

Data-protection company ensures success with HP StorageWorks virtualization solutions

asiGuardian



"Because we built our data-protection services on the HP StorageWorks Enterprise Virtual Array 5000, we can give our customers – no matter their size – access to an agile, extensible enterprise-class storage environment."

– Vice President Donnie Clemmons, asiGuardian

Business need:

HP value-added reseller (VAR) and systems integrator, Accent Systems, Inc. specializes in storage area networks (SANs); data security; remote management; messaging services; and LAN, WAN, and Internetworking. Accent Systems holds numerous service and technical certifications from HP. A couple of years ago, Accent customers began to ask for backup and security assistance. This prompted the firm's owners to form a new company, asiGuardian, to fill a niche for data-protection services. The new company needed a solid data-storage foundation comprised of resilience and extensibility, along with excellent technical support.

Solution overview:

asiGuardian implemented an HP storage virtualization solution as the foundation for its security services and storage needs. asiGuardian engineers, who are certified HP storage architects, configured an HP StorageWorks Enterprise Virtual Array 5000 (EVA5000) as a SAN with five attached HP ProLiant DL380 servers. In addition, HP StorageWorks Secure Path software, running on another ProLiant DL380 server, protects data transfers during online backups.



Securing an outstanding storage platform

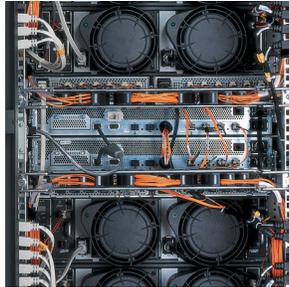
According to the technology analysis company Forrester Research Inc., security investments are leading the list of IT priorities for 2004. While some companies are securing their data, others are enhancing their recovery capabilities and mitigating the liabilities derived from not having procedures that comply with evolving government regulations.

For example, First Security Bank of Lexington needed to implement a disaster-recovery strategy to meet government regulations. The bank, which delivers innovative financial services at four locations, asked Accent Systems for help with setting up an alternate off-site IT infrastructure. Requests from customers like First Security were one of the main drivers behind the formation of asiGuardian, which launched its online backup, secure hosting, and security services in April 2003 from a hardened, bunkered data center located 120 feet underground in central Kentucky.

Knowing that holding customer data involves an incredible amount of liability, asiGuardian decided on the award-winning HP StorageWorks virtual SAN. "We chose an HP StorageWorks Enterprise Virtual Array 5000 as the foundation of our data center because we're familiar with its outstanding virtualization and scalability capabilities," emphasizes asiGuardian Business Development Manager Tom Tipton.

In fact, asiGuardian's sister company, Accent, has relied on the HP StorageWorks platform for years. "Even Accent Systems' older HP storage array still clicks along without fail," says Tipton. "We made the right IT choices and investments in the past, and those past investments can seamlessly integrate with new products, solutions, and technologies from HP."





asiGuardian built a state-of-the-art, nearly impenetrable storage foundation, which scales to allow for new customer services in the future. The solution provides layers of security and fault protection through intrusion detection systems outside of the network, behind routers, and in front and behind redundant firewalls. HP showed asiGuardian that HP products have many complementary features and capabilities.

"Credibility in data-protection services goes a long way," explains asiGuardian Vice President Donnie Clemmons. "With HP's excellent storage virtualization offering, we're able to tell our customers, 'We have a resilient, dependable HP StorageWorks platform that provides scalable capacity and high performance on which to put your data.'"

Whether it's a sizeable bank backing up its entire set of data nightly or a two-person insurance company safeguarding a small customer database, both regard their company data as critical. For both, maintaining business continuity is an absolute must. First Security Bank currently backs up its entire environment, including its mortgage services company, as part of its disaster-recovery plan. "It is a nice proposition to offer a large bank and small insurance firm, two companies with varying financial resources, the same access to an enterprise-level HP StorageWorks SAN built with the StorageWorks EVA5000," Tipton notes.

Keeping the business opportunity ready with HP virtualization technology

asiGuardian started with one customer, but now has more than 40 customers backing up critical data via the Internet to the HP storage solution. Currently, customers have 4.5 TB of restorable data on the vault, and the EVA5000

provides up to 24.5 TB capacity in a single cabinet. asiGuardian's EVA5000 configuration today supports five ProLiant DL380 servers using multiple operating systems, including Microsoft Windows NT, Windows 2000, and Linux Enterprise Server.

With 40-plus new customers, it can be difficult to project future storage growth and capacity requirements. Therefore, to protect against insufficient capacity as the business gathers steam, asiGuardian built its entire infrastructure around the virtualization technology of the EVA5000. By being able to provide virtualized pools of dispersible storage behind the controllers, the asiGuardian staff can expand and efficiently allocate storage for its echoBAK online backup and HaloPoint secure hosting services. The net effect is asiGuardian can tackle business changes, without impacting customers.

"The virtualization technology of the HP StorageWorks EVA5000 allows for scalability without the need to repurchase another system or reconfigure the entire data center," Clemmons says. "We can add three and four new disks to the EVA5000 easily and use the HP OpenView Management Appliance to add space quickly. The Management Appliance provides excellent functionality by providing a centralized, appliance-based monitoring and management solution for the SAN."

The firm plans to grow the EVA5000 into a near-line magnetic library for HaloPoint customers and into the central storage system for the firm's Network Operations Center. These activities might necessitate an expansion of the EVA5000 by a terabyte at year-end. Meanwhile Tipton adds, "By using HP StorageWorks 146 GB 10K rpm disk drives, we can postpone having to buy new shelves for the StorageWorks EVA5000."

HP solutions: working together as guardians of protection

With a small amount of resources and a few highly qualified staff, asiGuardian makes better use of its system engineers' time by helping customers and developing customer solutions – not managing the IT infrastructure. Thanks to the HP storage virtualization solution, they can focus on helping the business grow. "Our staff spends hardly any time managing our HP storage environment," Clemmons explains, "and we manage all SAN components remotely through a VPN (virtual private network) connection. The wizard-driven OpenView Management Appliance allows us to reduce our storage management time by 75 percent, compared to command line interface (CLI) management of our other storage systems."

"Our relationship with HP as a partner goes beyond just selling HP products. We know we can call on the HP team when we have questions. If we really get into a jam, they will take care of us."

Since cost-conscious asiGuardian has no staff stationed in the underground data center, the servers must be highly reliable and remotely manageable. asiGuardian shields its servers by standardizing on rack-mounted HP ProLiant servers (models DL360, DL380, DL560, and DL580) and placing spare ProLiant servers in its data center. Like the SAN-attached ProLiant servers, the spares or "vault" servers have redundant fans, power, connections, and components. "HP ProLiant servers give us consistent performance day in and day out," says Tipton. "Our engineers like the ProLiant DL380 models because they are sturdy and easy to manage using HP Insight Manager 7 SP2. In fact, we rely on Insight Manager to monitor all of our HP servers and storage hardware."

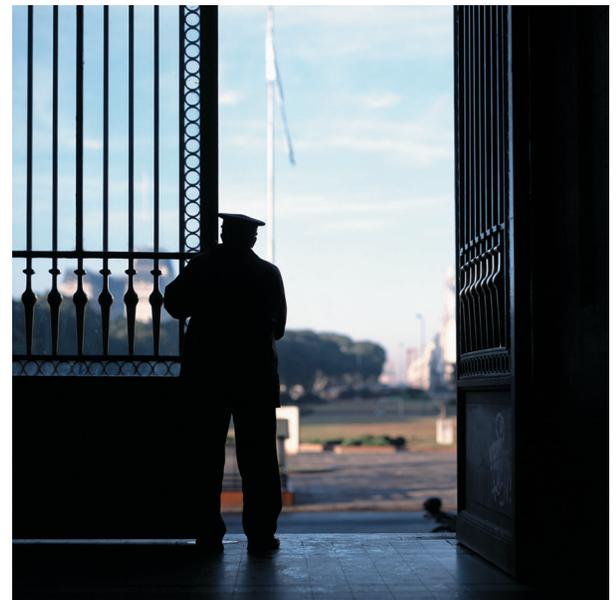
HP StorageWorks Secure Path software runs on a ProLiant DL380 server to maintain continuous access to the EVA5000 and enable no single point of failure from servers to storage. "HP StorageWorks Secure Path software is very valuable to us," Tipton comments. "It's

our insurance plan. We could lose a host bus adapter, a fiber cable, or a Fibre Channel switch, and the software would automatically fail over and keep our business running."

HP solutions are working together to ensure that the firm can confidently protect customer data and seize business opportunities, and the asiGuardian staff appreciates knowing the HP team is there when needed. "Responsive technical support from HP gives us an extra boost of confidence," Clemmons concludes. "If we get into a jam, HP will take care of us. We have total confidence in the HP team."

About asiGuardian

A limited liability entity formed in 2003, asiGuardian of Nicholasville, Kentucky found a niche in online backup and data protection. asiGuardian is a sister firm of Accent Systems, Inc. (www.accentystems.com), which delivers information technology solutions and products for small and medium business, local and state government, K-12, and higher education customers. Established in 1988, Accent Systems specializes in storage area networks; data security; remote management; messaging services; and LAN, WAN, and Internetworking.



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Challenge

- Provide a dependable, scalable storage environment for online backup and data-protection services
- Acquire storage virtualization capabilities to meet future storage needs
- Deploy an adaptive infrastructure that enables management savings and in-house support
- Offer companies of all sizes access to enterprise-level storage
- Allow for investment protection by integrating legacy and new cutting-edge products and solutions
- Ensure asiGuardian services are backed by responsive technical services and support

Solution

Hardware

- HP StorageWorks Enterprise Virtual Array 5000 (EVA5000)
- HP OpenView Storage Management Appliance II
- HP StorageWorks SAN Switches 2/16
- HP StorageWorks 72 GB and 146 GB 10K rpm disk drives
- 5 HP ProLiant DL380 G3 servers attached to the EVA5000
- 15 rack-mounted HP ProLiant servers (models DL360, DL380, DL560 and DL580)

Software

- HP StorageWorks Secure Path v4.0 for Windows
- HP OpenView Storage Management Appliance II software
- HP Insight Manager 7 SP2
- asiGuardian online backup software
- Microsoft Windows NT and Windows 2000
- Linux Enterprise Server

HP Services

- Technical support
- Pre-failure warranty

Results

- Based on the HP StorageWorks Enterprise Virtual Array 5000, asiGuardian's storage environment provides sizeable capacity and support for its data-protection, echoBAK online backup, and HaloPoint secure hosting services.
- HP virtualization technology enables the staff to allocate capacity dynamically based on current priorities and future storage needs.
- The HP StorageWorks EVA5000 and HP ProLiant servers reduce management cost and complexity, allowing remote monitoring and in-house management.
- While reducing management time by 75 percent, the HP SAN enables the staff to focus on serving customers and developing client solutions.
- asiGuardian delivers enterprise-type storage to companies of all sizes, thus building upon its revenue-generating services and developing more business opportunities.

For more information on how working with HP can benefit you, contact your local HP representative, or visit us at www.hp.com.

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5982-6153EN, 05/2004

