

A flexible, simple way to consolidate Microsoft SQL Server environments

Using HP PolyServe Software and HP StorageWorks 4400 Enterprise Virtual Array

HP StorageWorks Solution Block



Life is complicated enough—simplify it with a revolution in consolidation

You are a busy person. With data and storage needs growing at unbelievable rates and budget pressures constraining already tight resources, work hours can be long and stressful. When you add in your daily commute and simple family demands like cooking meals or getting the kids to after school activities, it is easy to see that you need some relief.

It all begins with HP PolyServe Software, which delivers a unified, consolidated infrastructure for Microsoft® SQL Server and applications like SAP, Microsoft BizTalk Server, Microsoft Office SharePoint® Server. A recent customer reduced their server count 50 percent and was able to rollout new services with their existing servers for instant messaging, video conferencing, right management and project management with Microsoft Office Communications Server, Microsoft Project Server and Microsoft Windows Rights Management Server. Your infrastructure can be affordable, energy-wise and easily expanded.

The HP StorageWorks consolidation solution for Microsoft SQL Server combines the HP PolyServe Software and HP StorageWorks 4400 Enterprise Virtual Array (EVA4400) to provide database consolidation, a lower total cost of ownership (TCO), simplified management and increased availability. When you choose a proven business solution from HP, you gain a database virtualization system that can lighten your workload, lower costs and make the whole organization more efficient.

Cost-effective availability

It all begins with HP PolyServe Software, which delivers a unified, consolidated infrastructure for Microsoft SQL Server and applications like SAP, Microsoft BizTalk Server, and Microsoft Office SharePoint Server. Your infrastructure can be affordable, energy wise and automated.

The platform enables dynamic server and storage provisioning, as well as the flexibility to move database instances through simple drag-and-drop

actions among servers. The resulting well-consolidated footprint reduces power and cooling costs by over 75 percent and lowers operational costs.¹

The EVA4400 delivers change readiness, energy savings and time efficiency. It consolidates your IT environment by delivering up to 34 percent more usable capacity than NetApp FAS for database applications.² The EVA4400 provides change readiness with up to 5 times the management efficiency of traditional disk arrays.³ HP PolyServe Software reduces routine system and storage administration tasks by up to 75 percent⁴ with the “One-Click” and “Roll-Through” maintenance eases management time by pushing updates or hot fixes to all servers.

With HP PolyServe Software, all servers have access to all databases, so high availability is easy. The EVA4400 reinforces this availability with a virtualized architecture that is based on the proven EVA4100/6100/8100, which offers 99.999 percent availability for planned up-time.⁵

Simple, flexible and scalable

Wouldn't it be nice to have all your information in one place? HP PolyServe Software leverages a “shared data” architecture to store information for all the databases in a single location that can be accessed by all of the servers. This vastly simplifies management you do not need to manage storage on a server-by-server basis, or monitor each server's free space pool. Changes are handled in seconds rather than hours for growth, maintenance and further consolidation.

^{1,4} Customers have regularly reduced their server count between 4 and 8 to 1, which translates to 75–87.5 percent in capital spending, power consumption and operational and maintenance processes.

² “Enterprise Storage Solutions for Database Applications: A Total Cost Comparison,” Alinean, October 2007

³ The Edison TCO White Paper: EMC, NetApp, and HP Midrange Storage Arrays

⁵ HP internal monitoring of EVA customers' downtime

HP StorageWorks Solution Blocks

- HP StorageWorks 4400 Enterprise Virtual Array – enterprise availability at an affordable price in capacities scaling from 1TB to 96TB
- HP PolyServe Software for Microsoft SQL Server – delivers a mission-critical infrastructure for Microsoft SQL Server
- HP servers – HP ProLiant or HP BladeSystem servers
- HP Dynamic Capacity Management Software – automates storage provisioning and improves capacity utilization
- HP StorageWorks Command View EVA software – to manage the EVA4400
- HP Storage Works Business Copy and Continuous Access EVA replication software – local and remote replication
- HP Data Protector Software – automates high-performance backup and recovery from disk or tape to disk or tape

Dedicated storage

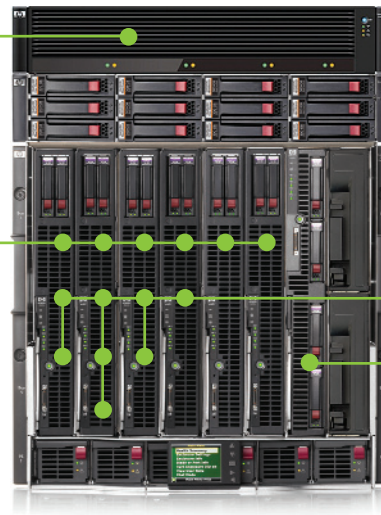
Local storage area network (SAN) storage with HP StorageWorks EVA4400 for Microsoft SQL Server 2005 data

4-6 x HP ProLiant BL680c or 685c Server Blades with 4 quad or dual core processors and 32GB RAM (Microsoft Windows Server 2003 64-bit)

HP PolyServe Software
Running on all blades

Qualified reliability and high performance

HP PolyServe Software for Microsoft SQL Server is a qualified and supported solution in the Microsoft SQL Server Always On program, having met a set of Microsoft SQL Server input/output (I/O) requirements focused on reliability and high performance



Microsoft SQL Server instances

- 2-6 Microsoft SQL Server instances per HP ProLiant BL68x Server Blade
- Dynamic Re-Hosting to quickly deploy, stack or reallocate instances to any server
- Add server, blade and storage capacity without disrupting existing operations

Cluster wide HP PolyServe Software services for Microsoft SQL Server

2 x HP ProLiant BL460c or 465c Server Blades with 2 dual core processors and 8GB RAM (Microsoft Windows Server 2003 64-bit)

HP BladeSystem and Microsoft SQL Server 2005 configuration — 10-36 Microsoft SQL Server instances

Bill of materials

HP StorageWorks 4400 Enterprise Virtual Array

14 x 300GB 10K RPM dual-port 2GB/second fibre-channel arbitrated loops (FC-AL) drive

HP StorageWorks EVA4400 Controller Media kit

HP PolyServe Software for Microsoft SQL Server (database or database/file services combo pack—for the number of sockets in the servers)

The HP StorageWorks EVA4400 complements the strengths of the HP PolyServe Software because it is simple to manage, flexible to implement and scales easily to accommodate growth. An HP PolyServe consolidation solution for Microsoft SQL Server can also include servers and storage you already own and can be expanded or upgraded as necessary. It's easy to add servers and storage to a cluster when demand grows.

HP gives you a cost-effective, powerfully simple platform for consolidation, availability and flexibility for your growing business needs. Costs are greatly reduced and server and storage management become dramatically simpler with HP PolyServe Software and the HP StorageWorks 4400 Enterprise Virtual Array.

Your next step

Life is only getting more complicated, and without action on your part it will become increasingly difficult for you to balance the demands of work and life. Take the next step toward simplification and relief. Call your local authorized HP reseller today. These HP experts have just what it takes to manage your business growth and lower your operating costs while simplifying the management of your total solution—and your life.

Technology for better business outcomes

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For more information, visit www.hp.com/go/EVA4400,
www.hp.com/go/StorageWorks, www.hp.com/go/polyserve

4AA1-8474ENW, March 2008

