

SAN/LAN

Local Area and Storage Area Networks Newsletter Covering Worldwide Technology Trends, Applications, and Market Opportunities

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Markets with highest broadband penetration of households, 2007 and 2012

Country	2007	2012
South Korea	93%	97%
Netherlands	74%	82%
Hong Kong	76%	81%
Canada	65%	79%
United States	54%	77%
Japan	54%	77%
Switzerland	69%	76%
Singapore	57%	75%
United Kingdom	58%	74%
Taiwan	59%	74%
France	58%	73%
Australia	52%	72%
Sweden	58%	69%
Spain	54%	68%
Germany	49%	68%
Belgium	55%	66%
New Zealand	43%	64%

Source: Gartner (July 2008)

CONTRACTS

Seanodes high-performance computing solution in the stars for NASA astrophysics group

Seanodes, the creator and developer of Shared Internal Storage solutions, announced that the Infrared

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Processing and Analysis Center (IPAC), a NASA facility based at the California Institute of Technology, has selected the company's Exanodes software to be part of an upgraded enterprise network architecture designed to process and store massive amounts of spectroscopy and imaging data generated by the Palomar Transient Factory (PTF), a four-year project established to perform nightly scans of the skies to capture any new, undiscovered objects.

IPAC, a multimission center of expertise for long-wavelength astrophysics, serves to carry out data-intensive processing tasks of vital importance to NASA's infrared and submillimeter astronomy programs by developing and maintaining systems, access/analysis tools and data archiving. For the Palomar Transient Factory project, the group will process and extract images of up to 30 million objects captured each night. The key to the system is the ability to process and deliver viewable images to researchers by the following day. Researchers estimate that the PTF will detect up to 42 billion records over the life of the project. Needing high-speed disk storage with total resiliency to meet the extremely data-intensive demands and large scale data growth of the project, IPAC sought out any improvements or advances to storage technology that could help it better manage the PTF data through its lifecycle.

Based on its ability to provide a very high performance storage platform that offers true catastrophic fault tolerance while eliminating complexity and third-party components, IPAC selected and is in the process of building out a multinode Exanodes clustered solution from Seanodes for the PTF project to offer a seamless, performance-scalable architecture at a price point significantly less than a traditional single-controller SATA RAID array.

"Seanodes is the most promising storage technology I've come across in years," said Eugene Hacopians, senior systems engineer at

IPAC. "I've found it to be a simple to deploy and manage architecture that is robust, highly resilient and very cost-effective. To me it represents the foundation of a new era of storage architecture — one in which storage systems exist independent of physical hardware and are much faster, much more flexible and utterly fault tolerant. We are very excited about the independence and performance that the Seanodes approach will provide in deploying future upgrades and expanded data storage requirements."

"Data storage and analysis is the lifeblood of organizations such as IPAC," said Jacques Baldinger, CEO of Seanodes. "Traditional storage solutions impose limiting factors that prevent organizations from maximizing their compute infrastructures. These limitations negatively impact performance, manageability, reliability and costs. Exanodes is truly a industry-changing approach that provides the option to leverage available space across existing multi-node server environments and utilize standard, off the shelf commoditized storage hardware to deliver ground-breaking benefits for even the most data-intense organizations."

Exanodes, the Seanodes software platform, allows HPC applications to marry unused disk space found in many server and storage clusters with existing or additional dedicated storage hardware to provide a powerful shared storage pool. Exanodes abstracts the storage layer from the physical devices enabling users to select the hardware and connectivity options that best suit their environment, today and tomorrow.

As more and more HPC applications are limited by storage performance, user-friendly and nonintrusive Exanodes radically improves the global performance of computing infrastructures while delivering cost-correct capacity expansion capabilities, eliminating the need for traditional external RAID storage and its associated costs.

Compellent: server and storage virtualization is no laughing matter for Comic Relief

Comic Relief has implemented a Compellent storage area network and VMware platform to create a virtual storage and server environment. As a result of deploying Compellent technologies such as thin provisioning, automated tiered storage, and continuous snapshots, the charity has dramatically improved its IT asset utilization. It also cut the number of physical servers by one-fifth, while reducing the costs of powering, cooling, and housing its servers — helping Comic Relief meet its environmental IT commitments.

Previously, Comic Relief's backup data was held off-site on tapes and could take several hours to recover. Today, however, recovery has been reduced to minutes and just a few mouse clicks, using Compellent's Data Instant Replay snapshots. In addition, the charity has deployed Compellent's Automated Tiered Storage to automatically move less-frequently accessed data to lower-cost disks.

Comic Relief has increased asset utilization by deploying Compellent's thin provisioning technology to eliminate allocated but unused capacity across the network. The charity only uses physical disk space when data is written. This has provided a fast and environmentally sensitive way to scale its storage requirements in line with future data growth — enabling the charity to create virtual volumes of any size up front and add new storage capacity as needed without having to shut down data access.

John Thompson, Comic Relief's head of IT, commented, "Compellent's SAN has been instrumental in reducing our IT capital and operational costs. It also ensures that our systems are better protected from potential downtime and data loss. Compellent has provided us with an extremely cost-effective solution, ensuring that the maximum amount of

profit is donated to our global initiatives. We therefore regard Compellent as an absolutely crucial partner in enabling us to adapt to rapid business growth and change — ensuring our long-term survival and continued success."

Andy Hardy, Compellent managing director of international sales, concluded, "Organisations like Comic Relief are building flexible virtual data centres founded on Compellent storage virtualisation technologies and VMware server virtualisation solutions. Compellent, together with VMware has enabled Comic Relief to move towards an environmentally friendly storage and server infrastructure. Unlike in traditional SAN environments, the charity does not need to spend money on powering and cooling unused storage space."

The installation was carried out by Fordway Solutions, a Compellent partner and specialist in enterprise management, data storage, IP networking, and IT infrastructure.

Alchemy Plus uses DataCore's SANmelody to achieve simplified SAN virtual storage management for hosted environments

DataCore Software, a provider of storage virtualization software, announced that Alchemy Plus, a Scottish-based IT services provider, is using DataCore's SANmelody solution to provide a hosted server virtualization farm environment for small businesses under a "pay as you use" utility computing framework.

Alchemy Plus's datacenter is located in Dingwall in the Scottish Highlands. David Massey, chief technology officer at Alchemy Plus, noted, "We wanted to bring the power and efficiencies of virtualization to smaller organizations that typically were only running a single server or a couple of servers at most. We knew in order to succeed that we would have to develop a model that was as cost-effective as it was functionality rich, using the principles of utility computing — a concept where the customer only pays for what is used."

Through this service, Alchemy Plus can provision an entire corporate desktop environment, allowing their 100+ customers to experience reduced capital overhead, zero downtime, and seamless provisioning of the latest applications onto their environment via a robust, securely protected storage area network. Alchemy Plus selected DataCore's SANmelody to support the VMware applications robustly and provide flexible, centralized storage capacity "on demand." SANmelody fit the bill to provide business continuity and thin provisioning and allow for flexible, generic growth for the companies' eight servers (mid-range Dell servers) and 61 virtualized servers — some of which are client dedicated, while others are shared across a Fibre Channel SAN.

Massey explained, "We have grown a steady business in providing virtualization solutions to small businesses. What we wanted to achieve through VMware and DataCore was an optimized utility solution that facilitated utilization of common resources (CPUs and disks) and both flexibly and readily deployed these resources to our customers. In effect, we sought to deliver a solution that presented applications and data in a total virtual desktop environment to subscribing customers who remotely connect in."

For total business continuity, accredited partner Transam recommended that the SAN comprise two SANmelody 2.0 nodes running on Dell PowerEdge servers in order to provide synchronous mirroring for failover and auto recovery of clients' business-critical systems, load balancing, and disaster recovery. The results have been assuring both for the participating companies and for the host. SANmelody's thin provisioning capability means that physical storage is delivered only as it is consumed. With SANmelody, Alchemy Plus has not had to speculate up front as to how much storage has to be allocated. Storage can be delivered on the fly, entirely dependant of demand, as predefined volumes of storage are

presented from a central storage pool to needy applications.

In terms of testing the high availability and business continuity of the host service, a failure that could only have been described as catastrophic last year was handled with no disruption to clients. In fact, Massey recounted, "There were no noticeable effects as VMware supports multi-pathing, allowing the path to be seamlessly reverted and switched, while SANmelody auto recovered, rebooted and was up and running within minutes without any data loss."

In terms of financial commitments, through SANmelody's thin provisioning delivered within utility computing, clients have access to 12TB of storage from the VMware servers, while only needing to deliver physical storage as needed. Massey knows that he can scale simply by adding extra storage to SANmelody up to 48TB. Moreover, even beyond that, Alchemy Plus can upgrade easily to SANsymphony. He further commented, "DataCore's thin provisioning allows our physical storage to scale up and out, inline with our users' usage and our 'Pay as You Use' model."

SANmelody is part of the cornerstone of building a true Highlands-based Alchemy Plus datacenter. With a naturally cooler climate than the rest of the UK (on average 3 degrees cooler), the Scottish Highlands are an obvious and environmentally friendly location for companies to relocate their datacenters. It is planned to be one of Scotland's first Green datacenters, and underpinning this will be the slim-line use of servers and storage operating within a fully virtualized infrastructure.

In summary, Massey concluded, "This concept attractively offers small businesses' no capital outlay and over a 3 year total cost of ownership we have found that our customers experience savings from 25 percent to in excess of 40 percent. Now that's compelling!"

For a free 30-day test drive of DataCore's affordable line of feature-packed SAN

virtualization solutions, please visit: www.datacore.com/trialsoftware.

NEW PRODUCTS

BTI Systems receives Brocade Data Center Ready status for storage networking compatibility

BTI Systems, a global supplier of Packet Optical Edge solutions for the delivery of Gigabit services, announced that the BTI 7000 Series has been verified by Brocade Communications Systems Inc. as compatible with Brocade-based SAN infrastructure, according to the testing requirements of the Brocade Data Center Ready Program. The program is an initiative designed to foster interoperability in multivendor Brocade-based datacenter environments.

Testing was conducted at the Brocade Data Center Ready labs, which are state-of-the-art facilities supporting end-to-end interoperability and performance testing of SAN products in multivendor and large fabric environments. The Brocade Data Center Ready Program boasts an impressive group of members joining the program since its launch in 2000.

"Becoming a member of Brocade's Data Center Ready program is validation that the BTI platform is a reliable, scalable solution for enterprise and carrier storage area networks," said Glenn Thurston, vice-president, corporate marketing, BTI Systems. "As the Packet Optical market continues to grow, it is important that our customers know that BTI's platforms meet the high standards of Brocade's rigorous Data Center Ready testing; they can be confident about the performance we deliver."

The BTI 7000 Series addresses the increasing demand for multiple services, greater transport capacity, dynamic networking, and management simplicity right to the network optical edge. Integrating both advanced wavelength and packet-oriented functionality, the BTI 7000 Series delivers all the capabilities

of large-core network platforms in the industry's most compact, low-power-consumption, easy-to-use packet-optical network system.

"We are pleased that BTI Systems has successfully completed the Data Center Ready testing with Brocade fabric switches in multi-vendor SAN environments," said Tom Buiocchi, Brocade vice president of worldwide marketing. "Storage area networks are being deployed worldwide at a rapid rate as a scalable, high-performance networking foundation for storage environments. The Data Center Ready program is an example of our continued commitment to our customers."

The Brocade Data Center Ready program is a comprehensive testing and configuration initiative designed to foster end-to-end SAN interoperability. As part of the program, testing is conducted in configurations that comprise a heterogeneous mix of servers, storage subsystems, Brocade fabric switches, SAN management and enterprise applications, and other SAN technologies. Brocade has created a dedicated lab with heterogeneous fabrics, in which the company tests and validates partner equipment in specific configurations. Vendors receive Brocade Data Center Ready Certification after successfully completing tests to confirm that vendors' products meet compatibility guidelines. For more information, visit http://www.brocade.com/partners/developers/data_center_ready.jsp.

Virtual Iron's new Virtual Classroom streamlines deployments and accelerates customer ROI

Virtual Iron Software (www.virtualiron.com), a provider of comprehensive server virtualization software solutions for the mainstream market, announced the immediate availability of a new eLearning portal. The new Virtual Classroom expands upon Virtual Iron's existing online training offerings to help technical personnel quickly learn about the Virtual Iron solution and the best

ways to install and deploy it for immediate benefit and ROI. This training is available to any Virtual Iron user on a subscription basis.

“The Virtual Iron eLearning portal is a great resource and a tremendous convenience,” said Paul Klump, system administrator at Rutgers University in New Jersey. “I can view exactly the training I need, when I need it, and as my busy schedule allows. Plus, I can refer back to it on demand. I feel very well prepared as we get ready to move Virtual Iron into production here at the university.”

Virtual Iron offers an easy-to-use, cost-effective true server virtualization solution that incorporates comprehensive and intelligent virtual infrastructure control with essential capabilities including LiveMigrate for virtual server migration, LiveRecovery for disaster recovery and high availability, LiveCapacity for dynamic CPU resource load balancing, and LiveMaintenance for offline server maintenance without downtime. Over 2,000 customer organizations use Virtual Iron to support a broad range of datacenter initiatives such as server consolidation, virtual server management, dev/test optimization, business continuity, and virtual desktop infrastructure (VDI) enablement.

“We pride ourselves on our ease of use; however, server virtualization lives in a complex ecosystem touching servers, networks, storage, and more,” said Tony Asaro, chief strategy officer at Virtual Iron. “That is why we’ve put such an emphasis on our online training and education. It is core to our strategy and Virtual Iron will continue to create courses and content to provide our customers with easier implementation, operation and optimization.”

With the new Virtual Classroom, Virtual Iron users get all the information they need to be totally self-sufficient on the Virtual Iron software platform — in just five hours. This is in comparison to the five days of onsite classroom training that is typical for comparable solutions such as VMware. The Virtual Iron training is self-paced, highly modularized, and delivered via a

Web-based console for anywhere, anytime access. Consisting of formal concept and how-to presentations, video demonstrations of tasks on real systems, integrated self-check testing, and downloadable job aids, the modules average 20-30 minutes each and are designed in a highly intuitive, workflow sequence that encourages users to practice and master each task before moving on. Users can also revisit any module at any time during their subscription period. The modules include the following:

- Virtual Classroom Overview
- Preparing a Virtual Iron Environment
- Installing Virtual Iron Software
- Creating and Configuring Virtual Data Centers
- Creating and Installing Virtual Servers
- Configuring and Testing High Availability
- Miscellaneous Administration Tasks
- Scripting with the Virtual Iron Application Programming Interface
- Troubleshooting Your Virtual Iron Environment

The Virtual Classroom is available from any Virtual Iron reseller partner as an annual subscription and includes new modules and updates throughout the year. Additional details are available at http://www.virtualiron.com/pdf/VI_Virtual_Classroom.pdf.

FINANCING

Seanodes awarded \$2.4 million in funding from French innovation agency OSEO

Seanodes, a creator and developer of Shared Internal Storage solutions, announced it has received about \$2.4 million in funding from OSEO, France’s national agency for industrial innovation, in the form of a no-interest loan to support ongoing technology development and company growth.

“It’s a very competitive process to receive OSEO funding, as there is an exceptional level of innovation being delivered by companies

based in France,” said Jacques Baldinger, CEO of Seanodes. “We appreciate the financial support provided for product and services, and are honored to be recognized by OSEO as a company delivering critical engineering and research in information technology.”

“This additional funding will help to reinforce our R&D team and investments enabling us to accelerate the porting of our solution on VMware and Microsoft’s platforms,” said Christophe Guittenit, CTO of Seanodes.

Exanodes, the Seanodes software platform, allows virtualized infrastructure applications to marry unused disk space found in many server and storage clusters with existing or additional dedicated storage hardware to provide a powerful shared storage pool. Exanodes abstracts the storage layer from the physical devices enabling users to select the hardware and connectivity options that best suit their environment, today and tomorrow.

As more and more HPC applications are limited by storage performance, user-friendly and non-intrusive Exanodes radically improves the global performance of computing infrastructures while delivering cost correct capacity expansion capabilities eliminating the need for traditional external RAID storage and its associated costs.

PARTNERSHIPS

LeftHand Networks Advantage Partner Program experiences rapid expansion

LeftHand Networks, a provider of highly available iSCSI SANs that optimize virtual environments, announced that the company’s Advantage Partner Program is growing at an accelerated rate, adding 145 new VARs to its global program since November 2007.

At more than 425 partners worldwide, the program’s strong growth is attributed to the rapidly expanding iSCSI SAN market and LeftHand Networks’ focus on its channel partner business model worldwide.

Flexibly designed to help partners of all sizes offer next-generation iSCSI and virtualization technologies to grow their business, the LeftHand Advantage Partner Program offers partners the ability to sell proven SAN solutions that are exceptionally appealing to mid-tier and enterprise organizations. LeftHand Networks’ partner program also provides a rich opportunity registration program, highly satisfied customers, and an architecture that promotes a high degree of repeat business and joint sales and marketing assistance from experts in the iSCSI market. The program is targeted at creating a profitable business opportunity for LeftHand Networks’ partners.

“IP SANs are quickly becoming the storage system defacto standard for server virtualization environments. With clustering capabilities and performance that scales with capacity, LeftHand Networks’ iSCSI SAN solutions are ideal for virtualized environments,” said David Webb, executive vice-president of sales for Evolution LLC, a LeftHand Networks reseller. “LeftHand Networks physical and virtual storage options coupled with the focus they have on channel success, through their rich registration program, the 40 percent annuity business and knowledgeable sales team, creates a very compelling business model for us.”

As the largest pure-play iSCSI vendor, LeftHand Networks provides customers with highly available storage solutions that are ideal for virtualized, datacenter, and remote office/branch office environments, providing new levels of performance, scalability, and utilization. According to IDC, the iSCSI/IP SAN market is expected to grow to \$4.4 billion by 2012.

“LeftHand Networks’ emphasis on innovation is proving to be very successful with our growing customer base,” said Alex McLoughlin, director of operations, Virtual Age Limited in the United Kingdom. “With LeftHand’s technology we have the ability to offer the most highly available iSCSI solutions in the

marketplace to help customers make the best choices today to meet the emerging needs of tomorrow.”

The Advantage Partner Program includes resellers in Europe and the United States who have enthusiastically joined the LeftHand Networks partner team and sold its technology as an integral part of their customer solutions, including IIS, PC Connections, AVNET, Virtualize IT, Integra, and more. As a member of LeftHand Networks, team partners enjoy a partner program, technology, and sales model, all committed to helping them create a compelling, successful, and profitable business.

“LeftHand Networks is committed to the success and profitability of its channel partners, and we are pleased to have the world’s leading resellers join the LeftHand Networks team,” said David Bangs, worldwide vice president of sales, LeftHand Networks. “With some of the world’s best and most knowledgeable specialists in virtualization and SANs, customers have access to best-in-class expertise and support around the world.” LeftHand Networks partners sell an enterprise-class SAN that includes all the features a customer needs, including online scalable capacity and performance, synchronous and asynchronous replication for data protection, ultra-efficient thin provisioning, instant data copies with snapshots, and remote copy for disaster recovery. LeftHand Networks SAN/iQ software enables a customer to manage all these features on the SAN from a single management interface on both physical and virtual SAN platforms.

LeftHand Network’s product innovation and strategy of supporting multivendor environments through multiple channels landed the company on Gartner’s Cool Vendors in Storage, 2008 and as an InfoPro Exciting Vendor as polled by Fortune 1000 & Midsize Enterprise Markets. In addition, LeftHand Networks SAN/iQ software was awarded an Excellence Award by eWEEK and InfoWorld magazines.

NetApp teams with Microsoft to help customers realize full potential of Windows Server environments

NetApp announced that it is a Microsoft Partner Solutions Center (MPSC) Sponsor Partner and is providing NetApp storage systems and data management solutions to the MPSC located on the Microsoft campus in Redmond, Washington. These resources, along with NetApp technical experts, are available to help customers accelerate the design, testing, and implementation of innovative storage solutions for their Windows Server environments.

A Microsoft Global ISV and Gold Certified Partner, NetApp provides a comprehensive portfolio of storage and data-management products, services, and solutions that help customers realize the full value of their Microsoft technology investments. With NetApp storage solutions, customers can efficiently store, protect, and manage their data for Microsoft applications and databases, significantly reduce storage costs, increase data availability, and simplify their IT environments to improve manageability.

“As a Sponsor Partner, NetApp plays a pivotal role in enabling Windows Server customers to leverage the storage and data management products, solutions, and technologies needed to take their business to the next level,” said David Hayes, director of the MPSC. “With vendors like NetApp now playing an integral part in the Microsoft Partner Solutions Center, customers are provided with the support and technical expertise they desire for a wide range of applications and technologies.”

“Commitment to the success of our mutual customers is at the heart of our relationship with Microsoft. Our support of the MPSC further demonstrates our support of the Windows Server platform,” said Patrick Rogers, vice president of Solutions Marketing for NetApp. “We are very excited to continue our

record of achievement, innovation, and integration with Microsoft to utilize the MPSC to further demonstrate the value that NetApp and Microsoft bring to our mutual customers and partners.”

In addition to its support of the MPSC, NetApp is a Microsoft Technology Center (MTC) Partner and has installed NetApp storage systems and data-management software in all MTCs worldwide. Through this multimillion-dollar commitment, customers and Microsoft ISV partners around the world can take advantage of Microsoft and NetApp technical expertise to solve their most pressing business and technical challenges.

SEPATON renews OEM agreement with HP

SEPATON Inc., a provider of enterprise-class data-protection solutions, announced that it has renewed its worldwide original equipment manufacturer (OEM) agreement with HP. The new contract contains terms to reflect new HP products that bring SEPATON's ContentAware deduplication to market as accelerated deduplication. SEPATON says that its recently enhanced data deduplication software offers customers the industry's leading performance, flexibility, and scalability, while lowering disk-related backup costs.

“Today's announcement reinforces the superiority of SEPATON's underlying ContentAware architecture and our leadership position in the disk-based data protection market,” said Mike Worhach, president and CEO, SEPATON Inc. “This agreement, which now includes our DeltaStor data deduplication software, is a solid example of our strategy to maintain and strengthen our sales channels as the company continues to grow. HP is broadly recognized as one of the strongest companies in the storage industry. We are proud to extend our relationship with one of the world's largest technology companies.”

An initial agreement with HP was signed in 2005 to develop and integrate SEPATON's

data protection platform into the HP StorageWorks 6000, 9000, and 12000 Virtual Library Systems.

That integration allows customers to accelerate backup performance in complex storage area network environments and improves the overall reliability of their data protection requirements. Through the previous agreement, the installation base grew to more than 700 HP customers worldwide. With the new agreement, SEPATON's DeltaStor data deduplication software will be integrated into HP StorageWorks 6000, 9000, and 12000 Virtual Library Systems to enable longer online retention times for faster restores, faster data access, and savings in space, power, and cooling.

SkillSoft and EMC collaborate to deliver new Storage Technology Foundation curriculum

SkillSoft PLC, an SaaS provider of e-learning and performance support solutions for global enterprises, government, education and small to medium-sized businesses, announced that it is working with EMC Corporation, a provider of information infrastructure solutions, to deliver a storage design and management curriculum designed to provide the requisite skills to become proficient in storage technology. EMC Global Services and SkillSoft have together created 12 Storage Technology Foundation (STF) e-learning courses, which will enable a broad new audience of users to access EMC's storage information and management training.

The 12 STF e-learning courses are available immediately as part of SkillSoft's comprehensive IT Skills Course Collection, which consists of 1,700 online courses. SkillSoft's IT Skills Course Collection provides a rich array of content assets and flexible delivery technologies to support the full range of formal and on-demand learning needs of IT organizations today. With instant access to the right resources, learning is continually available

close to the work, resulting in immediate impact to critical IT decisions and projects.

To address the shortage of skilled storage professionals in the \$65 billion storage technology industry, the Storage Technology Foundation's e-learning curriculum delivers end-to-end knowledge of storage technology and optimum storage comprehension. It comprises the following 12 courses:

- Introduction to Storage Technology
- Storage System Architecture
- Physical Disks and RAID Arrays
- Intelligent Storage Systems
- Network Storage Systems
- Fibre Channel Storage Attached Networks
- IP Sans and Content Addressed Storage
- Information Availability
- Replication and Business Continuity
- Monitoring and Managing the Data Center
- Securing Storage
- Storage Virtualization Technologies

SkillSoft's online courses are delivered via the SkillPort platform, the learning management system for SkillSoft's e-learning solution. Upon successful completion of the 12 courses and proctored certification exam, participants will receive an EMC Proven Professional Storage Technologist Associate (EMCPA) certification. The STF training will aid individuals in choosing the right storage technology to meet availability, performance, and security requirements.

"SkillSoft's customers recognize the growing importance of storage technology knowledge and we are pleased to offer these new courses as part of our IT Skills Course Collection," said John Ambrose, senior vice president of strategy, corporate development and emerging business, SkillSoft. "By working with an industry leader like EMC, we were able to create a comprehensive storage education curriculum, and we recognize that these courses

make a valuable addition to our already expansive courseware library."

"EMC is pleased to be working with SkillSoft to expand the scope and reach of our Storage Technology Foundations training," said Tom Clancy, vice president of education services at EMC. "This collaboration will enable a broader global audience to join the nearly 12,000 students who have already completed EMC's "open" storage technology curriculum, to gain valuable information storage and management expertise, and become more productive and efficient in managing their storage environments."

The Federal Rules of Civil Procedure (FRCP) are a driving force in the e-discovery development, and storage is among the most critical components of a company's structural technology system. STF was developed to fill the knowledge gap in understanding varied components of modern storage infrastructure. These unique e-learning courses focus on concept, principles, and design considerations of storage technology rather than specific products, and are part of SkillSoft's specialized library of roughly 1,700 IT courses. SkillSoft, which offers 6,000-plus courses that cover a wide variety of business, compliance, safety, and technology topics, focuses on delivering just-in-time learning for organizations worldwide.

Bosch and NetApp partner to provide customers with proven storage solutions for IP video surveillance

Bosch Security Systems and NetApp Inc. have formed a strategic, global partnership to capitalize on the rapid development of the IP video surveillance market. Under terms of the agreement, Bosch will sell and support cobranded NetApp storage devices as part of its closed-circuit television (CCTV) portfolio.

"The market is continuing to mature in its understanding of IP video system architectures, resulting in a substantial up-tick in the adoption of Bosch's approach for

recording video-streaming video direct to a RAID array or storage area network and eliminating network video recorders,” said Johan Jubbega, vice president of global video systems and products, Bosch Security Systems Inc. “The partnership with NetApp will increase the options we offer our customers by adding proven technology from a leading storage solution provider. These products will appeal to systems integrators and our newest generation of customers-IT-savvy end users.”

Bosch pioneered the development of IP cameras and encoders that stream directly to RAID arrays or storage area networks. This efficient approach to video recording is made possible with the use of an IP-based storage standard: the Internet Small Computer System Interface (iSCSI). With the partnership agreement, Bosch is growing its portfolio of storage devices that use the iSCSI protocol as the company will resell four cobranded NetApp products or solutions.

The NetApp products offered by Bosch include the FAS2000 series along with the S550 and S300, providing a cost-effective family of products that delivers enterprise-level performance and scalability with a storage density ranging from 2 to 104 terabytes. Both the S family and the FAS2000 Series were recent winners of the ServerWatch Product Excellence Awards and will serve as important components of Bosch video surveillance solutions for a wide range of applications.

“With the desire growing among customers for IP video surveillance solutions, the timing is right to partner with Bosch,” said Andreas König, general manager and senior vice president EMEA for NetApp. “By leveraging NetApp solutions that utilize the iSCSI protocol combined with Bosch security products, customers are provided with a proven and effective answer to their video surveillance needs.”

Under terms of the partnership, NetApp will assist Bosch associates with presales

support for the cobranded products. The company will also deliver training and certification to Bosch technical support groups. As a NetApp authorized provider, Bosch will provide customers with post-sale technical support for the storage devices. This level of integration will provide a streamlined experience for customers during and after the sale of the cobranded products.

To maintain continued compatibility of products, Bosch will also gain ongoing insight into NetApp’s technology roadmap. Early access to NetApp’s devices will assist Bosch in tuning its video surveillance products to take advantage of new features and functionality in NetApp’s future storage offerings.

BUSINESS

Intrinsa named one of fastest-growing storage companies by StorageSearch

Intrinsa, a provider of of shared, scalable, and simple external IP storage solutions for video and IT customer needs, announced that it has been named by StorageSearch as one of the fastest-growing storage companies in the country. As the only video surveillance storage vendor to make the StorageSearch list of the 20 fastest-growing storage companies, Intrinsa’s strong traction, innovative technology, and success in the market are continuing to gain industry-wide recognition. In addition to being named the second-fastest-growing iSCSI vendor and the fourth-fastest-growing company overall of the 20 named to StorageSearch’s list of Fastest Growing Storage companies, Intrinsa was recently recognized by SecurityDreamer as a “Best in Show” vendor at ISC West, the premier physical security industry event.

“Intrinsa is honored to be among an elite list of companies to be named to StorageSearch’s list of Fastest Growing Storage companies,” said Jeff Whitney, vice president of marketing for Intrinsa. “Intrinsa’s innovative,

scalable and simple IP SANs have been specifically designed for the video surveillance industry, and the fact our products can enhance and extend the life of the video surveillance systems that are currently in place is resonating with customers.”

The Intransa IP storage solution is flexible and upgradeable and allows customers to add more storage capacity, supporting longer storage periods and cameras. Intransa’s external storage solutions are Security-Grade IP Video Storage Certified to integrate with more than 40 physical security vendor’s products plus those of more than 35 IT vendors. In addition, the affordable IP storage systems allow for modular growth from 4TB to 1,500TB of RAID protected IP storage.

“Our growth rate is proof that by using Intransa’s scalable, security-grade IP storage for video surveillance applications customers are seeing the benefits of increased surveillance reliability and lower costs,” added Whitney. “In addition, customers are able to deploy more cameras with much longer retention periods while using Intransa IP storage to run other security or IT applications simultaneously, making this a system they can continue to use well into the future.”

Intransa staff will be demonstrating the company’s advanced IP storage systems at several upcoming industry events, including:

- Global Security Operations 2010, August 18-19, 2008, Santa Monica, CA
- Global Security Integration 2010, August 20-21, 2008, Costa Mesa, CA
- 2008 ASIS International 54 Annual Seminar and Exhibits, September 15-18, Atlanta, GA (booth #541)

RELDATA named Emerging Tech VENDOR by CRN Magazine

RELDATA, a provider of consolidated and unified storage solutions that deliver iSCSI SAN, NAS, and WAN replication from a single

virtualized storage platform, announced it has been selected by Everything Channel as a CRN Emerging Tech vendor. CRN’s Emerging Tech list recognizes companies that are delivering high margins for solution providers with innovative and easy-to-use technologies that undercut industry giants.

“We are honored to have our company and its technology recognized as an emerging vendor by CRN’s editorial staff for the second year in a row,” said David Hubbard, CEO of RELDATA. “Our value-added resellers (VARs) enjoy on-going repeat business as customers transform their RELDATA iSCSI SAN into a ‘future-proof’ enterprise-wide storage infrastructure. Customers benefit through reduced costs, increased application availability and dramatically simplified storage operations.”

RELDATA VARs deliver a powerful iSCSI SAN storage solution that seamlessly integrates into a customer’s existing storage infrastructure. This solution can be easily expanded by optionally integrating existing third-party storage assets for maximum ROI, provisioning enterprise NAS storage for users, implementing WAN replication for disaster recovery of all storage, and migrating data nondisruptively — all through the same user interface with storage automation. Customers can incrementally scale storage by simply adding more disk arrays, incrementally scale performance by simply adding more storage controllers, and incrementally scale the number of supported servers/users by upgrading to 10GbE. Additionally, Fibre Channel SAN customers can implement a cost-effective disaster recovery solution that allows them to migrate to an enterprise iSCSI SAN in the future. RELDATA VARS help their customers simplify their storage operations by building a flexible storage infrastructure, one project at a time.

According to the CRN Emerging Tech Survey, the top reasons solution providers add emerging technologies include (1) the technology is superior to other products in the

market segment; (2) the technology complements a solution providers' existing practice areas; (3) emerging vendors provide better service opportunities; (4) emerging vendors pay better attention to partners; (5) emerging vendors offer higher margins, customers want alternative product choices; and (6) emerging vendors have better joint marketing programs. In addition, 61 percent of solutions providers surveyed plan to increase the number of emerging technology vendors they partner with in the next 12 months.

"New and innovative vendor partners can help spur profitable new ideas that solution providers can use to build revenue and customer loyalty, and the CRN Emerging Tech list is where solution providers go to find these vendors," said Robert C. Demarzo, senior vice president and editorial director, Everything Channel editorial.

RELDATA secures VMware Infrastructure 3 Certification

RELDATA, a provider of consolidated and unified storage solutions that deliver iSCSI SAN, NAS, and WAN replication from a single virtualized storage platform, announced that its iSCSI product offerings have been verified for VMware Infrastructure 3 and are listed on the Storage / SAN Compatibility Guide for VMware ESX 3.5. Joint customers will benefit from a unified, scalable solution that offers task automation, simplified management, and open storage attachment that seamlessly operate with VMware ESX.

"Together, VMware ESX and RELDATA's 9240 provide a highly available, powerful, end-to-end virtualized environment," said Dave Hubbard, CEO of RELDATA. "We can provide added flexibility and freedom to VMware customers by offering unified iSCSI SAN, NAS and WAN replication that easily scales and leverages the customer's previous disk storage investments. Users can independently scale storage capacity and performance, as well as migrate data, without application disruption."

The combined solution provides customers with high availability, high reliability, operational simplicity, and significant cost savings, along with the following enterprise-class capabilities:

- Storage Virtualization: iSCSI SAN, NAS, WAN replication, nondisruptive data migration, heterogeneous storage environments;
- Performance: High IOPS performance and Mbps throughput;
- Seamlessly scalable to multipetabyte configurations;
- Open storage attachment — no vendor lock-in;
- Simplified storage management for dynamic IT infrastructures including an integrated management console, Adaptive Storage Wizards, and RELbot storage automation.

StorMagic joins Intel Enabled Server Acceleration Alliance

StorMagic, a developer of iSCSI SAN management software, announced that it has joined the Intel Enabled Server Acceleration Alliance (Intel ESAA). As a member of the Intel ESAA program, StorMagic is certifying its iSCSI SAN solutions for use in Intel-based environments. This new membership will allow the creation of a "recipe" that joint channel partners can use to build iSCSI SANs based on StorMagic iSCSI software and Intel hardware.

Intel ESAA is a collaborative program that streamlines technical certification and validation of reliable, high-quality server solutions to end-user customers. The certification allows Intel OEM and channel partners to quickly deliver preconfigured, Intel-based solutions to their customers. Solution builders are assured that Intel ESAA solutions consist of equipment and software from trusted technology providers, and end-user customers have confidence knowing they are purchasing a pretested and validated solution.

“We are welcoming StorMagic as a new Intel ESAA technology provider,” said Ned Thanouser, director of the Intel ESAA program. “We consider this a significant opportunity for our channel, as well as a great way to help small and medium organizations benefit from enterprise-class iSCSI features without the complexity and high cost. Intel has a long history of providing leading solutions to the SMB market, and StorMagic has focused exclusively on the small and medium segment of the market. With Intel as the platform for their iSCSI SAN solutions, I know they are in a great position to meet the needs of the SMB customers.”

“Intel was one of the first strategic partnerships we set out to develop, and by joining the Intel ESAA program, we are offering our customers proven, leading-edge iSCSI SAN solutions,” said Mike Stolz, VP of sales and marketing at StorMagic. “We are targeting small and medium organizations with demanding IT needs and limited budgets that need the ease of use and reliability that our iSCSI SAN solution brings.”

StorMagic SM Series is an iSCSI-based SAN solution designed specifically for SMBs to help them store, share, manage, and protect data through a single, easy-to-use interface. Nondisruptive data migration, consolidation, and management are now accessible to SMBs without the higher cost and complexity of typical SAN solutions. Data protection is performed locally using RAID and snapshot technologies for backup, data retention, or compliance purposes.

MARKET INTELLIGENCE

Dell No. 1 in iSCSI SANs worldwide

Dell is the worldwide leader for iSCSI storage area networks, with more than double the share of its nearest competitor in the first quarter 2008 according to industry analyst firm Gartner. In addition, Dell EqualLogic storage solutions received a “Strong Positive” — the

highest possible rating — in Gartner’s “MarketScope for iSCSI SAN Integrated Solutions.”

Burgeoning new Internet-based businesses — including application service providers and hosted services, proliferating social networking sites such as Facebook and LinkedIn, and handheld mobile devices such as the BlackBerry — are generating an unprecedented amount of digital content. IDC reported in March 2008 that the digital universe is expected to grow to nearly 1,800 exabytes by 2011, a tenfold increase over the next three years. According to McKinsey & Company, demand for storage capacity has grown by more than 50 percent annually in recent years.

This explosion of digital information not only is creating a monumental data storage challenge for IT managers as people continue to consume, create, and store more information, but is also demanding new storage solutions that move beyond the limitations of traditional solutions.

The storage needs to be accessible, flexible, automated, easy to manage, and have the ability to scale on demand without disrupting ongoing operations.

iSCSI, or Internet SCSI, is a simple communications protocol that employs the Internet Protocol (IP) to connect servers with external storage devices. iSCSI’s advantages are that it runs over ubiquitous Ethernet networks and switches, can communicate over wide area as well as local area networks, and, because it runs on top of IP, it is an extremely flexible routed protocol that facilitates virtualization.

Dell has invested in a broad range of iSCSI solutions ranging from entry-level PowerVault products to powerful Dell EqualLogic solutions to massively scalable Dell/EMC products.

According to Forrester, there are both hard economic benefits and soft benefits in adopting iSCSI storage. “Given the hardware

acquisition cost benefits as well as synergies in network staff and infrastructure, significant benefits can be gained from the use of iSCSI-based SAN architectures.”

Among the soft benefits is “more virtualization within the protocol. iSCSI is inherently more virtualized than Fibre Channel... allowing for more granular addressing, especially important for virtual server environments.” (Forrester Research Inc., February 2008, “Cost Comparison of iSCSI Versus Fibre Channel SAN Components”)

But iSCSI alone is not the answer — in the case of Dell EqualLogic, iSCSI is the enabling technology for the patented virtualization architecture at the heart of the Dell EqualLogic product line.

“We are seeing a tremendous opportunity for our storage systems across the board including our Dell/EMC, PowerVault and Dell/EqualLogic lines — especially with customers building virtual infrastructures and Internet-based businesses,” said Darren Thomas, vice president and general manager of Dell Enterprise Storage.

“These applications require not only the inherent ease of use and accessibility of the iSCSI protocol, but the intelligent automation and dynamic virtualization such as those in the Dell EqualLogic architecture.”

Dell owns the premier enterprise-class iSCSI-based storage platform for virtual infrastructures following the acquisition of EqualLogic earlier this year. Dell EqualLogic PS Series SANs are ideal for the new age of Internet-based applications, which demand unpredictable increases in storage capacity while continuously serving up uninterrupted access to data.

PS Series SANs offers a dynamic response to the unique demands of each application, learning and adapting to its behavior and adapting to shifting workloads to help ensure responsiveness and consistent uptime.

WhitePages.com is a trusted and comprehensive source for consumers to quickly and easily find relevant, accurate contact information in North America. WhitePages has deployed 105 terabytes of storage on 32 Dell EqualLogic PS Series storage arrays to index over 180 million people. “That’s more than MySpace, Facebook and LinkedIn combined,” said Jack Valko, senior director of IT/operations at WhitePages.com.

“The number of rows in our database more than doubled last year. We can’t continue to be successful unless we have adaptable, reliable storage that tightly integrates with Linux and scales easily. With Dell EqualLogic storage we get all of that as well as great performance to meet current and future demand.”

AirClic provides mobile information services to more than 500 customers worldwide. The company focuses on developing mobile handset solutions that provide a simple, cost-effective means for a mobile workforce to capture and exchange information using wireless devices.

AirClic’s Oracle-based application runs in a VMware virtual infrastructure on top of a tiered Dell EqualLogic SAN. “The impact of the Dell EqualLogic SAN on AirClic’s operations has been dramatic,” said Andy Monroe, vice president of technology at AirClic. “We know we can scale easily without disruption. Storage is not something we have to think about any more; so we can focus more on our customers and less on infrastructure.”

In the first quarter of this year, Dell’s worldwide external controller-based storage revenue increased 21 percent year-over-year. Dell increased customer acquisition internationally, received positive industry validation, delivered new storage features and products, and became No. 1 in open systems storage worldwide.

“We have been investing in every aspect of our storage business, from innovation in our direct attached product line to the acquisition of

EqualLogic to highly sophisticated Fibre Channel solutions, in order to keep up with the unprecedented demand for storage,” said Thomas. “As a result, Dell has demonstrated strong momentum across the board.”

Gartner rates NetApp “Strong Positive” in MarketScope Report

NetApp announced that it received the highest rating possible in the “Gartner MarketScope for iSCSI SAN Integrated Solutions.”

In the recent report, NetApp was rated as “strong positive,” which is the highest possible category in the MarketScope. Gartner advises current customers of vendors with strong positive ratings to “continue planned investments.” Gartner also advises potential customers to consider vendors with a strong positive rating as “a strong choice for strategic investments.”

“CIOs must deliver an agile and cost-effective IT infrastructure to enable their companies to respond to competitive opportunities and changing business needs,” said Elisa Steele, senior vice president of corporate marketing at NetApp.

“To this end, we are committed to working with our customers to create innovative data management solutions to meet their needs for storage efficiency, infrastructure flexibility, and total cost of ownership.”

Gartner’s evaluation criteria for the iSCSI included market responsiveness, overall viability, and an evaluation of the vendors’ products and services, among other criteria.

Dell No. 1 in open systems storage worldwide

In the first quarter of calendar year 2008, Dell for the first time captured a leading 20.4 percent of the open systems (Windows/Linux) external worldwide disk array storage market with \$422 million in revenue.

Its closest competitor claimed 18.5 percent share and \$384 million in revenue.

Dell’s external controller-based storage revenue increased 21 percent year-over-year, and Dell gained share in iSCSI-based SANs to take the No. 1 position with more than twice the revenue of the next-leading vendor.

This growth demonstrates strong momentum in all segments of Dell’s worldwide storage business.

“We believe taking the lead in the Windows/Linux external storage market is significant. We have invested heavily in our portfolio across the board,” said Darren Thomas, vice president and general manager of Dell Enterprise Storage.

“This is the high-growth segment, and we plan to continue demonstrating leadership throughout our entire family of storage systems, including PowerVault, Dell/EMC and EqualLogic.”

Digital data is expanding at a rate faster than computer systems and those who manage them can reliably store, manage, and protect it. Driven by digital content creation in all media — including audio, video, and graphical — and the proliferation of email and data sharing of all kinds, the amount of data that needs to be stored by business and consumers alike is growing exponentially.

This explains, in part, why Dell shipped over 116 petabytes in external disk storage for Windows/Linux servers in Q1, representing 95 percent of the total of 122 petabytes of external disk storage Dell ships each quarter. “That is an astounding amount of storage capacity,” said Thomas.

As a comparison, it is estimated by some that the total printed matter contained by all US academic research libraries equals only two petabytes.

All told, Dell ships more than an estimated 288 petabytes of total disk storage each week within all of its products — including servers, desktops, laptops, and enterprise storage systems — in order to accommodate the demand for storage in the digital universe.