



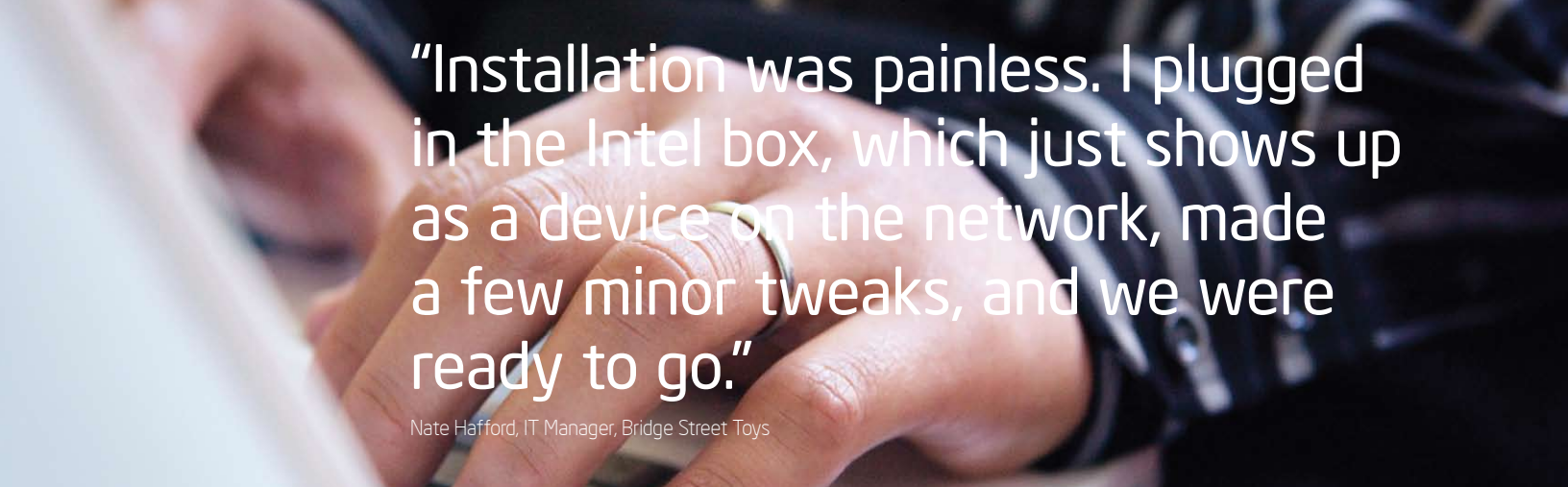
Case Study

Bridge Street Toys
Intel® Entry Storage
System SS4200-E
Storage for SMBs

Bridge Street Toys Builds Business with Robust, Reliable NAS Solution from Intel and EMC

Intel® Entry Storage System SS4200-E delivers easy networked backup for worry-free data integrity and storage visibility at a popular toy company

-
- Challenge** ▪ Bridge Street Toys needed a dependable and affordable backup solution to reduce storage networking complexity and potential data loss.
-
- Solution** ▪ Intel® network attached storage (NAS) appliance is powered by EMC Lifeline* software to centralize and safeguard business assets for the Small Office, Home Office (SOHO) and Prosumers.
-
- Benefits** ▪ The right combination of performance, simplicity, and value puts Bridge Street Toys back in control with systematic backup, out-of-the-box RAID, and instant access across the network.



“Installation was painless. I plugged in the Intel box, which just shows up as a device on the network, made a few minor tweaks, and we were ready to go.”

Nate Hafford, IT Manager, Bridge Street Toys

“When you’re growing the business, the focus needs to be on sales and service, not worrying about IT. Given what this box does for me, and knowing that EMC and Intel stand for reliability, that worry is gone. Storage is so simple now.”

Carol Flack
Founder
Bridge Street Toys

Nostalgia meets need at the Bridge Street Toys company. When two engineers tried to purchase a Girder & Panel building set for their young son and learned that these classic educational toys were no longer in production, the idea for a new toy company was born. Since launching the company in 2005, Bridge Street Toys founders Carol and Paul Flack have built a thriving small business that began out of their home. Today, Bridge Street Toys generates just under \$1 million in revenue, producing an entire line of building sets that interoperate with the original 1950s and 1960s sets that no doubt inspired generations of innovators and engineers.

Toying with the idea of growing more with less complexity

What began as a startup business is now a bustling hub of activity, complete with design, manufacturing, sales, office staff, and an on-call IT manager. Four workstations and two laptops store everything at the Bridge Street Toys office, from detailed drawings and images to the company’s accounting records and Web site files. While the machines are networked, they are also dedicated to different tasks, requiring staff to hop between workstations to occasionally find various files stored on the separate hard drives.

After one system quit working and some key data was lost, the Flacks’ on-call IT manager Nate Hafford set up a Linux server as a stop-gap solution. Valuable files were backed up weekly onto the 50 GB server. Bridge Street Toys quickly filled up the server and needed to explore more long-term storage solutions. With significant graphic requirements that had emerged for several new products and an increase in sales activity, Carol Flack realized the company needed a better IT infrastructure to help manage the complexity.

“When it was just the two of us, data integrity wasn’t really an issue. We knew where all the files were located and when we backed them up. But now, with four employees, all of a sudden our data issues have become complicated. In conferring with Nate, I wanted to know whether we should be looking at purchasing an external hard drive or bumping up the IT infrastructure a level. As a start-up company, we don’t have a lot of cash so we are reluctant to spend money for IT. I didn’t even know if it was possible to find a powerful yet simple solution that is also reasonably priced,” explains Flack.

Implementing a complete storage solution to simplify operations

Finding a storage device to meet both the functionality requirements and affordability of a growing small business can be frustrating and time-consuming. “We did some initial research to see what was commercially available for the home office or small business level of storage, but I really wanted the quality and reliability of a proven solution. I was absolutely thrilled to learn about a new storage device from Intel and EMC* that delivers all the functionality and performance I need in one box, at a price that is appropriate for a small business,” says Flack.

Bridge Street Toys installed the Intel® Entry Storage System SS4200-E, a complete hardware and software network attached storage (NAS) solution that instantly adds storage capacity and simplifies the network. The system is equipped with the Intel® Celeron® Processor 420 Series processor at 1.6 GHz to address heavy workloads with high I/O performance and efficiency. Powered by EMC software perfectly tuned to accommodate the demands of growing small businesses, the Intel system supports Windows*, Macintosh*, and networked multimedia devices in 11 languages. The system uses a wizard-based interface and can be configured in four easy steps.

"Installation was painless. I plugged in the Intel box, which just shows up as a device on the network, made a few minor tweaks, and we were ready to go. I've been in the IT business for a long time, and the Intel Entry Storage System SS4200-E is probably the best example I've seen of plug-and-play storage," Hafford says.

Locking on data protection with EMC's integrated backup and security

The Intel Entry Storage System SS4200-E takes the worry out of protecting valuable data. With EMC software, out-of-the-box RAID, and a media server built into the Intel system, Bridge Street Toys can fully protect everything from business-critical records to media-rich files—all on one storage appliance. The networked hard drives are automatically backed up to the SS4200-E, which is built around proven RAID technology, along with alert notifications, to help eliminate catastrophic data losses.

"When you're growing the business, the focus needs to be on sales and service, not worrying about IT. Given what this box does for me, and knowing that EMC and Intel stand for reliability, that worry is gone. Storage is so simple now," Flack says.

And because the Bridge Street Toys storage network has been centralized through the Intel Entry Storage System SS4200-E, files can be instantly accessed from any of the workstations or laptops. "I have visibility into backup just by clicking on the icon on my desktop to see what files were saved to the storage system and when. Unlike the previous setup where I'd have to go from computer to computer to see what files were backed up, with the Intel box, it literally takes only a few minutes to see that I have current backup of all my files," she adds.

Adding flexibility means more benefits to the bottom line

As the Bridge Street Toys company continues to add innovative learning toys to the marketplace, the Intel Entry Storage System SS4200-E provides the assurance of easy expansion and flexibility. With room for four SATA 3Gb/s drives, and the ability to expand outside of the box using the included external SATA port or any of the four USB 2.0 ports—the SS4200-E enables seamless connectivity and sharing of peripheral devices for centralized data access. The system software immediately recognizes and supports standards-based hardware added to the network for advanced file sharing, data management and protection capabilities.

With standard-issue 1 TB drives configured at RAID 5, the Intel system can effectively manage up to three terabytes of data storage without diminishing performance. EMC software also includes a disk drive spin-down function to shut down drives after a period of inactivity, helping to conserve power consumption. To add more storage to the existing network, higher capacity drives or another SS4200-E can be connected using the same wizard-based interface and standards-based protocols.

"As business grows, the Intel system will grow with us. Because our storage network is based on open technology, we have the flexibility to upgrade as we need. Bridge Street Toys data assets are now well protected with a storage system that is very fast, very reliable, and simple to manage. How great is that?" says Flack.

"As business grows, the Intel system will grow with us. Because our storage network is based on open technology, we have the flexibility to upgrade as we need. Bridge Street Toys data assets are now well protected with a storage system that is very fast, very reliable, and simple to manage. How great is that?"

Carol Flack
Founder
Bridge Street Toys

For more information visit: intel.com/go/storagesystems and bridgestreettoys.com

Visit the Intel case study library to read about other developers that have successfully used Intel technologies and building blocks to deliver leading edge solutions: developer.intel.com/design/network/solutions/search.htm

Information in this document is provided in connection with Intel products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel® products are not intended for use in medical, life saving, life sustaining, critical control or safety systems, or in nuclear facility applications. Intel may make changes to specifications and product descriptions at any time, without notice.

Information regarding third party products is provided solely for educational purposes. Intel is not responsible for the performance or support of third party products and does not make any representations or warranties whatsoever regarding quality, reliability, functionality, or compatibility of these devices or products.

Copyright © 2008 Intel Corporation. All rights reserved.

Intel, Intel. Leap Ahead., the Intel. Leap Ahead. logo, Intel Xeon, and VTune are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

*Other names and brands may be claimed as the property of others.

XXXXXX-001US

0608/YMB/TDA/XX/PDF

