Improving Collaboration and Protection Through Cloud-based Centralized File Storage

Manhard Consulting is a full-service civil engineering and surveying firm specializing in government, municipal, residential and commercial projects. With 225 employees distributed across 8 national offices, Manhard relies heavily on collaboration between end users in different locations. Three years ago, the IT group was stuck with an inefficient storage system, rising backup costs and no clear Disaster Recovery policy in place. Nasuni offered a centralized file storage solution that delivers enhanced collaboration, built-in protection and significant cost savings.

Drivers

- Inefficient file sharing and collaboration between offices
- Capacity challenges due to unstructured data growth
- Inadequate data protection and DR
- Excessive backup costs

Requirements

- Improve collaboration through centralized file storage
- Enhanced data protection including DR
- Control costs associated with unstructured data growth

Nasuni Solution

- A unified, infinitely scalable global file system that extends secure, fast access to all devices and offices
- Built-in data protection and 15-min DR
- Significant cost savings; eliminated \$10K/yr in backup



Manhard Consulting consists of veteran engineers, surveyors and planners who serve both public and private clients nationwide. Although the company has 8 offices across the country, Manhard is a unified firm, offering the services of its nationwide network of experts on each project. An engineer in the Chicago office may contribute to a job in Colorado and vice versa. Until recently, though, this unified approach to its business was not reflected in the company's treatment of the large and often complex files critical to the engineering business. Manhard relied on separate file servers in each location, so when engineers in different locations wanted to collaborate, IT had to carry out block-level replication from office to office. This was inefficient, bandwidth-intensive and expensive. "We realized there had to be a better way to communicate and share data between teams of engineers wanting to collaborate," says Don Willemarck, Director of Information Technology, Manhard Consulting.

Trading Backup for Built-in Protection

Improving collaboration was only one of IT's goals. As unstructured data grew, Manhard was running out of space in several of its offices and struggling to protect data in a cost-effective way. "We were spending upwards of

\$10,000 per year in backups," says Willemarck. "It was very inefficient, and we really didn't have a disaster recovery policy, either." If an office were to go offline, IT would have had to spend days recovering data from tapes.

The company began an exhaustive search for an alternative solution – one that would deliver centralized storage, cost-effective data protection and more. After evaluating numerous other options, Manhard pilot-tested Nasuni. The company began by installing a Nasuni Filer at its main office, in Vernon Hills, Illinois. IT copied a single TB of data to the Filer overnight, then waited to gauge the response from end users. "Our employees didn't even realize we switched over to the Nasuni Filer," says Willemarck. "One day they were using a file server. The next day they were using Nasuni, and they really didn't know the difference." After that proof-of-concept, Manhard rolled out Nasuni nationwide, and the cutover was equally painless.

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The Nasuni Solution

By switching to Nasuni, Manhard moved from a disconnected model to a single, unified system. Nasuni gives the company one infinitely scalable solution for storing, protecting and accessing all of its unstructured data. At each of the company's 10 offices, on-site appliances cache active data locally, providing fast access to files for end users. Since the master copy of all data is securely maintained in the cloud, employees in different locations can have fast, secure access to the same volumes. An engineer in Nevada can easily work with his or her colleague in California on the same project files, and Nasuni's global file locking technology eliminates the editing conflicts common to replication.

"One of the primary reasons we chose Nasuni is because it is truly storage infrastructure as a service."

—Don Willemarck, Director of Information Technology.

Files are a critical piece of an engineering and surveying firm's business, and protecting this unstructured data is paramount. Previously, Manhard relied on tapes and backups to hard drives. The company was spending \$10,000 on backups and still did not have a viable Disaster Recovery policy in place. Nasuni eliminated the backup costs and replaced Manhard's time-consuming, hardware-dependent system with georedundant, built-in protection to the cloud. Before moving to the cloud, all data is chunked, deduped and compressed to limit bandwidth consumption. To maintain strong security, files are encrypted using customer-controlled keys before they leave Manhard's offices. This way, neither Nasuni nor the cloud provider can access that data.

Nasuni's data protection model is based on frequent, unlimited snapshots to the cloud, which eliminates the need for separate backup systems and enables fast DR. In the event of an outage at one of its offices, IT will be

able to restore access to files within 15 minutes. As an extra measure of protection, Manhard also added a Nasuni virtual machine to each location at no added cost. This way, if anything should go wrong with the hardware version of the Nasuni appliance at that location, IT can switch over to the virtual machine.

Responsive Management, Reduced Hardware Dependence

The transition to Nasuni dovetailed with several larger changes in Manhard's approach to IT. After the 2008 downturn, the IT staff was reduced, especially in network engineering, so a block-level approach to storage would have required hiring someone specifically dedicated to storage, which was not in the budget. The Nasuni Management Console allows Willemarck to oversee file storage and access at all 10 offices through a single pane of glass. He can also roll out new offices or provision added capacity with ease.

Nasuni complements the group's larger initiative to shift away from expensive hardware. "We chose Nasuni because it was a one-stop solution, and it was a way for us to move more IT functions out of our data center and put them in the cloud," says Willemarck. "We can move to more of an operational IT model from a capital IT model."

Secure Mobile Access & Seamless Transitions

By creating a unified file share in the cloud, Nasuni also simplifies secure mobile file access. While this was not the main driver behind Manhard's search for a new solution, the feature has been a welcome addition. "Our users need to access their data from anywhere, whether it's a mobile app or a web client," says Willemarck. "They just want to get to their data." With Nasuni, they now enjoy secure file access on the road and at job sites.

Now that Manhard has switched all of its offices over to Nasuni, capacity is no longer a concern. Protection is automatic, and employees in different parts of the country can easily access the same project files without risk of replication conflicts. All of Manhard's storage-related concerns have been addressed with a single, costeffective system.