage Gateways are excellent companion platforms for EVA arrays; not only can they host Command View EVA, but they also add file and iSCSI services to the array/SAN environment.

For more information please visit:
<http://h18006.www1.hp.com/products/storage/software/cmdvieweva/index.html>

HP File Migration Agent - HP FMA is an automated solution designed to help simplify Windows-based file, web, and application server administration in small business to enterprise environments. This is accomplished through policy-based file migration and archive to popular storage targets, including HP StorageWorks Reference Information Storage System (RISS), HP StorageWorks File System Extender, and NAS, via Common Internet File System (CIFS).

The following Windows Storage Server features or add-ons are currently NOT supported by HP File Archiving software:

NOTE: Single Instance Storage (SIS) - (NOT SUPPORTED)

NOTE: DFS-Replication (DFS-R) - (NOT SUPPORTED)

NOTE: File Server Resource Manager (FSRM) - Content Filter, & File Screening - (NOT SUPPORTED)

For more information: <http://h18006.www1.hp.com/products/storage/software/fma/>

Optional Software

HP Systems Insight Manager - HP SIM 5.x is the first unified server and storage management platform. Now, from a single management console, administrators can manage their complete HP server and storage environment with a feature rich, extensible and secure management tool set.

HP SIM also serves as a central access point for ProLiant Essentials, Integrity Essentials, and Storage Essentials software options that deliver targeted functionality for these platforms. For more information: <http://h18013.www1.hp.com/products/servers/management/hpsim/index.html>

Insight Management Agents - Allow all HP servers to present system instrumentation, health and configuration information into HP Systems Insight Manager and the HP System Management Homepage. The HP System Management Homepage aggregates systems data from Insight Management Agents and other HP management tools, providing a consolidated browser-based interface for managing individual servers.

HP Storage Essentials NAS Manager Software - Provides comprehensive Network Attached Storage (NAS) management capabilities for HP ProLiant Storage Servers. Visualize your distributed HP NAS solutions and centrally manage their capacity, performance, events, and dependencies to ensure NAS availability and performance and unify SAN and NAS management. For more information on the complete line of HP Storage Essential products go to: <http://www.hp.com/go/storageessentials>

HP SAN / Array Support	HP StorageWorks Enterprise Virtual Array (EVA)	http://h18006.www1.hp.com/products/storageworks/eva/index.html
	HP StorageWorks Disk Array XP	http://h18006.www1.hp.com/storage/xparrays.html
	HP LeftHand SAN Solutions	http://h18006.www1.hp.com/storage/highlights/lefthandsans.html
	HP StorageWorks Modular Smart Arrays (MSA)	http://h18006.www1.hp.com/storage/disk_storage/msa_diskarrays/index.html

HP X3000 Network Storage Gateways and third-party storage arrays/SAN interoperability statement

HP acknowledges that some third-party storage arrays/SAN environments have been successfully tested for interoperability with StorageWorks X3000 and ProLiant Storage Server SAN Gateway products. HP will provide support for the HP Gateway products when connected to third-party storage arrays, but HP will not provide support on third-party storage arrays/SAN unless specifically called out in an HP Support contract. HP may support the third-party SAN environment attached to HP Gateway product(s) when specifically under contract with HP, but that SAN coverage does not extend to supporting the SAN connectivity of the third-party array.

If you call HP Services and the problem is determined to be caused by a third-party storage array or the storage arrays' connectivity into a non-HP supported SAN, you will be directed to contact the third-party storage array supplier for support. Please refer to the third-party supplier for information relating to specific support of their storage arrays with Windows Storage Server 2008 Enterprise Edition.

HA Shared Storage Solutions

HP StorageWorks X3000 Network Storage Gateways can be used in conjunction with array storage to build affordable and highly-available direct-attach unified (file/block) storage solutions. Below are sample configurations for reference.

Two-node HA SAS solution (2TB raw)

Component	Part Number	Quantity
HP StorageWorks X3400 Network Storage Gateway	AP797A	2
HP SC08Ge Host Bus Adapter	488765-B21	2
HP StorageWorks 2312sa G2 Dual Controller Modular Smart Array (LFF)	AJ805A	1
HP StorageWorks MSA2 500GB 7.2K 3.5-inch SATA LFF HDD	AJ738A	4
mini-SAS 4x 2M Cable All	407339-B21	4

Two-node HA Fibre Channel solution (1.8TB raw)-no Fibre Channel switch required

Component	Part Number	Quantity
HP StorageWorks X3800 Network Storage Gateway	AP798A	2
HP StorageWorks 2312fc G2 Dual Controller Modular Smart Array (LFF) (Pre-configured with two array controllers)	AJ797A	1
HP StorageWorks 82E 8Gb Dual-port PCI-e FC HBA	AJ763A	2
HP StorageWorks MSA2 450GB 3G 15K 3.5 inch Dual-port SAS LFF HDD	AJ737A	4
2 m LC-LC Multi-Mode Fibre Channel Cable	221692-B21	4

Service and Support, HP Care Pack, and Warranty Information

HP Care Pack Services. Scalable, Flexible, Dependable. Like your storage.

Your storage is evolving. Get scalable support that evolves with it. HP Care Pack Services is an easy-to-buy, easy-to-use portfolio of packaged services covering your lifecycle needs. You can rely on our highly skilled, HP certified professionals to offer a breadth of expertise across leading storage technologies, and work side by side with you for optimal results. Partner with HP Technology Services to boost availability and avoid costly downtime by mitigating technology-related business risks. To help take the worry out of deploying, supporting and managing your storage technologies, we've designed a portfolio of service options that are as flexible, scalable and affordable as our storage.

Protect your business beyond the warranty

Standard warranty protects against product defects and some causes of downtime. HP Care Pack Services helps you proactively guard against unplanned downtime which can reduce your productivity and profitability. By using a standard approach to warranty uplifts, such as HP Care Pack Services, customers can be certain of consistency of operations for both mission-critical and standard business computing.

Extending warranties with HP Care Pack Services

The key to normalizing the warranty of combined solutions-is making service uplift simple: HP Care Pack Services. This portfolio of predefined packages, extending across the entire IT lifecycle, offering consulting, education, technical support, optimization, risk assessment, and more. It's entirely flexible allowing customers to extend the cover to the precise level of support required. Customer's standard hardware warranty, for example, can be upgraded to next-business-day response, to same-day coverage, or even to a committed six-hour call-to-repair service available 24 hours every day of the week.

- Provide consistent, predictable levels of support across your entire department or business
- Give you direct access to proven technical and problem-solving expertise
- Offer a choice of response-time and repair-time commitments
- Are available whenever and wherever you do business

For many products, post-warranty HP Care Pack Services are available when your original warranty has expired. Choose the support levels that meet your business requirements, from basic to mission-critical. In the new world of business technology, when your technology has to work for your business to work, who can you trust to make your technology work? HP Technology Services, the trusted business technology experts who manage your technology in action, because when technology works, business works.

<http://www.hp.com/hps/storage>

NOTE: Care Pack Services availability may vary by product and country.

Recommended Services	HP Care Pack Services recommended for optimal satisfaction of all deployments of your product.
3-Year HP Support Plus 24	3-Year HP Support Plus 24 provides integrated hardware and software support services designed specifically for your technology. HP Services engineers deliver reactive onsite hardware support and over-the-phone software support around-the-clock.
HP Installation and Startup Service for HP BladeSystem c-Class Infrastructure (OS + ICE)	HP Installation and Startup Service for HP BladeSystem c-Class Infrastructure provides basic hardware and software installation of your c-class BladeSystem. This service includes service planning, deployment, Installation verification tests (IVT) and a customer orientation session.

Service and Support, HP Care Pack, and Warranty Information

Product Number	Product Name	Service Name	Care Pack Services Product # and Band	Alternate Care Pack Services Product #
		HP Installation and Startup Service for HP BladeSystem c-Class Infrastructure (OS + ICE)	HA114A1-5N9	UF817E
AP806A	HP StorageWorks X3800sb Network Storage Blade	3-Year HP Support Plus 24	HA110A3-1LC	UR137E

Related Services

Services that will enhance the user experience in many product deployments.

HP Proactive Select Service HP Proactive Select Service improves IT performance and manageability through the use of cost effective flexible proactive services. This proactive service allows you to accelerate the ROI of your technology environment, by tailoring specific services to more quickly take advantage of your investment.

HP Entry Storage Data Migration Service for Windows HP Entry Storage Data Migration Service for Windows offers you a cost competitive and convenient way to accommodate data migration triggered by a need to refresh or consolidate storage, or to create different storage tiers. This service offers a migration cost in line with the costs of storage products in small and medium-sized storage environments. The service is delivered via a skilled HP service specialist with special consideration for data availability, integrity, and ongoing operational performance during the transfer process

Service Name	Care Pack Services Product # and Band	Alternate Care Pack Service Product #
HP Proactive Select Service	Contact your HP sales rep or Channel Partner for assistance	Contact your HP sales rep or Channel Partner for assistance
HP Entry Storage Data Migration Service for Windows	Contact your HP sales rep or Channel Partner for assistance	Contact your HP sales rep or Channel Partner for assistance

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
- Proactive notification of relevant information

Access to certain features of the support portal requires an HP service agreement. To access the support portal, visit: <http://www.hp.com/support>

Service and Support, HP Care Pack, and Warranty Information

Remote Support Technology (RST)-HP Remote Support Pack

Taking a more proactive approach to IT support, the HP Remote Support pack plug-in module easily integrates with HP Systems Insight Manager to provide a powerful, unified "single pane of glass" solution for onsite and remote management.

HP Remote Support Pack enhances HP Systems Insight Manager with intelligent event diagnosis plus the automatic submission of hardware event notifications securely to HP support, including acknowledgment and status returns. It adds remote configuration collections to allow the delivery of assessment and proactive services for your SAN storage and HP-UX environments.

Customer Technical Training

Consider education as an integral part of your strategy to get the best return on investment for your HP storage solution. HP offers a variety of training courses on storage software, networking, archiving and disk storage systems. Our classes are available in many delivery modalities from traditional instructor-led courses at one of our 80 training centers worldwide to on-site training customized to your needs or online. www.hp.com/learn/storage

HP Services Awards

HP Services continues to be recognized for service and support excellence by customers, partners, industry organizations and publications around the world. Recent honors and award reflect our services team's dedications, technical expertise, professionalism and uncompromising commitment to customer satisfaction. For a list of all our awards, please visit:

<http://h20219.www2.hp.com/services/cache/433028-0-0-225-121.html>.

Additional Services Information

For more information about HP Care Pack Services for Storage, please visit:

<http://www.hp.com/hps/storage>

If you have specific questions, contact your local HP representative. Contact information for a representative in your area can be found at "Contact HP" <http://www.hp.com>

Product Configuration

NOTE: The steps outlined below are intended only as a guide for the options available. The X3800sb is built on the ProLiant BL460c G6 server. All BL460c G6 options are supported by the X3800sb and will ship as separate components. HBA options listed below are available factory-installed. For more information on BL460 G6 options and details on memory configuration, see the BL460c G6 QuickSpecs: http://h18004.www1.hp.com/products/quickspecs/13238_na/13238_na.html

Step 1 - Order the HP StorageWorks X3800sb Network Storage Gateway for your BladeSystem c-Class enclosure.

HP StorageWorks X3800sb Network Storage Blade AP806A	Server + Processor	Built on the BL460c G6, with 2 Quad-Core Intel Processors L5520 (2.26GHz, 60w) pre-installed
	Memory	8GB (2x4) PC3-10600R pre-installed
	Operating System	Microsoft Windows Storage Server 2008, Enterprise X64 Edition, pre-installed
#OD1 -Factory Integration into c-class enclosure	Hard Drives	2 x 146GB SFF 3G SAS 10K HDDs (for mirrored OS image)
	Form Factor	Half height cClass blade

Step 2 - Add Optional HBAs delivered as separate components or optional factory-installation

Fiber Channel, SAS and Network Adapter Mezzanine Options	HP BLc NC512m 10GbE	440910-B21
	BLc Emulex LPe1205 8Gb FC HBA	456972-B21
	BLc QLogic QMH2562 8Gb FC HBA	451871-B21
	HP Smart Array P700M/256 SAS	507925-B21
	HP Smart Array P700M/512 SAS	508226-B21

Step 3 - Order additional memory for the X3800sb

Additional memory options	Registered DIMMS (RDIMMs)	
	HP 2GB 2Rx8 PC3-10600R -9 Kit	500656-B21
	HP 4GB 2Rx4 PC3-10600R-9 Kit	500658-B21
	HP 4GB 4Rx8 PC3-8500R-7 LP Kit	500660-B21
	HP 8GB 2Rx4 PC3-10600R-9 Kit	500662-B21

Additional Specifications

HP StorageWorks X3800sb Network Storage Blade specifications

The X3800sb is built on the HP ProLiant BL460c G6. See the BL460c QuickSpecs for additional specifications.

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For hard drives, 1 GB = 1 billion bytes. Actual formatted capacity is less.