

# DCIG Solution Profile

## Enterprise Multi-site File Collaboration Solutions

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### SOLUTION

#### Nasuni

### COMPANY

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### DISTINGUISHING FEATURES OF NASUNI

- Nasuni Global File Lock
- Data encryption and protection
- Nasuni Continuous File Versioning

### DISTINGUISHING FEATURES OF TOP 5 SOLUTIONS

- Robust support
- Virtually unlimited capacity
- Public cloud support
- Global namespace
- File locking capabilities

### SOLUTION FEATURES EVALUATED

- Deployment capabilities
- Data protection
- Product and performance management
- Documentation
- Technical support
- Licensing and pricing

### File Collaboration Challenges in the Multi-site Enterprise

In many organizations, core business processes rely on effective file-based collaboration. This was fine when most employees worked at a headquarters facility with fast network links to the enterprise data center and its filers. However, with an organization's users now spanning the globe, legacy systems fail to meet the collaboration needs of this distributed workforce. This frustrates end users, wastes time and money, and increases multiple risks to the organization.

The challenges around effective file collaboration include:

#### Version Control

When a distributed organization lacks an effective file collaboration solution, troubles occur. An employee discovers they are working on the wrong version of a file. Or worse, they discover this after they have sent an incorrect version to a client. Team members lose time when they compare versions to understand differences between two possible documents. Then users must spend cycles to merge and resolve different versions into a correct one.

#### Unmanageable File Data Growth

IT experiences an unending growth of unstructured data. End-users and IT are reluctant to remove files for concern of deleting something necessary. Employees copy files temporarily with the intention of reviewing later, only to never do so. Organizations watch their backup and archive storage grow along with their active file storage. These dynamics contribute to file clutter and increase storage volumes dramatically.

#### Sharing Files and Folders

Sharing files and folders for collaborative work brings its own concerns. Sending files through email presents security risks, delivery failures, and out-of-date files floating around. If a team uses email to send documents, they must spend time with messaging, making changes, then emailing files back. Enterprises can create VPN's or other shares for outside partners; however, this is frequently with manual activity and possible mistakes.

#### Data Security and Control

Traditional file sharing approaches often lack security and compliance features. Employee negligence, poor security, or compromised storage media can result in data breaches. A notable reason is the lack of visibility and management over the file data by the IT department. A single breach or attack can devastate a business and its reputation.

#### Handling Large Files

Whereas a traditional local NAS infrastructure handles large file sets with ease, this becomes problematic

when sharing large files across the wide area network (WAN). File-sharing can become slow or even impossible when distributed teams are involved. And end-users must completely rule out emailing large files for collaborative work.

#### Latency

Cloud file storage opens possibilities for multi-site file collaboration but also obstacles. WAN transfer speeds, mobile access, and competition with other applications over the WAN link can result in latency problems that make collaborative work tedious. Cloud storage by itself does not resolve other issues noted above. For files hosted on-premises, a slow user experience is still typical for anyone except for those local to the hosted files.

#### Frustrations, Costs, and Risks

Teams lose time and money because of these problems. Additionally, legacy approaches do not provide opportunities for enterprise-wide automation for efficiency benefits. These issues create frustration, lower productivity, increase costs, elevate risks to data security, revenue, and brand reputation.

### SDS-based File Collaboration Benefits

Along with the change to a distributed workforce, enterprises are adopting Software-defined Storage (SDS) for its flexibility, agility, and increasing capabilities. Many SDS-based file-storage solutions offer features that enhance multi-site file collaboration and bring a number of benefits.

#### Effective Version Control

As a primary feature, these solutions provide global file locking. Global file locking ensures only one person can access and edit a file. Others who try are notified the file is locked. This feature prevents file collisions and unintended overwrites. These solutions track and retain previous versions for restoral when there is a need.

#### Modern File Collaboration

These solutions enable file and folder sharing with internal and external stakeholders outside the department. The degree of access can be customized based on need. Changes to files by collaborators are updated automatically with private or public cloud storage used as the authoritative source. To speed synchronization, only the portions of a file that have changed are transmitted across the network.

#### Reduced Storage Capacity

By centralizing file storage and managing effective version control, companies realize savings on file storage. Many offerings utilize deduplication and compression for

efficient storage and reduced data transmission. Thus organizations save file storage costs and reduce WAN bandwidth needs.

### Data Protection, Security and Control

Cloud storage and a global file system can consolidate islands of file data into a unified platform that is easier and less expensive to deploy, operate, and scale. For many organizations, cloud storage architecture offers more than sufficient data protection and additional back up can be added. With these solutions, IT administrators have access to tools to monitor their entire file data landscape. IT departments experience control through their abilities to assign file permission attributes at a granular level. API features enable integration with the customer's IT infrastructure.

### Fast File Access

Many of these SDS solutions use edge appliances or solutions to provide fast access to end-users for active data files. While the authoritative file is stored in the private or public cloud, active data is cached locally to speed up performance when users or applications access data. Changes to files are updated on the back end and invisible to the end-user. Stakeholders have a near-immediate view into the file updates.

In summary, SDS-based file storage solutions enable fast file collaboration, improved end-user experiences, new file management capabilities, improved security, and reduced storage needs for enterprise organizations.

## Distinguishing Features of TOP 5 Enterprise Multi-site File Collaboration Solution Providers

DCIG evaluated sixteen SDS-based solutions for a multi-site file collaboration use-case. Using feature-based analysis and comparisons of defensible data derived from publicly available sources, vendors, and DCIG's own experience, the TOP 5 solution evidence these characteristics in contrast with the other evaluated solutions.

- **Robust support.** DCIG TOP 5 providers display robust support capabilities. All TOP 5 vendors provide 24x7x365 technical support and one-hour support response times compared to 75% of the other evaluated providers. All of these vendors offer community support forums and knowledgebases for self-service support. In short, they evidence a greater breadth of technical support options in comparison with the other solutions.
- **Virtually unlimited capacity.** Another characteristic of TOP 5 solutions is virtually unlimited capacity. While there are a few exceptions, these solutions provide near unlimited capacity for the maximum number or size of files, directories, and volumes. Unlimited capacity means organizations can dynamically adjust to changing business requirements.
- **Public cloud support.** Cloud-based file storage provides the opportunity of centrally storing an organization's file data in the cloud for the benefits this architecture brings. DCIG TOP 5 solutions support multiple public cloud providers. Such broad support offers flexibility in matching a cloud provider's capabilities with the needs of the business.

- **Global namespace.** A key feature of a global namespace is a single presentation of an organization's file system data. All DCIG TOP 5 solutions provide this feature. The resulting global visibility greatly simplifies the management of unstructured data.
- **File locking capabilities.** Distributed workforces value file locking for avoiding editing conflicts while working with centrally stored files. Robust file locking capabilities prevent more than one person from modifying and updating a file, or a specific portion of a file, at the same time or provide mechanisms for reconciling such changes. Each of the DCIG TOP 5 solutions support file locking capabilities.

## Nasuni

Upon DCIG's completion of reviewing multiple, available SDS-based file storage solutions, DCIG ranked Nasuni as a TOP 5 solution for multi-site file collaboration. Nasuni stores and synchronizes files across any number of locations at any scale. The heart of the Nasuni file services platform is its patented cloud-native global file system, UniFS®. It unifies enterprise NAS, backup, and disaster recovery infrastructure while consolidating all of an organization's files in cloud object storage. The Nasuni solution deploys at the edge as a physical or virtual appliance on-premises or in the cloud. The Nasuni edge appliance caches frequently used files, giving office users a local file-sharing experience. Nasuni works with all major object store vendors, so organizations can choose which cloud backend to overlay with the Nasuni platform.

Three features that earned Nasuni recognition as a DCIG TOP 5 solution include:

- **Nasuni Global File Lock™.** Nasuni differentiates itself with a patented global lock feature that enables large scale file collaboration without data conflict worries. Capitalizing on its cloud-centric approach, Nasuni's solution offers redundant lock services and enhances availability through intelligent failover across regions. Nasuni's Global File Lock also includes intelligence that determines when a "local lock" at the edge of the network is sufficient or when a full global lock is required. Global locking can be configured at a folder level as needed. Locks can be viewed and, if needed, cleared through the Nasuni management console and filer interfaces.
- **Data encryption and protection.** Nasuni extends protection of cloud-stored data by encrypting data both in-flight and at-rest. The customer controls the encryption keys. Organizations can take advantage of the data protection inherent within cloud architecture for safeguarding data against loss. Data remains secure through AES-256 encryption.
- **Nasuni Continuous File Versioning™.** Nasuni provides continuous file versioning to capture changes on every edge appliance as they occur. UniFS then stores file system deltas as a snapshot in object storage. Recovery points can be up to every few minutes, and recovery times just a few minutes more to restore a single file, a whole directory, or the entire file system. If an enterprise experiences a ransomware attack, it can quickly revert the affected files to a point-in-time just before the attack. ■

### About DCIG

The Data Center Intelligence Group (DCIG) empowers the IT industry with actionable analysis. DCIG analysts provide informed third-party analysis of various cloud, data protection, and data storage technologies. DCIG independently develops licensed content in the form of TOP 5 Reports and Solution Profiles. More information is available at [www.d cig.com](http://www.d cig.com).