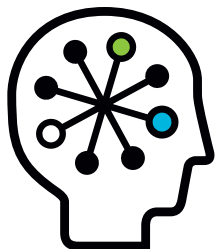


HP StorageWorks MDS600 and Microsoft Exchange Server 2010

Reduce the cost and complexity of deploying a highly reliable messaging solution

HP Solution Block solution brief



You've got mail...and more mail...and more mail... and more mail...

The communications world is more mobile and complex than ever—just take a look at your inbox. Today, when someone sends you e-mail and you reply, you assume that the exchange will be reliable and the message will get through—regardless of time, distance or (though it's often not thought of) the underlying hardware and software infrastructure.

Microsoft® Exchange Server 2010 helps ensure that your messages will get through. Building on application level replication introduced in Exchange Server 2007, the new, high availability architecture in Exchange Server 2010 presents a simplified, unified framework for both high availability and disaster recovery.

Exchange Server 2010 offers new options and choices for storage, including low cost direct attach storage (DAS) or shared storage using a storage area network (SAN). While a SAN provides lower cost centralized management, DAS—using high capacity SATA or SAS drives—offers the ability to deploy larger mailboxes at a lower price point.

Less cost, more reliability

You need more scalability, more flexibility and more reliability from your underlying infrastructure to support your messaging solution. A perfect fit—satisfying these needs and more—is HP BladeSystem, an all-in-one infrastructure for storage and servers. Complementing HP BladeSystem is the HP StorageWorks 600 Modular Disk System (MDS600). The HP StorageWorks MDS600 provides zoned direct attach capabilities and low cost storage solutions for Exchange Server 2010 implementations.

Drives within the HP StorageWorks MDS600 are “zoned” and assigned to individual blade servers, and appear as local storage to that server, allowing server administrators to easily build and manage low cost DAS storage for Exchange environments. Configurations start at less than \$0.75 cents/GB.

Each HP StorageWorks MDS600 holds 70 SATA or SAS hard drives in just 5U of rack space. A single HP BladeSystem enclosure can support up to six HP StorageWorks MDS600, providing up to 840TB of capacity.

To protect your messaging environment and adhere to a growing number of regulations, HP BladeSystem can host HP StorageWorks physical and virtual tape libraries. HP BladeSystem also supports the latest tape technologies for performance, capacity and security.

The combination of HP BladeSystem infrastructure, HP Virtual Connect Flex-10 interconnects, HP StorageWorks MDS600 and Microsoft Exchange Server 2010 provides one of the most flexible, reliable and cost-effective messaging systems available, meeting demands for greater business mobility head-on.

You may not worry that your e-mail gets through when you press send—and with the right messaging infrastructure you never need to. Call your local HP and Microsoft-authorized reseller today. Discover how a unified communications and collaboration solution built on an HP infrastructure with Microsoft Exchange Server 2010 can keep your messages flowing, your workers productive and your business thriving.

Direct connect SAS storage for HP BladeSystem

The straight-forward SAS architecture consists of HP Smart Array P700m Controllers and 3Gb SAS BL switches connected to HP StorageWorks 600 Modular Disk System for zoned DAS or HP StorageWorks 2000sa Modular Smart Arrays for shared storage. The simplicity of SAS results in a very low cost per Gigabyte.

Hub transport server configuration

2 x HP ProLiant BL460c G6 Server Blades
With an HP Smart Array P700m Controller

Client access server configuration

2 x HP ProLiant BL460c G6 Server Blades

HP BladeSystem c3000 Enclosure

With 8 x HP Insight Control Suite Licenses and an HP Virtual Connect Flex-10 Ethernet Module



Mailbox server configuration

2 x HP ProLiant BL460c G6 Server Blades
With an HP Smart Array P700m Controller

Direct attached storage option

With 2 x HP StorageWorks 600 Modular Disk Systems
With up to 70 SATA or SAS hard drives per storage system

HP recommended configuration for Microsoft Exchange Server 2010 up to 4000 users



HP StorageWorks MDS600

- HP BladeSystem servers have exclusive access to user-defined drive groups in the HP StorageWorks MDS600
- Each HP StorageWorks MDS600 holds 70 SATA or SAS hard drives in just 5U of rack space
- Connect up to six HP StorageWorks MDS600 to a single HP BladeSystem enclosure



HP StorageWorks 3Gb SAS BL Switch

- Use the HP Virtual SAS Manager (VSM) in the 3Gb SAS BL switch to dynamically assign drives in the HP StorageWorks MDS600 to individual HP blade servers
- Drives zoned to each server appear as local storage to that server
- Fits HP BladeSystem c3000 or c7000 Enclosures
- 3Gb/s SAS connectivity
- Direct SAS cable connection to the HP StorageWorks MDS600



HP Smart Array P700m Controller

- High performance HP Smart Array controller installed in a server blade
- Provides new levels of reliability for HP blade servers through its support of the latest SCSI technology and advanced RAID capabilities
- RAID 1, 1+0, 5, 6
- 512MB battery-backed write cache optimizes performance



HP StorageWorks MSL2024 SAS Tape Library

- Automated backup of blade servers
- Remote management
- LTO HP StorageWorks Ultrium tape drive support and LTO-4 data encryption

Technology for better business outcomes

To learn more, visit www.hp.com/go/solutionblocks,
www.hp.com/go/mds600, www.hp.com/go/directconnect

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