

Solution Brief

Nasuni for Architecture, Engineering & Construction

The Challenge: Enhancing Cross-Site Collaboration and Project Management as Data Growth Explodes

Highlights

Optimize collaboration and design processes with global file sharing

Align with a dynamic business environment with easy integration of new acquisitions

Enhance business continuity with access to all files even if remote sites go offline

Modernize your NAS infrastructure with a single solution for back up, DR, storage, and file sharing

Leverage a cloud first architecture to reduce CAPEX and operate with more predictable costs

Archive design and as-built files at low-cost but have them quickly accessible if needed

Today's AEC projects are larger and more complex than ever before. AEC firms are looking to technology to increase efficiency and remain competitive. However, new design and construction management technologies are driving massive increases in data. Building information management (BIM) and 3D modeling files can run into hundreds of megabytes. Project folders can exceed hundreds of gigabytes. A single Lidar image can be a TB or more. This data explosion impacts projects "at the edge" and back at headquarters as traditional NAS, replication, and remote access solutions fail to keep pace.

Unchecked file growth also strains backup and disaster recovery solutions. One site down can take days to restore using traditional solutions, which can impact an entire project's schedule and cost.

These daily challenges strain traditional file storage infrastructure. They also prevent AEC firms from fulfilling strategic objectives such as global growth and mergers and acquisitions, since it is too difficult to efficiently absorb newly acquired companies and their own storage assets. Furthermore, IT staff are drawn away from implementing important collaboration and client service initiatives to manage storage and file problems.

Nasuni: The Cloud-Scale Solution

Nasuni® is the new strategic platform for Architecture, Engineering & Construction (AEC) firms in need of scalable file storage to improve collaboration and project management. Nasuni consolidates Network Attached Storage (NAS), file archiving, data protection, global file access, and disaster recovery (DR) in a single, infinitely scalable cloud-based solution. Users in every location, from headquarters to temporary job sites, gain fast, secure access to files, making distributed teams more productive. Powered by the first global file system designed to live in Azure, AWS, IBM Cloud and other public and private cloud object stores, Nasuni (“NAS Unified”) is the modern, pay-as-you-grow file services solution for today’s AEC companies.

"Nasuni is highly scalable, with all edge appliances centrally managed. Even if something happens with one, each site remains independent. One site going down doesn't affect any other site's ability to access files. It has been a game-changer."

Brian Erickson
IT Implementation and
Acquisitions Manager, APi
Group

[APi Group webinar on-demand](#)

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"In addition to meeting all our technical requirements, the cost effectiveness and the ease of expansion made Nasuni the right solution for us."

Gregory Fait
Director of IT, Perkins + Will

[Perkins + Will case study >>](#)

Enhancing Project Delivery Capabilities

With Nasuni, AEC firms benefit from:

- A cloud-scale global file system that unifies file storage, data protection, and management across all design and remote sites.
- Unlimited capacity, secure file storage for unstructured data of all types and file sizes.
- Powerful file infrastructure for your building information management process (BIM), 3D modelling and CAD applications, that enhances collaboration and improves time-to-build
- A simple, single file storage solution that easily integrates new users, offices, and acquisitions.
- Reduced storage, backup, and DR footprint generating up to 60% cost savings while also reducing reliance on replication and WAN optimization.

Capabilities Suited for AEC Firms

The Nasuni enterprise file services platform is tailor-made for modern, collaborative AEC firms that operate in many locations.

Delivered as a subscription service, Nasuni presents local volumes like a standard NAS device, giving existing AEC applications access to unlimited file storage without changing the user experience. Capabilities include:

Unlimited primary storage – Physical or virtual Nasuni Edge Appliances are deployed on-premises to provide fast, secure access to files. These appliances send all files immediately to the cloud (no tiering), where the authoritative copies are stored by the Nasuni UniFS[®] file system in your preferred object store. Since the gold master copies of all files live on inexpensive, virtually unlimited cloud storage, the Edge Appliances only need enough local storage to cache the active data.

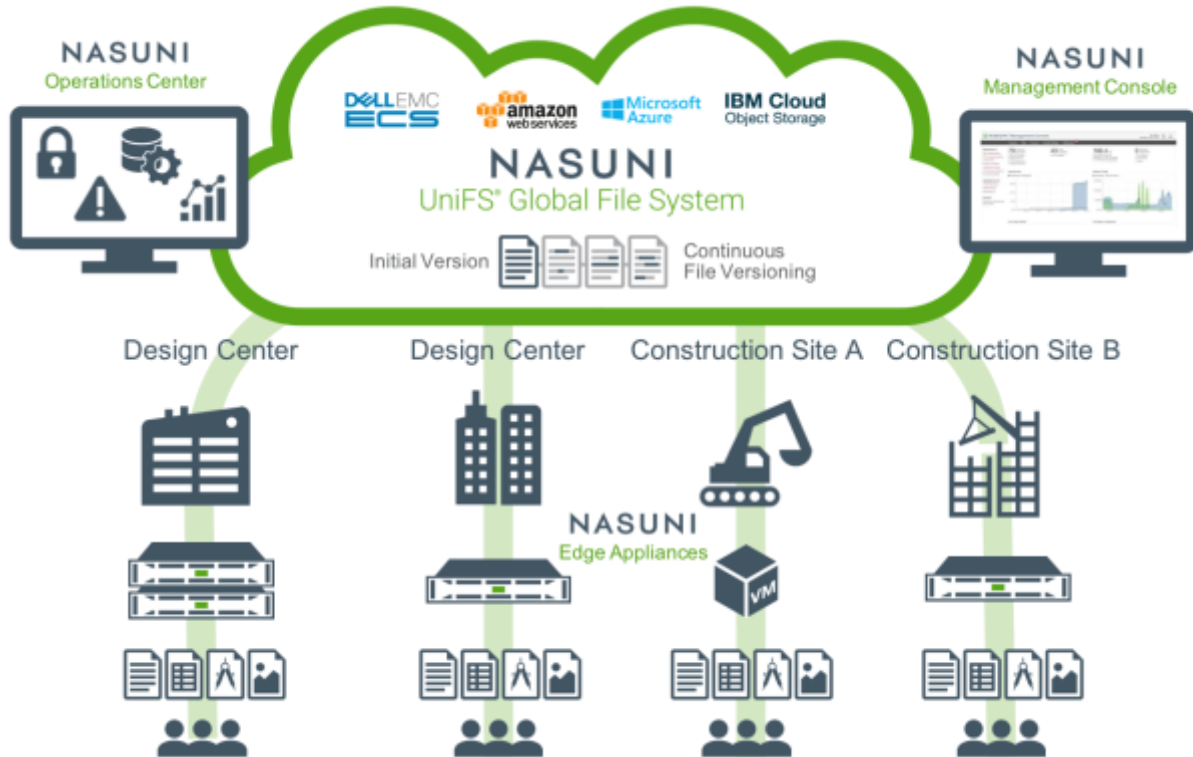
Unlimited archive storage – By leveraging cooler tiers of cloud storage and the same edge caching architecture, Nasuni offers a secure, long-term, and cost-effective means of storing AEC project files, without the lengthy retrieval times of traditional archive solutions.

Global file access – Files are cached locally in each on-site Edge Appliance, giving users in all locations, from design centers to temporary job sites, fast access to all files. Since all changes and updates are constantly sent to the single master copy in the cloud, users in all locations are always working with the most current files.

Global file locking – Scalable cloud-based global file locking enhances collaboration and protects project files from loss or corruption by preventing data from being simultaneously written in multiple locations. File locks are extended across the global enterprise and function as if users were accessing files from the same file server.

Advanced data protection – Nasuni Continuous Versioning[™] eliminates the need for traditional file backup, while providing superior recovery points and recovery times. Every change to every file is continuously sent to cloud object storage, where it is versioned and stored by UniFS. This enables any version of any file to be recovered in minutes, minimizing the impact of data loss or accidental deletions. In the event of a disaster, equipment failure, or local office outage, files can still be accessed by all users in the cloud. Even restoring local file access by repopulating Edge Appliances takes only minutes, enabling any location to be a DR site.

Strong Security – Nasuni Edge Appliances join the organization's Active Directory or LDAP directory for full integration with existing user authentication and access control policies. Data is encrypted with strong AES-256 encryption before being sent to the cloud using a key generated and controlled by the customer. Data is never visible to the cloud provider or Nasuni.



Nasuni stores files immediately in the cloud while caching frequently accessed files in on-premises Edge Appliances for fast, secure local access. The Nasuni UniFS file system leverages public and private cloud object stores to provide virtually unlimited file storage and global file sharing across the distributed enterprise.

About Nasuni

Nasuni (“NAS Unified”) is the leading provider of cloud-scale enterprise file services. Powered by UniFS®, the first cloud-native file system, Nasuni leverages private and public cloud object storage to integrate and surpass the “silo” capabilities of traditional Network Attached Storage (NAS), distributed file systems, data protection software, file synchronization solutions, and disaster recovery infrastructure. With Nasuni’s unlimited primary and archive storage capacity, industry-leading recovery points and recovery times, global file access, and unmatched scalability, enterprises can meet “cloud-first” and business growth objectives, extract more value from their file data, and transform expensive storage infrastructure into an affordable, as-a-service asset. For more information, visit www.nasuni.com.