Automated Protection and Enhanced Productivity

The global architecture and engineering firm Environmental Systems Design, Inc., had enough capacity to handle its data. The challenge was protecting that data. The firm would often have 15TB of data in production at a given time and its existing backup solutions simply could not keep pace. After quickly outgrowing several other systems, ESD turned to Nasuni's enterprise storage as a service. Now, thanks to Nasuni's automated backup, which delivers unlimited versioning, fast disaster recovery and an unmatched RPO, IT can stop worrying about backup and focus on its core mission of enhancing business productivity.

Drivers

- Outgrowing existing protection solutions every few years
- Network performance demands often postponed backup
- Storage growth led to repeated, expensive backup investments

Requirements

- A cost-effective, scalable solution that grows with the business
- Automatic backup and DR with no limitations on history
- Enterprise-grade performance

Nasuni Solution

- Unlimited scalability with a capacity-based cost model
- Enterprise-grade data protection
- Central management
- Local performance for end users and applications



Since its 1967 founding, Environmental Systems Designs (ESD) has been involved in a wide range of projects, from modern data centers and office buildings to skyscrapers like the Kingdom's Tower in Saudi Arabia. The company, headquartered in Chicago, has more than 280 employees—including 140 engineers—and offices across the globe.



The Challenge of Maintaining Backups

The designers and engineers at ESD rely on workload intensive programs such as AutoCAD and Revit. At any given time, there might be as many as 250 projects in the works, with 15TB of data in production. The IT team at ESD was not concerned with capacity so much as protecting all that business-critical data. "Our data growth was affecting our ability to protect the data," says Mark Andersen, VP of Information Technology. IT needed to make sure that this data would be readily available in the event of a local disaster or outage, and since ESD's clients often ask the firm to revisit old projects, files also had to be stored indefinitely and recoverable on demand.

"Our main concerns were backup and restore and disaster recovery. We wanted to make sure that in the event our office was not available, we would still be able to access our data from another place."

- Mark Andersen, VP of Information Technology

The firm's previous backup solutions taxed the network, so IT was forced to limit backups to nights and weekends. In some cases, though, the engineers would be working overtime to finish an important project.

In these cases they'd ask IT not to run backups at all due to the network overhead. When his team suggested bulking up its existing disk-to-disk solution, Andersen balked at the price tag. "I don't want to spend \$100,000 a year on this. That's a big budget item."

Andersen asked his team to consider cloud, but the first cloud storage technology the company tested did not perform. After six months, it still wasn't working. While the waiting period was frustrating, it allowed the team to crystallize their thinking and determine exactly what they needed in a storage solution.

IT wanted a solution that was easy and cost effective to scale as storage expanded. Company data needed to be protected in such a way that it would be accessible from anywhere in the event of a local disaster. Ideally, the protection system would be scalable as well: IT didn't want to continue outgrowing its backup solution every few years. Productivity was another paramount concern. IT needed backup to run smoothly in the background without impacting the productivity of ESD's designers and engineers. The firm's professionals demand enterprise performance at all hours, from any location, to work effectively, and IT wanted to be able to give end users both the protection and performance they deserved. Once Andersen and his team solidified their wish list, they determined that the Nasuni Service met every requirement.

A Painless Transition

After a proof-of-concept period, ESD took advantage of Nasuni's migration tool to test some of its less important data first. Once that was successful, the IT team began migrating 7TB worth of critical production data from its storage arrays onto the Nasuni Service. ESD uses relative pathing in its newer Autocad files and direct pathing in some of the firm's older data, and all the pathings and links continued to work without a hitch. Once that data was migrated, IT re-mapped the system one night and instructed everyone to reboot in the morning. Users did not notice any performance difference and all the connections and links in the complex program files worked properly.

"We're running AutoCAD and Revit and all the applications that architects typically use. The goal was to make sure nothing out of the ordinary happened and it didn't. There were no problems at all. It just worked like magic."

— Mark Andersen, VP of Information Technology



The Nasuni Solution

With Nasuni's enterprise storage as a service and Filers deployed across numerous offices, ESD is enjoying a number of benefits, including:

- Automatic Protection: The Filer's frequent snapshots enable fast restores, DR and unmatched RPO
- Reduced WAN Traffic: Nasuni's technology includes deduplication and sends only changes to the cloud
- Automatic Archiving: Once data is migrated to The Nasuni Service, it never expires; ESD will be able to restore current files forever
- Capacity-based Cost Model: ESD can forgo big budget line items in favor of predictable, reasonable pricing with storage, protection and more
- Unlimited Scalability: The Nasuni service's use of cloud storage means that capacity can grow on demand
- Enterprise-grade Performance: The Filer's unique design caches data locally and delivers the speed of local hardware
- Enhanced Collaboration: Designers in different offices can easily access the same files, improving the productivity of globally distributed teams

Automated Protection and Enhanced Productivity

ESD needed to implement a solution that delivered protection without impacting network performance. Traditional backup had proven too expensive and standard cloud backup schemes ran the risk of negatively impacting network bandwidth. The Nasuni service includes a local appliance that maintains enterprise-grade performance while pushing snapshots to the cloud. It does this while delivering the protection and archiving ESD needs at a fraction of the cost of traditional backup solutions.

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