



COMPANY:

Healthcare management company

INDUSTRY:

Healthcare

PLATFORM:

Microsoft Windows and RedHat Linux

APPLICATIONS:

Microsoft SQL Server 2000, Microsoft SQL Server 2005, Microsoft Exchange Server 2003, PostgreSQL

CHALLENGES:

Improve data protection and storage reliability for critical databases

SOLUTION:

PS Series provides scalable growth and comprehensive data protection with replication, application-aware snapshots

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GHS DATA MANAGEMENT IMPROVES RELIABILITY AND FLEXIBILITY OF DATA PROCESSING SERVICES WITH EQUALLOGIC

GHS Data Management (GHS) is a healthcare management company that provides advanced, high-quality data capture and processing solutions. GHS serves state and local agencies, pharmacies, various medical associations, HMOs, hospitals and private corporations.

THE CHALLENGE: IMPROVE DATA PROTECTION AND STORAGE RELIABILITY FOR CRITICAL DATABASES

GHS manages one of the largest data entry facilities in the Northeastern United States. Prior to a storage upgrade, its data center in Augusta, Maine, housed eight terabytes of documents, images and healthcare claims processing files. GHS' business was growing across the country, so the IT staff wanted to increase storage capacity by another 12 terabytes to support database growth from new customers and services. This became a mandate when the company outgrew their capacity on a direct-attached SCSI disk system and underwent a host outage for a few hours. The GHS IT department recovered without serious impact to the business, but it was clear that they needed a more highly available storage and data protection approach.

GHS met EqualLogic through a trusted value added reseller while evaluating SAN options to replace their direct attached storage for mission-critical data warehousing, optical character recognition (OCR) storage, data processing, and document management systems. After an investigation of industry offerings, the company created a short list of vendors and brought an EqualLogic PS Series SAN and two competitive Fibre Channel storage platforms into its labs for benchmark testing using typical, heavy database workloads.

“We actually had our data warehouse staff set up a battery of exercises to stress test the arrays with specific data loads and data types,” said Jason Skeffington, senior systems analyst at GHS. “At that point EqualLogic, and iSCSI in general, was sort of a dark horse solution. The other two arrays were connected to the servers with Fibre Channel. Much to our surprise, the EqualLogic unit outperformed both the NetApp 3020s and EMC Clariion by leaps and bounds – so much so that we ran the test again. One of the other vendors actually sent in a specialist to make sure that things were configured right. After the second test, the other vendor’s gear was still not faster.”

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– GHS Data Management, Senior Systems Analyst
Jason Skeffington

After the benchmarking, GHS was convinced that EqualLogic had the best technology and overall solution offering, citing EqualLogic's all-inclusive feature set, responsive support organization, and easy scalability and administration as key factors for their selection.

When considering iSCSI versus Fibre Channel options, GHS felt their data center could be more easily managed and grown by adding more host devices onto an iSCSI SAN instead of using Fibre Channel equipment. The IT team found iSCSI much easier to work with for both their Windows and Linux server environments.

THE SOLUTION: COMPREHENSIVE DATA PROTECTION WITH REPLICATION & APPLICATION-AWARE SNAPSHOTS

GHS experienced no trouble implementing EqualLogic into its data center by themselves. The company now uses six EqualLogic PS Series arrays to store and protect data for over 200 employees. 24 of GHS' 82 servers are connected to the EqualLogic SAN with more to follow. EqualLogic provides GHS with an extensive set of software features to manage their data operations, including data replication, snapshots, clones and Microsoft business application integration tools.

Since their entire business depends on their data processing capabilities of their IT environment, protecting their data is top priority for the GHS IT team. GHS now uses a combination of technologies to protect their data, including Symantec Backup Exec for tape backup, and EqualLogic's Auto-Snapshot Manager for asynchronous replication, host-integrated copy operations and snapshots.

Most recently, GHS began implementing Auto-Snapshot Manager's Smart Copy capabilities for their upcoming SQL Server 2005 data warehouse. Auto-Snapshot Manager is a standard software feature of the PS Series which is host-based and provides application-integrated snapshots, replicas and clones of SQL databases and NTFS file systems. Jason Skeffington took part in EqualLogic's beta-testing for

the feature and was impressed with the engineering team's responsiveness to development requests and the potential for the new software. Smart Copy's integration with Microsoft also lets GHS manage copies of SQL Server 2005 databases at the host level with snapshot and replication schedules.

"I really like the ability to restore a Smart Copy of one SQL database while I'm querying the other databases on the same LUN," said Skeffington. "This gives me options to reconfigure our backup schema, so I can snapshot and backup my databases one at a time and then recover them very quickly on an individual basis. Smart Copy also lets me save time for our data warehousing operations for database development or client reports; I can restore a clone to a new volume in mere minutes as opposed to the hours it takes when restoring from tape. Time saving tools like this and the SMTP mail monitoring alerts are really helpful for my lean team. If I can cut back on the time it takes to provide clients information with EqualLogic's Smart Copy, it competitively puts GHS ahead of the technology curve."

EASY MIGRATION TO SAN, FLEXIBLE DATA MANAGEMENT

With EqualLogic's easy management, helpful documentation and responsive support team, GHS converted its storage operations from DAS to SAN in a very short period of time.

Skeffington said, "I am very excited about EqualLogic's innovation for protecting our databases. The PS Series has performed really well for our database applications. The Smart Copy feature gives us impressive recovery times and allows us to better manage our IT projects around client priorities rather than the constant, manual attention to our restore and backup activities."

SIMPLIFYING NETWORKED STORAGE

EqualLogic PS Series solutions deliver the benefits of storage consolidation in an intelligent, enterprise-class storage system that is easy to install, manage and grow. Let us show you what simplifying networked storage can mean for your business, visit our web site at www.equallogic.com.



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