Case Study

datalink
An Insight company

INDUSTRY

Retail

LOCATION

Cleveland, Ohio

SOLUTION

Storage virtualization

DATALINK SERVICES

- Analysis
- Design
- Project management
- Implementation
- Support

BENEFITS

- Realized up to 86-percent capacity savings
- Avoided $300,000 capacity spending
- Managed 150 terabytes with one full-time employee
- Avoided addition of three full-time employees
- Enabled non-disruptive SAP development and test
- Achieved target of five nines application availability

American Greetings reclaims capacity and shrinks costs with a storage virtualization solution built by Datalink.

THE CUSTOMER: AMERICAN GREETINGS CORPORATION

American Greetings Corporation is a manufacturer and retailer of innovative social expression products. The company offers the web's largest collection of electronic greetings available through BlueMountain.com, Egreetings.com, and other sites. American Greetings generates annual revenue of approximately $1.7 billion (FY2009).

In a global economy that has been particularly challenging for retail businesses, American Greetings continues to thrive, maintaining its position as the world's largest publicly owned creator, manufacturer, and distributor of social expression products. Success comes from creative excellence combined with persistent focus on growth and cost reduction.

To support these business objectives, the American Greetings IT team works to ensure that server and storage solutions deliver essential reliability, scalability, and efficiency. Meeting these requirements was one of the reasons the company became an early adopter of server virtualization solutions. But while the supporting multi-vendor storage infrastructure met performance and scalability requirements, it did so at the expense of storage efficiency. American Greetings engaged Datalink to help identify and evaluate potential solutions to improve the usability and business value of existing storage assets.

THE CHALLENGE: ELIMINATE STRANDED STORAGE CAPACITY AND REDUCE COSTS

Enterprise systems management team lead for American Greetings, Robert Hunt, describes the issues with the current infrastructure: "Our IT resources are project-funded – the creative department may request additional capacity to introduce a new line of cards, or IT may need to expand an inventory database to accommodate new footage (the linear feet products occupy in a store). Unfortunately, in the existing infrastructure with multiple storage arrays from different storage manufacturers, once capacity was allocated to a particular project or server, no one else could access it. That fact, along with the tendency for vendors and project managers to cushion storage requirements, meant we were squandering precious IT dollars on a significant footprint of unused capacity. We needed to implement a front end to our host systems so that we could share the capacity behind it, regardless of the storage brand."

Hunt's team initiated a project to virtualize the existing storage pool to complement the virtual-server environment and to increase disk utilization and reclaim stranded capacity. Project goals included maintaining reliability and performance to support American Greetings' demanding application environment and simplifying storage management.

American Greetings engaged Datalink to assist in all phases of the project, from analysis and

solution design to project management and implementation. Datalink maintains partnerships with major storage vendors, but is not tied to any one company or product set. "The significance of that," remarks Hunt, "is that they work for us, so we were certain to benefit from a thoughtful, unbiased approach. With their in-depth knowledge of storage solutions from all of the major vendors, the Datalink team helped us to more efficiently and objectively narrow the field to find the best solution for our unique requirements."

THE SOLUTION: IMPLEMENT STORAGE VIRTUALIZATION

Working with Datalink, the American Greetings IT staff developed specifications and ranked potential solutions against those requirements. After evaluating products from several storage vendors, the team selected a NetApp® solution that features space-efficient replication and deduplication technologies.

In 2008, Datalink led the implementation of a high-availability NetApp V6000 series open storage controller to enable American Greetings to more efficiently manage some 150 terabytes (TB) of Tier 1 and Tier 2 storage on existing disk arrays from different storage vendors. The solution unifies NAS/SAN architectures, enabling CIFS-based service for Microsoft® Windows® and Apple® Mac OS® file shares, NFS for UNIX® file shares, and Fibre Channel SAN access for IBM® AIX/VIO Server and VMware® environments.

The solution consolidates storage resources for mission-critical applications and delivers resources to Microsoft® Office SharePoint® Server, Exchange Server, and SQL Server® applications, as well as multiple Oracle® and IBM DB2® databases. "As we complete our transition," reports Hunt, "we expect that all but 10 TB (our remaining mainframe storage) of our enterprise storage footprint will be managed through the NetApp V-Series."

Datalink services also included development of a data migration plan and a proof of concept that ultimately resulted in American Greetings' decision to move forward with an aggressive virtual

desktop infrastructure initiative. Today, the storage virtualization solution supports three VMware/VMware View environments comprised of some 130 virtual servers and 700 virtual desktops, about 100 IBM System p virtual LPARs for AIX®, and a small number of Windows® and AIX stand-alone servers. Approximately 130 TB of data – nearly 90-percent of the total specified in the migration plan – is now managed through the V-Series.

"Datalink was the perfect fit for this deployment," Hunt observes. "Our Datalink storage architect was experienced in virtualization solutions and certified on all of the storage products we were putting behind the NetApp V-Series. That expertise contributed to a faster, more seamless integration."

THE BENEFITS: MORE EFFICIENT STORAGE AND GREATER BUSINESS RESULTS

Savings of $500,000 in capacity and full-time employees
American Greetings has already achieved significant capacity and cost savings by leveraging NetApp deduplication technology across both Tier 1 and Tier 2 storage. Hunt quantifies, "We've seen up to 86-percent capacity savings on SAP datastores. Running deduplication on existing data allowed us to recover some 20 TB of capacity that we are now using to support additional projects. We estimate the cost avoidance to be at least $300,000 – roughly $168,000 of Tier 1 storage and $132,000 in Tier 2 capacity."

Hunt also points to savings from improved capacity utilization. "In the old environment, it would not have been unusual to allocate 3 TB to a project that used only 200 gigabytes in the first year. With the entire 3 TB assigned to a specific group or project, it might have been years before that capacity was fully utilized. In the meantime, our capital investment was depreciating without the business realizing anywhere near the full value of the asset. Today, the V-Series allows us to pool storage resources and easily create and resize virtual volumes as our needs change. We've effectively eliminated overestimating and are achieving significantly higher utilization of existing storage resources.

Implementing the V-Series solution ensures scalability to accommodate growth, and, with the ability to manage NetApp disk shelves as well as disk arrays from other major vendors, it protects American Greetings' flexibility to continue to choose the best storage solution for new requirements.

"Another benefit is administration efficiency – a single administrator now runs 150 TB of disk on the production floor. Before, we'd have needed at least three more full-time employees – that's conservatively another several hundred thousand dollars of savings."

Shrinking space and energy requirements
The solution has also contributed to data center space and energy savings. Server and storage virtualization projects together have enabled American Greetings to eliminate three Tier 1, enterprise-class storage arrays for a space savings of some 81- square feet and reduction in power consumption of up to 41.4 kilowatts. These savings directly support American Greetings' initiatives to make operations more energy efficient.

**High availability, data protection, enhanced
SAP development and test**

Datalink worked in concert with Hunt's team to optimize the storage configuration for availability and performance. Hunt stresses that in American Greetings' demanding application environment, savings cannot compromise performance and availability – and they don't. "We're achieving performance and reliability equivalent to the original infrastructure, but with the added benefits of space and management efficiencies."

Application availability is critical to the more than 10,000 part-time merchandisers (PTMs) who maintain inventory at major American Greetings retailers. Hunt comments, "Once fully implemented, our SAP CRM system will be essential to PTMs building their daily schedules. If that system is down, PTMs aren't getting products on the floor, and the stores aren't selling. We also cannot afford downtime on sales systems, particularly during busy holiday seasons when we have small windows in which to produce and ship products. The virtualized server and storage infrastructure helps us consistently achieve our target of five nines application availability."

American Greetings uses NetApp FlexClone™ technology to create storage-efficient production system clones that make it easy, fast,

and cost-effective to test and reconfigure SAP applications without disrupting production. Point-in-time copy technology makes it feasible to add recoverability to client machines. Having multiple versions available online and allowing users to do their own recoveries contributes to both user and administrative staff productivity.

Deployment in half the time and flexibility
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Hunt emphasizes Datalink's role in helping American Greetings select best-fit solutions to maximize the business value of IT investments. "Datalink holds NetApp Virtualization Specialization status, but they are also certified on other storage products and can offer an objective view of how potential solutions will work in our environment. Their expertise helped us install the V-Series in less than one week. Otherwise, it could have taken our team several weeks to complete the project in tandem with ongoing responsibilities."

**THE OVERALL EXPERIENCE: ONE LONG-TERM
PARTNER AND IMPRESSIVE RESULTS**

Hunt summarizes, "I've been working with data center solution providers for more than 11 years, and I'd have to say that the value of doing business with Datalink has surpassed anything we've realized from other partner-ships. Datalink's evaluation and implementation services were essential to the project's success, and their ongoing support helps us proactively manage our server and storage resources to meet business needs.

"The project led by Datalink has helped us effectively address American Greetings' expanding storage requirements while simultaneously meeting corporate objectives for reducing costs. That's a critical achievement for maintaining a successful retail business during challenging economic times." ■

Making IT happen

A complete data center solutions and services provider, Datalink helps Fortune 500 and mid-tier enterprises get the most from every IT investment – with storage, server, and network expertise across the infrastructure. We deliver greater business results throughout, designing what we sell, deploying what we design, and supporting what we deliver.

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