

Overview

Natural and man-made disasters can occur when you least expect it - serving as a reminder that in less than a moment's notice, volumes of data loss can occur. To prevent data loss from failure, error, or disaster, HP Storage Mirroring Software provides replication and recovery of valuable Windows and Linux data to another server. Proactive replication is a key strategy coupled with tape backup and snapshot technology for up-to-the-second data protection. Having replicated data co-located enables customers to recover their static and transactional data in seconds to minutes.

Patented replication and failover technology continuously captures byte-level data changes as they occur in your production environment and replicates those changes to one or more servers in any location without geographic limitations. By replicating only the bytes that change, Storage Mirroring Software uses the absolute minimum bandwidth required to replicate customer data. The software does not require special hardware to run and utilizes existing LAN or WAN infrastructure -saving time, additional investment, and maintenance. Storage Mirroring software is storage independent and will support any DAS, NAS, and SAN storage device. Additional flexibility is achieved with Windows and Linux operating system support. Storage Mirroring works on Windows Server 2003, Windows Server 2008, Windows Storage Server, 64-bit Windows, Windows on Itanium and Red Hat Linux. The platform flexibility, resource optimization, and application-specific protection enable customers to solidify their data and disaster protection strategies.

What's New

- New product SKUs with version 5.2
- Enhanced clustering services



Models

Storage Mirroring will now be offered in 3 different product SKU families

- Stock LTU (channel stocked license(s))
- E-LTU (electronic delivery - order any number of licenses - 10 or higher)
- LTU (paper delivery which replaces all previous 10 pack licenses -an alternative to electronic delivery)

Stock LTU Base Models

Order the Stock LTU from an HP authorized reseller. Delivery will consist of a paper entitlement certificate per SKU and a single activation code. Add a corresponding Storage Mirroring Care Pack for support.

HP Storage Mirroring Windows Media Kit	TA778A
HP Storage Mirroring Data Migration Stock LTU	TA780A
HP Storage Mirroring Replicate Edition Stock LTU	TA782A
HP Storage Mirroring Replicate Target Edition Stock LTU	TA784A
HP Storage Mirroring Replicate Target Exchange Stock LTU	TA786A
HP Storage Mirroring Recover Entry Edition Stock LTU	TA788A
HP Storage Mirroring Recover Standard Edition Stock LTU	TA790A
HP Storage Mirroring Recover Enterprise Edition Stock LTU	TA792A
HP Storage Mirroring Recover Premium Edition Stock LTU	TA794A
HP Storage Mirroring Recover Virtual Host 1 Stock LTU	TA796A
HP Storage Mirroring Recover Virtual Host 10 Stock LTU	TA798A
HP Storage Mirroring Recover Virtual Host Unlimited Stock LTU	TA800A

E-LTU Base Models

Order E-LTU when you require 10 or more licenses and you desire electronic delivery of those 10+ licenses. E-LTUs replace the previous 10 packs. Previously, an odd number of licenses over 10 require 10 packs and multiple singles, now E-LTUs will deliver the exact number of licenses electronically. Add corresponding Storage Mirroring Care Packs for support.

NOTE: Electronic software is now available in most countries. HP recommends purchasing electronic products over physical products when available for faster delivery and the convenience of not having to manage-either file away or throw away-confidential paper licenses. For more information, please contact an HP representative.

HP Storage Mirroring Data Migration E-LTU	TA779AAE
NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	
HP Storage Mirroring Replicate Edition E-LTU	TA781AAE
NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	
HP Storage Mirroring Replicate Target Edition E-LTU	TA783AAE
NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	
HP Storage Mirroring Replicate Target Exchange E-LTU	TA785AAE
NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	
HP Storage Mirroring Recover Entry Edition E-LTU	TA787AAE
NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	
HP Storage Mirroring Recover Standard Edition E-LTU	TA789AAE
NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	



Models

HP Storage Mirroring Recover Enterprise Edition E-LTU NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	TA791AAE
HP Storage Mirroring Recover Premium Edition E-LTU NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	TA793AAE
HP Storage Mirroring Recover Virtual Host 1 E-LTU NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	TA795AAE
HP Storage Mirroring Recover Virtual Host 10 E-LTU NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	TA797AAE
HP Storage Mirroring Recover Virtual Host Unlimited E-LTU NOTE: Electronic software is available in all countries except China and Japan. China and Japan customers should order the physical equivalent.	TA799AAE

LTU Base Models

Order LTUs when you require 10 or more licenses and you desire paper delivery of those 10+ licenses. LTUs replace the previous 10 packs. Previously, an odd number of licenses over 10 require 10 packs and multiple singles, now LTUs will deliver the exact number of licenses via regular mail Add corresponding Storage Mirroring Care Packs for support.

HP Storage Mirroring Windows Media Kit	TA778A
HP Storage Mirroring Data Migration LTU	TA779A
HP Storage Mirroring Replicate Edition LTU	TA781A
HP Storage Mirroring Replicate Target Edition LTU	TA783A
HP Storage Mirroring Replicate Target Exchange LTU	TA785A
HP Storage Mirroring Recover Entry Edition LTU	TA787A
HP Storage Mirroring Recover Standard Edition LTU	TA789A
HP Storage Mirroring Recover Enterprise Edition LTU	TA791A
HP Storage Mirroring Recover Premium Edition LTU	TA793A
HP Storage Mirroring Recover Virtual Host 1 LTU	TA795A
HP Storage Mirroring Recover Virtual Host 10 LTU	TA797A
HP Storage Mirroring Recover Virtual Host Unlimited LTU	TA799A



Software Compatibility

Storage Mirroring Replicate Operating System Support

Microsoft Windows Server 2003
Microsoft Windows Server 2008
RHEL 4.5 and higher
SuSE Linux 10.2
Windows Server 2003 Enterprise Edition for 64-Bit Itanium-based Systems
NOTE: Only available under the Premium edition.

Storage Mirroring Recover Operating System Support

Microsoft Windows Server 2003
Microsoft Windows Server 2008
Microsoft Windows Server 2008 Hyper-V
Windows Server 2003 Enterprise Edition for 64-Bit Itanium-based Systems
NOTE: Only available under the Premium edition.
RHEL 4.5 and higher
SuSE Linux 10.2
VMware ESX Server 3.x or later (Strongly recommended: VMware ESX Server 3.5 or later)
VMware GSX
Citrix XenServer versions 4.0 or later

Storage Mirroring Data Migration Operating System Support

Microsoft Windows Server 2003
Microsoft Windows Server 2008
Exchange Server 2007, Exchange Server 2003,
SQL Server 2008, SQL Server 2005, SharePoint Services v3, WSS
components of SharePoint Server (MOSS) 2007
BlackBerry Enterprise Server 4.1.2 - 4.1.5
Oracle 10g, 9i*

Applications

* Many older application versions are only supported by older versions of Microsoft operating systems. Please check for valid configurations with Microsoft

Storage Mirroring Application Manager

Microsoft Exchange 2003 and 2007 (Clustering support and Target Data Verification for 2003 and 2007)
Microsoft SQL 2005, 2008 (Target Data Verification)
Blackberry Enterprise Server - Consolidated 4.1.2 - 4.1.5
Microsoft SharePoint - Windows SharePoint Services (WSS) 3.0 and Microsoft Office SharePoint Server (MOSS) 2007



Software Compatibility

HP Storage Mirroring Recover

HP Storage Mirroring Recover / Replicate 5.2 is interoperable back to version 5.0 but is restricted to the following limitations. The HP Storage Mirroring Recover / Replicate clients can only control the same or earlier releases. To accommodate rolling upgrades, older sources can connect to newer targets, but newer sources cannot connect to older targets.

Client	Source Server	Target Server	Supported
5.0	5.1 or 5.2	5.1 or 5.2	No
5.1	5.2	5.2	No
5.2	5.0	5.0, 5.1, or 5.2	Yes
5.2	5.1	5.0	No
5.2	5.1	5.1 or 5.2	Yes
5.2	5.2	5.0 or 5.1	No
5.2	5.2	5.2	Yes

HP Storage Mirroring Replicate

Client	Source Server	Target Server	Supported
5.0	5.1 or 5.2	5.1 or 5.2	No
5.1	5.2	5.2	No
5.2	5.0	5.0, 5.1, or 5.2	Yes
5.2	5.1	5.0	No
5.2	5.1	5.1 or 5.2	Yes
5.2	5.2	5.0 or 5.1	No
5.2	5.2	5.2	Yes

HP Storage Mirroring Data Migration

Client	Source Server	Target Server	Supported
5.1	5.2	5.2	No

Windows Operating System Compatibility

HP Storage Mirroring Recover

Product	Windows Server	Windows OS
Recover Entry Edition	2003	Windows 2003
		Windows 2003 R2 Storage Server Edition
	2008	Windows 2008 Storage Server Edition i386 and x64
		Small Business Server Standard and Premium x64
		Foundation Server with SAK
Recover Standard Edition	2003	Essential Business Server x64
		Windows 2003
		Windows 2003 R2 Storage Server Edition
		Small Business Server
		Web Edition i386 and x64
	2008	Standard Edition i386 or x64
		Windows 2008 Storage Server Edition i386 and x64
		Small Business Server Standard and Premium x64
		Foundation Server



Software Compatibility

		Essential Business Server x64	
		Web Server i386 and x64	
		Standard Edition i386 and x64	
Recover Enterprise Edition	2003	Windows 2003	
		Windows 2003 R2 Storage Server Edition	
		Small Business Server	
		Web Edition i386 and x64	
		Standard Edition i386 or x64	
		Enterprise Edition i386 and x64	
	2008	Windows 2008 Storage Server Edition i386 and x64	
		Small Business Server Standard and Premium x64	
		Foundation Server	
		Essential Business Server x64	
Recover Premium Edition	2003	Windows 2003	
		Windows 2003 R2 Storage Server Edition	
		Small Business Server	
		Web Edition i386 and x64	
		Standard Edition i386 or x64	
		Enterprise Edition i386 and x64	
	2008	Enterprise Itanium IA64	
		Datacenter i386, x64, and IA64	
		Windows 2008 Storage Server Edition i386 and x64	
		Small Business Server Standard and Premium x64	
Recover Virtual Host 1 Recover Virtual Host 10 Recover Virtual Host Unlimited	ESX VM (host-level)	Client / Service: Microsoft Windows XP (32-bit), Microsoft Windows 2003 (32-bit) , Microsoft Windows 2003 (64-bit) , Microsoft Windows Vista (32-bit)	
		VirtualCenter Server: VMware VirtualCenter 2.x or later (Strongly recommended: VMware VirtualCenter 2.0.1 or later)	
		Source / Target ESX Servers: VMware ESX Server 3.0.x, ESX 3.5 classic, or ESX 4.0 classic	
		HyperV VM (host-level)	Source: Microsoft Windows Server 2008 Standard, Datacenter, or Enterprise, 64-bit version, with the Hyper-V service installed
			Target: Windows Server 2008 Standard, Datacenter, or Enterprise, 64-bit version, with the Hyper-V service installed
	ESX (Entire P/V)	Source: See base requirement for Recover.	
		VirtualCenter Server: Mware VirtualCenter 2.0.1 or later.	



Software Compatibility

		Target ESX Host Server: Physical machine running VMware ESX Server 3.0.x, ESX 3.5 classic, or ESX 4.0 classic, Enterprise edition or higher. ESXi versions 3 and 4 are also supported as long as ESXi is managed by vCenter or vSphere.
	HyperV (Entire P/V)	Source: Microsoft Windows 2003 with Service Pack 1 or later, Microsoft Windows 2008. Target: The target Microsoft Hyper-V host server is a physical machine running Hyper-V Windows 2008 server.

HP Storage Mirroring Replicate		
Product	Windows Server (P/V)	Windows OS
Replicate (Source Server)	2003 or 2003 R2 (32-bit and 64-bit)	Datacenter, Enterprise, Standard
		Web Edition
		Small Business Server
		Storage Server Edition
	2008 (32-bit and 64-bit)	Datacenter, Enterprise, Standard
		Essential Business Server
		Web Server
		Foundation Server
Replicate (Repository Server)	2003 or 2003 R2 (32-bit and 64-bit)	Datacenter, Enterprise, Standard
		Web Edition
		Small Business Server
		Storage Server Edition
	2008 (32-bit and 64-bit)	Datacenter, Enterprise, Standard
		Essential Business Server
		Web Server
		Foundation Server
Replicate (Recovery Server)	Physical/Existing Virtual 2003 or 2003 R2	Enterprise, Standard
		Web Edition
		Small Business Server
		Enterprise x64 Standard x64
	Physical/Existing Virtual 2008	Enterprise, Standard
		Web Server
		Small Business Server
		Enterprise x64 Standard x64
Replicate (CDP)	Provisioned Virtual	Windows 2008 Hyper-V
		VMware ESX Enterprise Edition version 3.0.x, 3.5, or 4.0
If your repository server is running a Windows 2003 operating system, you must have Service Pack 2 installed on the server.		



Software Compatibility

HP Storage Mirroring Data Migration		
Product	Windows Server (P/V)	Windows OS
Data Migration (Source)	2003 or 2003 R2	Enterprise, Standard
		Web Edition
		Small Business Server
		Enterprise x64
		Standard x64
	2008	Enterprise, Standard
		Web Edition
		Small Business Server
		Enterprise x64
		Standard x64
Data Migration (Target)	Physical/Existing Virtual	Enterprise, Standard
		Web Edition
	2003 or 2003 R2	Enterprise x64
		Standard x64
	Physical/Existing Virtual	Enterprise, Standard
		Web Edition
	2008	Enterprise x64
		Standard x64
	Proviisiioned Virtual	Windows 2008 Hyper-V
		VMware ESX Enterprise Edition version 3.0.x, 3.5, or 4.0

Linux Operating System Compatibility

HP Storage Mirroring for Linux					
Physical Servers and Virtual Systems Guest Operating Systems	Kernel Version	Kernel Type	File System	Virtual Systems Platforms	
Red Hat® Enterprise Linux 4.5 through 4.7 for 32-bit architecture	2.6.9.x.x	Default SMP	Ext2 Ext3	VMware® Microsoft Virtual Server Xen® Virtual Iron®	
CentOS 4 Updates 5-7 for 32-bit architecture		HugeMem			
Red Hat Enterprise Linux 4.5 through 4.7 for 64-bit architecture		Default SMP			
CentOS 4 Updates 5-7 for 64-bit architecture		HugeMem			
Red Hat Enterprise Linux 5.0 through 5.3 for 32-bit architecture	2.6.18.x.x	Default (SMP)	Ext2 Ext3 ReiserFS		
CentOS 5 GA-Update 2 for 32-bit architecture		Xen PAE			
Red Hat Enterprise Linux 5.0 through 5.3 for 64-bit architecture		Default (SMP)			
CentOS 5 GA-Update 2 for 64-bit architecture		Xen			
SUSE Linux Enterprise Server 10.2 for 32-bit architecture	2.6.16.x.x	Default SMP BigSMP Xen XenPAE		Ext2 Ext3 ReiserFS	VMware® Microsoft Virtual Server Xen® Virtual Iron®



Software Compatibility

SUSE Linux Enterprise Server 10.2 for 64-bit architecture			
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	Default SMP Xen		
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Hardware Prerequisites, Distribution Media and Documentation

Hardware Prerequisites

- WinTel server (minimum of two hosts, target and source) having industry standard processor(s) as documented in the Microsoft Windows 2000, Windows Server 2003, or Windows Server 2008 Hardware Compatibility List.
 - Red Hat Enterprise Linux 4.x, 5.x
 - SUSE Linux Enterprise Server 10.2
 - Itanium Server (minimum of two hosts, target and source)
 - TCP/IP network connection between hosts
 - 45 MB disk space for Storage Mirroring system files
 - 30 MB disk space for Windows installer files
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Distribution Media

Storage Mirroring is available as a media and docs kit for all supported operating systems. A 60-day trial version is also available on the HP Web site for download at:

<http://h20392.www2.hp.com/portal/swdepot/displayproductsList.do?category=swsded>

Licenses per host are sold separately and are available in single or bulk ordering using flex SKUs (e-delivery).

Documentation

Additional information online:

HP home page: <http://www.hp.com>

HP products home page: <http://h18006.www1.hp.com/storage/index.html>

HP Storage Mirroring software home page: <http://www.hp.com/go/storageworks/storagemirroring>

HP Services home page: <http://www.hp.com/hps/storage/>

HP Technical Support home page: <http://welcome.hp.com/country/us/eng/support.htm>

HP Solutions: <http://welcome.hp.com/country/us/en/solutions.html>

HP * software download page:

<http://h20392.www2.hp.com/portal/swdepot/displayproductsList.do?category=swsded>

*Go to this location to download a 60-day trial version of Storage Mirroring.



Software Licensing

Software Licensing

Storage Mirroring LTU (license to use) is licensed per WinTel or Itanium host installation. When purchasing a Stock LTU, 1 activation key code is provided, one for each host.

HP's Storage Mirroring software requires a software license per server that will participate in the replication and failover process. A typical scenario would be a 1-to-1 configuration - a production server and a replication server. In this 1-to-1 scenario, each server would require a Storage Mirroring license. If you chose to implement a many-to-1 or a 1-to-many scenario where you have many production servers or many replication servers, all servers need to be licensed. There is no limit to the number of servers that can be licensed.

In general, all servers that participate in the replication and failover process need to be licensed. The exception are the new Data Migration SKUs and the Virtual Host SKUs.

Storage Mirroring for Virtual Machines replicates and protects data inside a virtual operating system - unlimited machines based on licensing

Storage Mirroring for Virtual Hosts replicates and protects the entire virtual machine - the operating system, the applications, and the data. This Storage Mirroring product is licensed to support up unlimited machines based on licensing.

Additionally, you will need to match the version of your operating system for each server to the appropriate version of Storage Mirroring.

SPECIAL NOTE: Storage Mirroring Enterprise Edition will function on any supported version of Microsoft operating system (except Premium Editions). For example, if you desire to keep all software licenses consistent regardless of the operating system version installed on your server, you can elect to install Storage Mirroring Enterprise Edition on all servers. Other Storage Mirroring versions must be matched to their respective operating system editions.

The software does not need special hardware or software to utilize your existing LAN or WAN infrastructure.

Storage Mirroring software is extremely flexible and supports different storage technologies even if you have a mix of different hardware and operating system versions:

- DAS (servers with internal drives or external drives)
- NAS (ProLiant Storage Server products and All-in-One Storage Subsystems)
- SAN (XP, EVA, MSA)
- Storage Mirroring will also support 3rd party servers and storage if a customer wishes to migrate data from their servers and storage onto ProLiant servers and storage. The Storage Mirroring licenses are transferable to other HP servers.

Getting the Storage Mirroring Software Instructions:

1. Select the appropriate version for your operating system.
2. Download the Storage Mirroring software for a 60 day evaluation.
(Note if you have purchased an All-in-One Storage System or ProLiant Storage System product, the Storage Mirroring installer or evaluation software may be embedded on the disk image). The Virtual Infrastructure products are currently not available as a 60 day trial. These products are only available in the Virtualization media kit.
All features and options are enabled during this evaluation period.



Software Licensing

3. Type in "EVAL" during the installation when you are prompted for an activation or license code. At the end of the evaluation period, the appropriate Storage Mirroring licenses are required to continue using the software. All configurations, settings, and jobs created during the evaluation period are maintained when the appropriate Storage Mirroring licenses are added even if the evaluation software has previously expired.

The 60-day trial software cannot be re-installed on the same server after the software has expired. The customer may elect to purchase the License To Use (LTU), re-install the trial on another server, or not use the software.

Getting the Storage Mirroring License Key:

You need to obtain a permanent activation key to make your Storage Mirroring license valid beyond the 60 day trial period.

1. You need to purchase the appropriate Storage Mirroring part number that matches your operating system on your server (see the 'Software Support' table above). Those part numbers can be obtained from your HP channel partner.
2. After ordering the LTU (license-to-use) part number, you will receive an HP Entitlement Certificate. This certificate will contain information on how to create a permanent software license.
3. The Entitlement Certificate will provide instructions on how to proceed to an HP web site that will automatically generate your license key.
4. The HP licensing web site will ask you to enter contact information and your order number from the entitlement certificate.
5. The web site will generate the activation key and email a permanent activation certificate to the email address you previously supplied. An activation code will appear on the certificate.
6. Upon receipt of the activation code, you may reload the software, enter the activation code and make the license fully functional and permanent.

NOTE: Storage Mirroring version 5.2 uses 24 character activation codes that will not work with previous versions of Storage Mirroring. If entitled (via a valid support/Carepack contract), older Storage Mirroring activation codes will activate in 5.2. Storage Mirroring version 5.0 and version 5.1 has new 24 character activation codes. Previous versions of Storage Mirroring had 16 character codes. The version 5.0, 24 character activation codes WILL NOT activate any software that is version 4.5 or below. Any new Storage Mirroring servers must be version 5 or 5.1 and use the new 24 character activation codes.

NOTE: Storage Mirroring version 5, 5.1 and v5.2, once licensed, will not interoperate with any Storage Mirroring v4.4 or v4.5 servers as the target server.

Recovery of Entitlement Certificates, Activation Codes or Issues with Redemption:

For additional password assistance you may contact one of the following license centers

If your request is an emergency and the time is after normal business hours of your password delivery center, you may contact another center by phone or e-mail to fulfill your request.

Hewlett-Packard Password Center for U.S.A.:

Phone: (801) 431-1597 or (800) 326-0411

Fax: (801) 431-3654

Hours of operation: 6:00 am to 6:00 pm MST

Americas_password@cnd.hp.com



Software Licensing

Hewlett-Packard Password Center for Europe/Africa:

Phone: (+31-55-543-4642)

Fax: (+31-55-543-4645)

Hours of operation: 9:00 to 18:00 CET

Europe_password@cnd.hp.com

Hewlett-Packard Password Center for Asia Pacific:

Phone: (outside Japan) (+81-3-3227-5672) - English Support

Phone: (within Japan) 03-3227-5264 - Japanese Support

Fax: (+81-3-3227-5238)

Hours of operation: 9:00 am to 5:00 pm JST

Asia_password@cnd.hp.com



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.

60-day evaluation services support

- No support or services are available for trial versions of HP Storage Mirroring

Recommended Services HP Care Pack Services recommended for optimal satisfaction of all deployments of your product.
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



Service and Support, HP Care Pack, and Warranty Information

- Increase customer satisfaction-with no interoperability gaps

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

HP Installation and Startup Services for Storage Mirroring

For smooth startup and better business outcomes, HP Installation and Startup Services for Storage Mirroring-delivers the expert assistance you need to rapidly deploy and integrate real-time data mirroring between local and remote systems. In today's new era of business technology- 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.

- Installation that adheres to the product specifications and supports your customer's configuration requirements and business objectives
- Design and implementation delivered by a trained HP specialist and based upon HP-recommended configurations and industry best practices
- Verification of the implementation against design objectives
- Knowledge transfer to assist your customer's local administrator in managing the solution
- Delivery of the service at a mutually scheduled time convenient to your customer
- Availability of an HP service specialist to answer questions during the onsite delivery of the service
- A project manager to manage the implementation of the service engagement
- Documentation of the HP Storage Mirroring configuration as implemented
- Availability of advanced customization beyond the standard service through the Statement of Work (SOW) process

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA0-0625ENW.pdf>

Product Family	Product Number	Description	PURPLE Care Packs**	Service Level
Storage Mirroring Data Migration LTU only 15432	TA779A	HP Storage Mirroring Data Migration LTU	UT300E	HP 3yr 9x5 SM Data Migration SW Supp
	TA779AAEHP	HP Storage Mirroring Data Migration E-LTU	UT301E	HP 3yr 24x7 SM Data Migration SW Supp
	TA780A	HP Storage Mirroring Data Migration Stock LTU	UT302E	HP 4yr 9x5 SM Data Migration SW Supp
Storage Mirroring Replicate Edition LTU 15711	TA781A	HP Storage Mirroring Replicate Edition LTU	UT306E	HP 3yr 9x5 SM Replicate Edition SW Supp
	TA781AAEHP	HP Storage Mirroring Replicate Edition E-LTU	UT307E	HP 3yr 24x7 SM Replicate Edition SW Supp
	TA782A	HP Storage Mirroring Replicate Edition Stock LTU	UT308E	HP 4yr 9x5 SM Replicate Edition SW Supp
			UT309E	HP 4yr 24x7 SM Replicate Edition SW Supp
			UT604E	HP 5yr 9x5 SM Replicate Edition SW Supp
			UT605E	HP 5yr 24x7 SM Replicate Edition SW Supp



Service and Support, HP Care Pack, and Warranty Information

Storage Mirroring Replicate Target Edition LTU 15721	TA783A	HP Storage Mirroring Replicate Target Edition LTU	UT606E	HP 3yr 9x5 SM Replicate Target SW Supp
	TA783AAEHP	HP Storage Mirroring Replicate Target Edition E-LTU	UT607E	HP 3yr 24x7 SM Replicate Target SW Supp
Storage Mirroring Replicate Target Exchange LTU	TA784A	HP Storage Mirroring Replicate Target Edition Stock LTU	UT608E	HP 4yr 9x5 SM Replicate Target SW Supp
	TA785A	HP Storage Mirroring Replicate Target Exchange LTU	UT609E	HP 4yr 24x7 SM Replicate Target SW Supp
Storage Mirroring Recover Entry Edition LTU 15714	TA785AAEHP	HP Storage Mirroring Replicate Target Exchange E- LTU	UT610E	HP 5yr 9x5 SM Replicate Target SW Supp
	TA786A	HP Storage Mirroring Replicate Target Exchange Stock LTU	UT611E	HP 5yr 24x7 SM Replicate Target SW Supp
	TA787A	HP Storage Mirroring Recover Entry Edition LTU	UT612E	HP 3yr 9x5 SM Recover Entry Ed SW Supp
	TA787AAEHP	HP Storage Mirroring Recover Entry Edition E-LTU	UT613E	HP 3yr 24x7 SM Recover Entry Ed SW Supp
Storage Mirroring Recover Standard Edition LTU 15723	TA788A	HP Storage Mirroring Recover Entry Edition Stock LTU	UT614E	HP 4yr 9x5 SM Recover Entry Ed SW Supp
			UT615E	HP 4yr 24x7 SM Recover Entry Ed SW Supp
			UT616E	HP 5yr 9x5 SM Recover Entry Ed SW Supp
			UT617E	HP 5yr 24x7 SM Recover Entry Ed SW Supp
	TA789A	HP Storage Mirroring Recover Standard Edition LTU	UT618E	HP 3yr 9x5 SM Recover Std Ed SW Supp
Storage Mirroring Recover Enterprise Edition LTU 15724	TA789AAEHP	HP Storage Mirroring Recover Standard Edition E-LTU	UT619E	HP 3yr 24x7 SM Recover Std Ed SW Supp
	TA790A	HP Storage Mirroring Recover Standard Edition Stock LTU	UT620E	HP 4yr 9x5 SM Recover Std Ed SW Supp
			UT621E	HP 4yr 24x7 SM Recover Std Ed SW Supp
			UT622E	HP 5yr 9x5 SM Recover Std Ed SW Supp
Storage Mirroring Recover Enterprise Edition LTU 15724			UT623E	HP 5yr 24x7 SM Recover Std Ed SW Supp
	TA791A	HP Storage Mirroring Recover Enterprise Edition LTU	UT624E	HP 3yr 9x5 SM Recover Enterp Ed SW Supp
	TA791AAEHP	HP Storage Mirroring Recover Enterprise Edition E-LTU	UT625E	HP 3yr 24x7 SM Recover Enterp Ed SW Supp
	TA792A	HP Storage Mirroring Recover Enterprise Edition Stock LTU	UT626E	HP 4yr 9x5 SM Recover Enterp Ed SW Supp
			UT627E	HP 4yr 24x7 SM Recover Enterp Ed SW Supp



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		UT628E	HP 5yr 9x5 SM Recover Enterp Ed SW Supp	
		UT629E	HP 5yr 24x7 SM Recover Enterp Ed SW Supp	
	TA793A	HP Storage Mirroring Recover Premium Edition LTU	UT630E	HP 3yr 9x5 SM Recover Prem Ed SW Supp
Storage Mirroring Recover Premium Edition LTU 15725	TA793AAEHP	Storage Mirroring Recover Premium Edition E-LTU	UT631E	HP 3yr 24x7 SM Recover Prem Ed SW Supp
	TA794A	HP Storage Mirroring Recover Premium Edition Stock LTU	UT632E	HP 4yr 9x5 SM Recover Prem Ed SW Supp
			UT633E	HP 4yr 24x7 SM Recover Prem Ed SW Supp
			UT634E	HP 5yr 9x5 SM Recover Prem Ed SW Supp
			UT635E	HP 5yr 24x7 SM Recover Prem Ed SW Supp
	TA795A	HP Storage Mirroring Recover Virtual Host 1 LTU	UT636E	HP 3yr 9x5 SM Recover VH 1LTU SW Supp
Storage Mirroring Recover Virtual Host 1 LTU 15718	TA795AAEHP	Storage Mirroring Recover Virtual Host 1 E-LTU	UT637E	HP 3yr 24x7 SM Recover VH 1LTU SW Supp
	TA796A	HP Storage Mirroring Recover Virtual Host 1 Stock LTU	UT638E	HP 4yr 9x5 SM Recover VH 1LTU SW Supp
			UT639E	HP 4yr 24x7 SM Recover VH 1LTU SW Supp
			UT640E	HP 5yr 9x5 SM Recover VH 1LTU SW Supp
			UT641E	HP 5yr 24x7 SM Recover VH 1LTU SW Supp
	TA797A	HP Storage Mirroring Recover Virtual Host 10 LTU	UT642E	HP 3yr 9x5 SM Recover VH 10LTU SW Supp
Storage Mirroring Recover Virtual Host 10 LTU 15726	TA797AAEHP	Storage Mirroring Recover Virtual Host 10 E-LTU	UT643E	HP 3yr 24x7 SM Recover VH 10LTU SW Supp
	TA798A	HP Storage Mirroring Recover Virtual Host 10 Stock LTU	UT644E	HP 4yr 9x5 SM Recover VH 10LTU SW Supp
			UT645E	HP 4yr 24x7 SM Recover VH 10LTU SW Supp
			UT646E	HP 5yr 9x5 SM Recover VH 10LTU SW Supp
			UT647E	HP 5yr 24x7 SM Recover VH 10LTU SW Supp
	TA799A	HP Storage Mirroring Recover Virtual Host Unlimited LTU	UT648E	HP 3yr 9x5 SM Recover VH Unllim SW Supp
Storage Mirroring Recover Virtual Host Unlimited LTU 15727	TA799AAEHP	Storage Mirroring Recover Virtual Host Unlimited E-LTU	UT649E	HP 3yr 24x7 SM Recover VH Unllim SW Supp
	TA800A	HP Storage Mirroring Recover Virtual Host Unlimited Stock LTU	UT650E	HP 4yr 9x5 SM Recover VH Unllim SW Supp



Service and Support, HP Care Pack, and Warranty Information

UT651E	HP 4yr 24x7 SM Recover VH Unllim SW Supp
UT652E	HP 5yr 9x5 SM Recover VH Unllim SW Supp
UT653E	HP 5yr 24x7 SM Recover VH Unllim SW Supp

Related Services

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

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>

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



Service and Support, HP Care Pack, and Warranty Information

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>

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