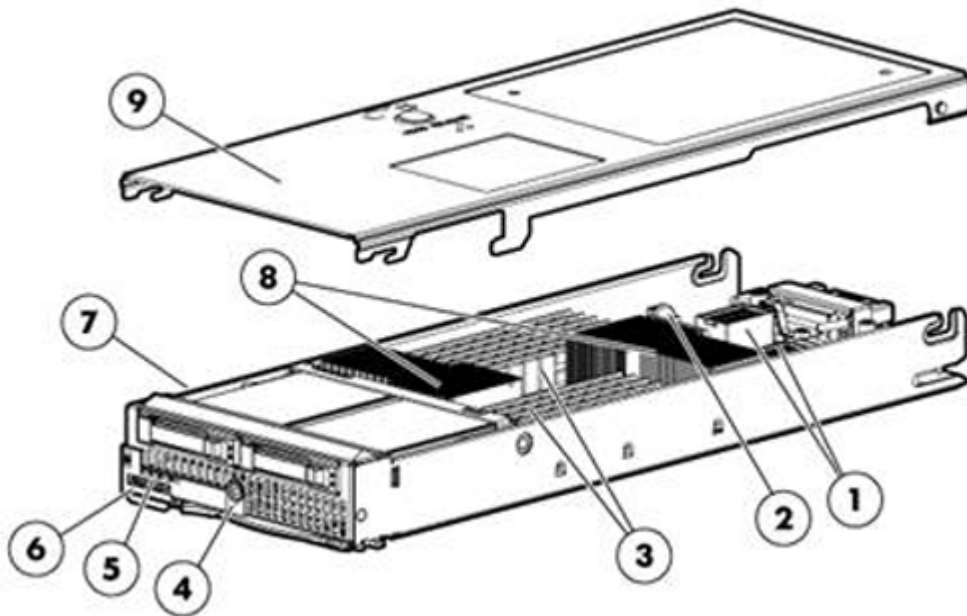


Overview

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 G2 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.

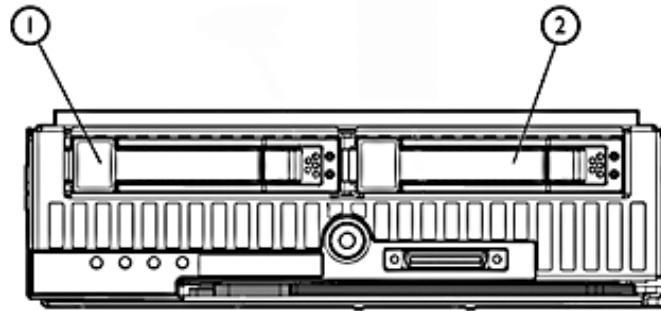
Built on the HP ProLiant BL460c Server Blade, the HP X3800sb G2 Network Storage Gateway Blade is a ready to deploy SAN gateway solution, with Microsoft Storage Server 2008 R2, Enterprise x64 Edition pre-installed. The X3800sb G2 also includes a Microsoft Cluster Server (MSCS) license and Microsoft iSCSI Software Target.



The X3800sb G2 is built on the BL460c G7 Server Blade

1. Two (2) mezzanine I/O expansion slots
2. Internal USB connector
3. The X3800sb G2 has 8GB (2 x 4GB) PC3-10600R pre-installed
4. HP Smart Array P410i Controller
5. 2 x 146GB SFF SAS 15k hot plug hard drives with Microsoft Windows Storage Server 2008 R2, Enterprise X64 Edition pre-installed (in a RAID 1 configuration)
6. Local I/O Connector
7. Internal SD card slot
8. One Quad-Core Intel® Xeon® Processors E5640 (2.66 GHz, 80w) pre-installed
9. Access Panel

Overview



Front View

- 1-2 2 x 146GB SFF SAS 15k hot plug hard drives with Microsoft Windows Storage Server 2008 R2, 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 G7 server, the X3800sb G2 includes one quad core Intel Processors E5640 (2.66GHz, 80w), 6GB of PC3-10600R memory, and 2 x 146GB SFF 6G SAS 15K HDDs (for mirrored OS image)
 - Pre-installed Microsoft® Windows Storage Server 2008 R2 Enterprise x64 Edition operating system with Microsoft iSCSI Software Target and a Microsoft Cluster Server (MSCS) license included
-

Models

HP X3800sb G2 Network Storage Gateway

BV874A

Features and Benefits

Add more data services to your array or SAN	HP X3800sb G2 Network Storage Gateway is a file and iSCSI bridge into a Fibre Channel or SAS array, or into a Fibre Channel SAN. The X3800sb G2 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 G2 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 G2 Gateway nodes with a P2000 MSA or other SAN arrays.
Optimized file services for clients	In a Windows (SMB/CIFS) environment, there's no better way to serve files. Windows Storage Server 2008 R2 delivers better file serving performance than standard Windows Server 2008 R2, 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 G2 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 (AD) and Distributed File System (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 G2 Network Storage Gateway is built on the HP ProLiant BL460c G7 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 3 with the included Advanced Pack). The X3800sb G2 Network Storage Gateway also integrates with HP Systems Insight Manager (HP SIM) and support ProLiant Support Pack.
Array / SAN Management	An X3800sb G2 Gateway can host a variety of storage management applications, including HP Command View EVA. Once you add an X3800sb G2 Gateway for file/iSCSI services, it's like getting an array or SAN manager for free.

Operating Systems Microsoft Windows Storage Server 2008 R2, Enterprise x64 Edition

- 64-bit processing (compatible with 32-bit applications)
- Microsoft Cluster Server (MSCS) license included

Features and Benefits

NOTE: X3000 Network Storage Gateways may be clustered only with gateways also running Microsoft Windows Storage Server 2008 R2, 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 R2 installation on the same hardware.
- HP-enhanced File Server Management Console: Features the familiar look and feel of the Microsoft Management Console (MMC).
- HP 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, Windows XP or Windows Vista.
- 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.
- File Classification Infrastructure: provides insight into your data to help you manage your data more effectively, reduce costs and mitigate risks by providing a built-in solution for file classification allowing administrators to automate manual processes with predefined policies based on the data's business value. Also provided is an extensible infrastructure upon which ISVs can build end-to-end solutions that enable organizations to perform advanced classification and data management.
- 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.
- Hosted Branch Cache - Using a client/server architecture, Windows 7 client computers cache content on the local network to an X3800sb G2 Network Storage System running Windows Storage Server 2008 R2, known as the Hosted Cache. Other clients who need the same content retrieve it directly from the Hosted Cache.
- 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

Window Storage Server Roles	X1800sb G2	X3800sb G2
Active Directory Certificate Services	No	No
Active Directory Domain Services	No	No
Active Directory Federation Services	No	No
Active Directory Lightweight Directory Services	Allowed	Allowed
Active Directory Management Services	No	No
Application Server	No	No
DHCP Server	Allowed	Allowed
DNS Server	No	No
FAX Server	Enabled	Enabled
File Services	Enabled	Enabled
Hyper-V	No	No
Network Policy and Access Services	No	No
Print Services	Enabled	Enabled
Terminal Services	No	No
UDDI Services	No	No
Web Server (IIS)	Enabled	Enabled
Windows Deployment Services	No	No

Microsoft iSCSI Software Target

Microsoft iSCSI Software Target v3.3

- Compliant with iSCSI industry standards and compatible with industry standard iSCSI initiators. Interoperability has been verified for:
 - Microsoft iSCSI Software Initiator 2.07 and 2.08 in Windows Server 2003.
 - Microsoft iSCSI Software Initiator in Windows Server 2008 SP1 and SP2.
 - Microsoft iSCSI Software Initiator in Windows Server 2008 R2.
 - Microsoft iSCSI Software Initiator in Windows Vista.
 - Microsoft iSCSI Software Initiator in Windows 7.
 - Qlogic initiator QLE4062C-SP, firmware 3.00.01.24.
 - RedHat Enterprise Linux iSCSI Initiator version 5.x.
 - SuSE Enterprise Linux iSCSI Initiator version 10.x.

Support

HP is the customer's primary contact for the resolution of all iSCSI initiator/iSCSI target interoperability issues. Microsoft is committed to working with HP to resolve interoperability issues involving the Microsoft iSCSI Software Target, but Microsoft is not responsible for resolving any issues caused by non-Microsoft iSCSI initiators

- IETF-ratified iSCSI specification compliant
- IPv6 support
- iSNS integration
- IPsec encryption
- CHAP authentication
- Seamless integration into Microsoft Management Console (MMC) user interface
- LUN resizing

Features and Benefits

- 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 and Server 2008 R2
 - 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 Initial Configuration Task Wizard

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

System Specifications

HP X3800sb G2 Network Storage Blade includes:	Server + Processor	<ul style="list-style-type: none"> ● BL460c G7 server with 1 Quad-Core Intel® Xeon® Processors E5640 (2.66 GHz, 80w) pre-installed ● NOTE: All BL460c G7 options are supported by the X3800sb G2 and will ship as separate components unless otherwise noted.
	Memory	<ul style="list-style-type: none"> ● 6GB (3 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 15k hot plug hard drives with Microsoft Windows Storage Server 2008 R2, Enterprise X64 Edition pre-installed (in a RAID 1 configuration)
	Network Controller	<ul style="list-style-type: none"> ● Integrated NC553i Dual Port FlexFabric 10GbE Converged Network Adapter ● NOTE: FlexFabric capability requires the use of an HP Virtual Connect Flex-Fabric module. Learn more at: www.hp.com/go/virtualconnect. ● One (1) additional 10/100 NIC dedicated to iLO 3
	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.
	Form Factor	<ul style="list-style-type: none"> ● The X3800sb G2 is based on the HP ProLiant BL460c G7, 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 3 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

Warranty and software support	Warranty	<ul style="list-style-type: none"> ● The X3800sb G2 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	<ul style="list-style-type: none"> ● 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 G2

HP Storage Mirroring Software - HP 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://h18006.www1.hp.com/products/storage/software/sm/>

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 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.

Optional Software

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: [Storage Essentials - NAS Manager](#)

HP SAN / Array Support	HP 3PAR Storage Systems http://h18006.www1.hp.com/storage/highlights/3par.html
	HP P9000/XP Disk Arrays http://h18006.www1.hp.com/storage/xparrays.html
	HP EVA Disk Arrays http://h18006.www1.hp.com/products/storageworks/eva/index.html
	HP P4000 SAN Solutions http://h10010.www1.hp.com/wwpc/us/en/sm/WF05a/12169-304616-3930449-3930449-3930449-4118659.html
	HP P2000/MSA Disk Arrays http://h10010.www1.hp.com/wwpc/us/en/sm/WF04a/12169-304616-241493-241493-241493.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 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 R2 Enterprise Edition.

Service and Support, HP Care Pack, and Warranty Information

Warranty

HP X3000 G2 Network Storage Systems come with a standard 3-3-3 warranty (3 years parts exchange, 3 years labor and 3 years onsite, next business day response). Software media is warranted to be free of physical defect for a period of 90 days from delivery.

Services Included with the Product One year of HP Software Support, standard 9x5 business hours (software advisory and remedial software telephone support, new version license rights, and media and documentation distribution service).

For increased uptime, productivity and ROI-HP Care Pack packaged services for Storage

These days, you need to get the most out of your storage investment-you can't afford not to. When you buy HP storage products and solutions, it's also a good time to think about what levels of service and support you may need. To help take the worry out of deploying, designing, maintaining, and managing your environment, we've designed a portfolio of service options that are as flexible, reliable and scalable as your storage. Unlike storage-only vendors, we take a holistic approach to your entire environment, bridging storage, servers, blades, software and network infrastructures with our HP Care Pack packaged services for Storage.

Protect your business beyond the warranty

When it comes to robustness and reliability, standard warranties on today's computing equipment have matured just as the technologies have matured. Good news on some fronts-but also a source of potential problems and subsequent consequences that come from depending on standard warranties alone. Standard warranty protects against product defects and some causes of downtime- but not the business. By using a standard approach to warranty uplifts, such as HP Care Pack Services, you can reduce downtime risks and be more certain of operational consistency for both mission-critical and standard business computing. Simply put, HP Care Pack Services normalize the warranty of combined products - helping you proactively guard against unplanned downtime.

Extending warranties with HP Care Pack Services

For cost-effective upgrading or extending your standard warranty, HP Care Pack Services offer a suite of standard reactive hardware and software support services that are sold separately, or combined as with our Support Plus and Support Plus 24 services. The portfolio also provides a combination of proactive and reactive services, such as Proactive 24 Service and Critical Service. In addition, with HP Proactive Select we offer an innovative approach to service delivery that gives you the flexibility to acquire the specific proactive services you need today, then add services as your needs evolve. HP Proactive Select offers a broad set of technical or per-event type service options - including server, storage, and network, SAN device, and software, environment, installation and education services. Services that you can mix and match depending on your specific requirements, from preliminary planning and equipment delivery to installation, configuration, integration, and testing, through every level of ongoing support. Our HP Care Pack packaged services for Storage assures help when you need it most. And for many products, post-warranty HP Care Pack Services are available when your original warranty has expired.

HP Storage Services: Offering reliability, flexibility and value-just like your storage

HP Storage Services offers a full spectrum of customer care, from technology support to complex migrations to complete completely managed services. HP Factory Express provides customization, integration and deployment services for turnkey solutions. HP Education offers flexible, comprehensive training on storage networking, disk storage systems, and storage software to help your IT staff get the most out of your investments. And HP Financial solutions extend innovative financing and asset management programs to cost-effective buy, manage and eventually retire your older equipment.

HP Storage Services, the trusted business technology experts who manage your technology in action, because when technology works, business works. <http://www.hp.com/services/storage>

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

HP Care Pack Services are sold by HP and HP Authorized Service Partners

- Services for customers purchasing from HP or an enterprise reseller are quoted using HP order configuration tools.
- Customers purchasing from a commercial reseller can find HP Care Pack Services at <http://www.hp.com/go/lookuptool>

Recommended HP Care Pack Services for optimal satisfaction with your HP product.

Recommended Services **3-Year HP Support Plus 24**

For a higher return on your storage investment, HP Support Plus 24 provides integrated hardware and software support services designed specifically for your technology. Available 24x7, this 3-year combined reactive support option delivers onsite hardware support and over-the-phone software support around-the-clock. Leverage the full strength of HP Technology Services - customers can trust the services professionals at HP to work collaboratively with them, putting our strategic and technical know-how to work across their entire infrastructure.

- Improve uptime with responsive hardware and software services
- Enjoy consistent service coverage across geographically dispersed sites
- Update HP software at a predictable cost
- Increase customer satisfaction-with no interoperability gaps

<http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-6638EN.pdf>

HP Installation and Startup Service for X1000/X3000 G2 Storage Systems

For smooth startup, HP Installation and Startup Service for X1000/X3000 G2 Storage Systems - provides deployment of your HP ProLiant Storage Server while helping you establish readily available access to and management of your critical data and applications. Leverage the full strength of HP Technology Services - customers can trust the services professionals at HP to work collaboratively with them, putting our strategic and technical know-how to work across their entire infrastructure.

- System installation and setup by a HP technical specialist
- Reduced implementation time and cost
- Verification prior to installation that all service prerequisites are met
- Availability of an HP service specialist to answer basic questions related to this service during the orientation session
- Potential expansion of the number of shares and hosts

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA2-6112ENL.pdf>

HP Proactive Select Service

HP Proactive Select Service improves your IT performance and manageability through the use of cost effective flexible services. HP provides technical expertise and best practices to accelerate ROI of your technology investment. Selectable proactive services span a wide range of technology and process services - a flexible way to purchase proactive services that fit your particular environment and situation.

HP Proactive Select Service is technology agnostic and purchased in addition to your choice of underlying reactive support.

- Access to a list of flexible and customizable proactive service activities
- Enhance customers' in-house IT team with complementary assistance from HP
- Improved time to solution
- Reduce business risk and project costs by accessing HP specialists
- Simplify IT operational procedures by leveraging HP best practices

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA2-3842ENN.pdf>

Service and Support, HP Care Pack, and Warranty Information

Optional HP Care Pack Services that will enhance your HP product experience.

Optional Services

HP Entry Storage Data Migration Service for Windows

For customers who need to safely migrate Windows data within their TCP/IP networks with minimal impact to their operations:

You have a need to migrate data between Windows servers within your TCP/IP network. Or you have a need to migrate storage for your Windows servers. Or both. And you need to accomplish these migrations efficiently while minimizing risk at the same time.

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.

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA2-4734ENW.pdf>

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>

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

Service and Support, HP Care Pack, and Warranty Information

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.htm>

Additional Services Information

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

<http://www.hp.com/services/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 G2 is built on the ProLiant BL460c G7 server. All BL460c G7 options are supported by the X3800sb G2 and will ship as separate components. HBA options listed below are available factory-installed. For more information on BL460 G7 options and details on memory configuration, see the BL460c G7 QuickSpecs: http://h18004.www1.hp.com/products/quickspecs/13238_div/13238_div.html

Step 1 - Order the HP X3800sb G2 Network Storage Gateway for your BladeSystem c-Class enclosure.

HP X3800sb G2 Network Storage Blade BV874A	Server + Processor	Built on the BL460c G7, with 1 Quad-Core Intel Processors E5640 (2.66GHz, 12MB L3 Cache, 80w) pre-installed
	Memory	6GB (3x2GB) PC3-10600R pre-installed
#OD1 -Factory Integration into c-class enclosure	Operating System	Microsoft Windows Storage Server 2008 R2, Enterprise X64 Edition, pre-installed
	Hard Drives	2 x 146GB SFF 6G SAS 15K HDDs (for mirrored OS image)
	Form Factor	Half height cClass blade

Step 2 - Add additional processor for X3800 G2

HP BL460c G7 E5640 (2.66 GHz, 12MB L3 Cache, 80W, DDR3-1066, HT, Turbo 1/1/2/2) Kit	610861-B21
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Step 3 - Add Optional HBAs delivered as separate components or optional factory-installation

HP Fiber Channel Mezzanine Options	Brocade 804 8Gb FC HBA for HP BladeSystem c-Class	590647-B21
	HP BLc Emulex LPe1205- 8Gb FC HBA for HP c-Class BladeSystem	456972-B21
	Emulex LPe1105 FC Dual Channel 4Gb, PCI-E-to-Fibre Channel Host Bus Adapter	403621-B21
	QLogic QMH2562 8Gb FC HBA for HP c-Class BladeSystem	451871-B21
	QLogic QMH2462 4Gb FC HBA for HP c-Class BladeSystem	403619-B21

Step 4 - Order additional memory for the X3800sb G2

Additional memory options	Registered DIMMS (RDIMMs)	
	HP 2GB (1x2GB) Dual Rank x8 PC3-10600 (DDR3-1333) Registered CAS-9 Memory Kit	500656-B21
	HP 4GB (1x4GB) Dual Rank x4 PC3-10600 (DDR3-1333) Registered CAS-9 Memory Kit	500658-B21
	HP 4GB (1x4GB) Single Rank x4 PC3-10600 (DDR3-1333) Registered CAS-9 Memory Kit	593339-B21
	HP 4GB (1x4GB) Single Rank x4 PC3L-10600 (DDR3-1333) Registered CAS-9 Low Power Memory Kit	604504-B21
	HP 8GB (1x8GB) Dual Rank x4 PC3-10600 (DDR3-1333) Registered CAS-9 Memory Kit	500662-B21
	HP 8GB (1x8GB) Dual Rank x4 PC3L-10600 (DDR3-1333) Registered CAS-9 Low Power Memory Kit	604506-B21
	HP 16GB (1x16GB) Quad Rank x4 PC3-8500 (DDR3-1066) Registered CAS-7 Memory Kit	500666-B21

Additional Specifications

HP X3800sb G2 Network Storage Blade specifications The X3800sb G2 is built on the HP ProLiant BL460c G7. See the BL460c QuickSpecs for additional specifications.

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