Marketing firm switches from DVDs to Thecus network-attached storage device for backup; slashes archival work time by 85 percent, improves reliability, gains terabytes of growing room.

The staff at HB Design hated being pulled away from creative work to perform the tedious and time-consuming job of archiving. They spent hours each week manually copying project files to DVDs when they would rather have been coming up with the next big idea for clients.

Files Keep Getting Bigger

HB Design is a marketing communications firm in Portland, Oregon, that helps Fortune 500 and small businesses alike define and develop visual and messaging brand strategies. The firm has 19 employees and a project office in Chandler, Arizona.

About half of the firm's computers are Windows* operating system-based PCs, used by web developers, account managers, and project managers, and half are Apple* computers used by designers. Most of the company's files are enormous media files—some up to a half gigabyte—that just keep getting bigger. "Every year, the files get larger as images become higher resolution and animations become more complex," says Chris Barry, Network Administrator and Web Developer at HB Design. "We have a whole room full of production servers that store jobs we're working on day to day, and we need to keep those servers at peak performance for everyday use."

Eating Up Creative Time

HB Design preserved its production servers by copying finished jobs onto DVDs for archival storage. However, moving files on and off DVDs consumed a lot of time—more than two hours per DVD. Some animations consumed 10 or more DVDs, which meant that the archival staff spent hours and hours copying files, duplicating the disc, and verifying data integrity. When employees needed to pull an old job, more time was needed to check out the needed DVDs and reload the job onto the production server and their own computer.

"Chris and other staff members were spending about 10 hours a month burning DVDs, which was time not spent on client projects," says Noma Hanlon, President of HB Design. "We wanted to minimize the time spent on backup and maximize staff time doing web development and project management."

Sometimes, a DVD would be misplaced, not burn properly, or fail. One time, the DVD manufacturer notified the firm that "DVD rot" had affected its product, and the agency had to reburn all its archival DVDs—which took the better part of a weekend.

High-Capacity Plug-In Solution

In early 2011, HB Design began looking for a better archival solution. "The next logical step was to go to Blu-Ray,* which would give us more capacity per disk but still saddle us with all the copying time and the reliability pitfalls of optical disks," Barry says. Moving to an archival server with hard drives was another alternative, but servers are expensive, take time to set up, and require operating system licenses.

HB Design needed a storage solution that would work with its Windows-based network, provide enough bandwidth to transfer files quickly, and offer enough storage space (at least 10 terabytes) to meet the agency's future needs.

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>
> – Noma Hanlon, President, HB Design

HB Design ultimately settled on the Thecus® N4200PRO network-attached storage (NAS) device. The Thecus N4200PRO is based on the Intel® Atom™ processor, with 1 gigabyte of DDR3 RAM. "With an Intel processor inside, file transfers are blazingly fast," Barry says. "The system doesn't break a sweat when you're transferring files to it."

Thecus gave HB Design an inexpensive way to get terabytes of storage, quickly. "The NAS unit is ready to go, out of the box," says Robert Wallace, Technical Director at HB Design. "The operating system is pre-installed, and all the services are ready to go. You load the hard drives [purchased separately], plug it in, log into the web-based management console, and configure the storage you need. It took Chris 20 minutes to set it up."

Robert Wallace and Chris Barry of HB Design populate the firms's new Thecus NAS with hard drives.

Also, the Thecus NAS has RAID technology and hot-swappable drives to provide high levels of data protection, and a battery backup to protect the drives in case of power failure. HB Design obtained two Thecus NAS devices and mirrors all files to the second unit on a nightly basis. This gives the company protection in case anything happens to one of the devices.

Backup Time Reduced 85 Percent, Productivity Boosted

Today, archival work takes about 10 minutes per job, versus the dozens of hours required before. When a job is finished, the designer cleans up the job files and lets Barry know that the job is ready for archiving. Barry and his team simply transfer the files to the NAS. When a designer needs to resurrect an old job, he or she connects to the NAS on the network and copies the needed files—with the Intel Atom processor making the transfer nearly instantaneous.

"We've reduced the time spent on backup by 85 percent," Hanlon says. "This gives my staff more time for creative work. The Thecus NAS has freed up an entire staff member from archiving duties. With these productivity gains, the Thecus systems paid for themselves in three months."

More Mileage Out of Production Servers, Higher Reliability

Having a NAS helps HB Design preserve its expensive production servers by providing an easy way to quickly whisk finished jobs to archival storage. Because of the work involved in copying DVDs, staff members sometimes let jobs linger on those servers.

The firm also has a far more reliable archival system. "There's so much that can go wrong with DVDs: the burning process can fail, the media can degrade, even pulling DVDs in and out of the paper sleeves can damage data," Barry says. "We don't have to worry about any of that with hard drives. We have deep faith in the reliability of the Thecus NAS devices and the Intel processors inside."

Room to Grow

Last but not least, HB Design no longer needs to stock up on and store stacks and stacks of DVDs. "At our current rate of consumption, the Thecus NAS gives us years of growing room," Hanlon says. "That contributes to a great ROI on a great product."

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