

WHITEPAPER

6 Fundamental Functions to Improve Unstructured Data Management



Table of Contents

Introduction	3
Data Management Challenges	3
StorageX Key Functions	3
Migration	3
Replication	3
Tiering	4
Archiving	4
Analytics, Search and Indexing	4
Microsoft DFS	5
Conclusion	5

Introduction

As storage became the central element supporting all digital business, managing this business asset has become a paramount skill. To reach new operations efficiency levels, storage managers require an enterprise class product to cover a wide data landscape spread across all over companies' offices. Adopted by thousands of companies for many years, Data Dynamics StorageX has demonstrated his leadership in unstructured data management.

Data Management Challenges

Day to day storage operations could rapidly become a nightmare with point products or just tools without any integration or just a common console between them. The growing complexity fueled by fast magnification of data volume contributes to the urgent necessity to adopt a comprehensive solution. Every storage manager requires key functions like data migration, replication, tiering, archiving, analytics, search and indexing.

StorageX Key Functions



Migration



Replication



Tiering



Archiving

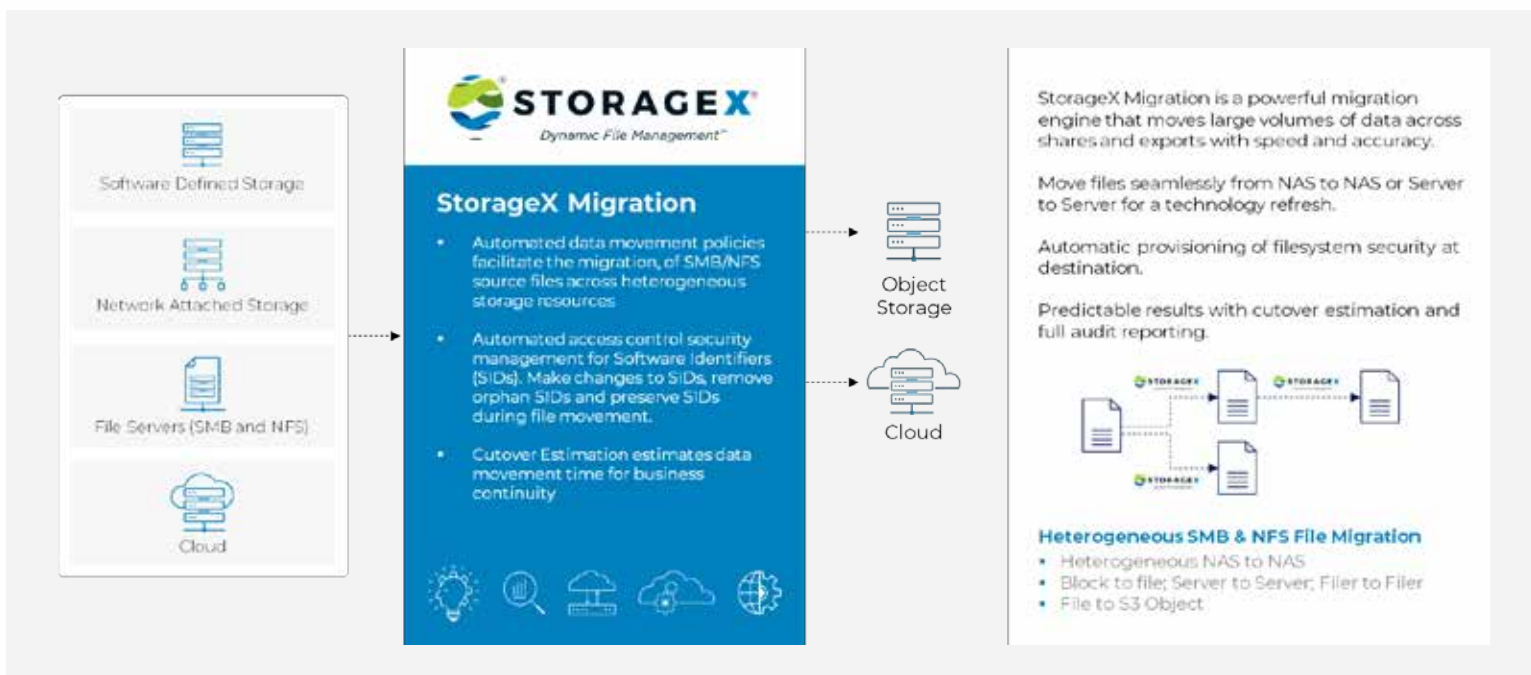


Analytics

DFS Management

Migration

Migration is a buzzword and means multiple things in the industry. Here it stands for refresh and replacement of file servers and NAS by new ones. It could be seen as a 1 for 1 swap but also as a consolidation mechanism from N sources servers replaced by M targets ones while maintaining users access. This migration capability supports any file servers and NAS running Windows, Linux or proprietary operating environment as soon as they expose NFS and SMB protocols.

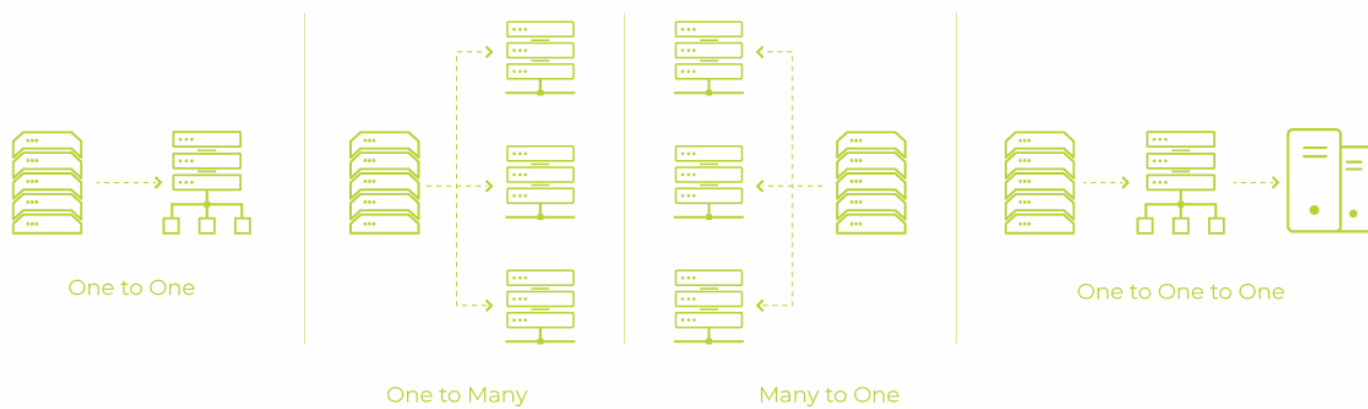


Migrated data from any source file servers to a new “big” all flash NAS is a typical example of such operations. To realize this copy, the function implements a several steps process with initial copy, parallel transfer, final copies and clone user rights and rules to end with a clear cut-over. Users connect and access file data through the new location with all original metadata and access right maintained.

Replication

Beyond migration, replication is the next need as data must be preserved and be redundant in all circumstances. StorageX leverages its strong flexible Universal Data Engine used in various movement requirements. Here, the idea is to initiate a perpetual data asynchronous replication method between various file servers and NAS devices to make data durable. The second effect of this multiple presence of data resides in a new level of availability of data giving storage managers the capability to distribute access to multiple users and finally make file services resilient.

StorageX offers flexible remote copy settings and beyond classic 1:1, 1:N or N:1 modes, it can cascade data using middle systems and thus avoiding to overload source file servers.



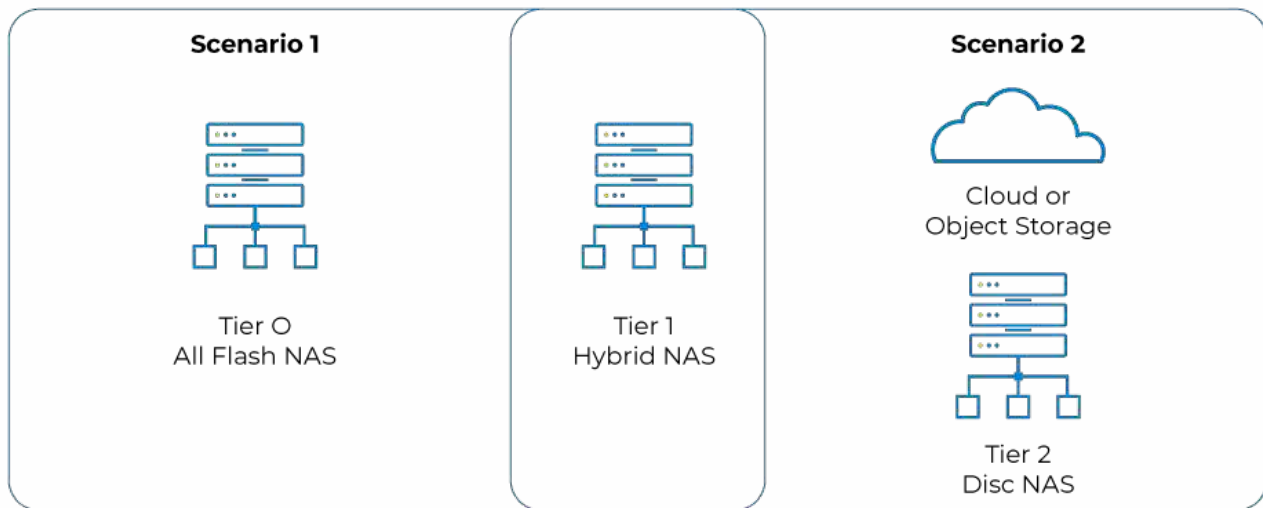
Flexible replication configurations allows you to create policy driven DR strategies, automating the replication of data to meet your specific needs

Tiering

Analyze, classify and manage data to finally store them on the right storage based on their value is an obvious mission for storage managers. In fact, they have to manage their budget and quality of services as users won't accept any penalty whatever happens in the IT department. Therefore doing more with less is a day to day reality.

StorageX evacuates data to secondary storage based on file metadata attributes such as: activity, size or application that can be used in compound queries to create automated policies that manage the movement of the data. These moves free primary storage space and make these systems more responsive with shorter replication and backup sessions due to the limited data set.

Secondary storage entities can receive data from multiple sources, thus building a real file server ecosystem aligned with the value of data and its lifecycle attributes.



Optimized for higher performance environments storing 80% of data stored on Tier 1 hybrid NAS with 20% of data (most active) stored on Tier 0 all flash NAS.

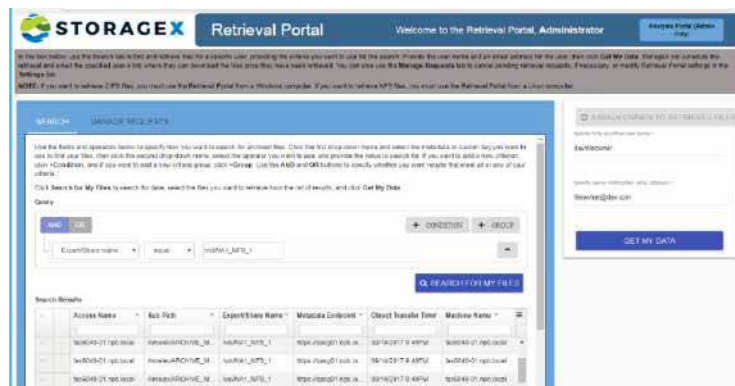
Optimized for storage efficiency storing 20% on Tier 1 hybrid NAS, 40% on Tier 2 Disc NAS and 40% in Cloud Object Storage for archive data

Archiving

This feature extends the data management capability by moving data to the right location based on file attributes and specific archive policies activated by filtering on file metadata tags.

File candidates can be elected on secondary storage such capacity file servers, archiving NAS or cloud storage with 2 special copy techniques File to File and File to Object.

As other StorageX functions, any NFS, SMB and S3 storage are supported as targets wherever they're deployed on-premise or in the cloud. This intelligent archiving feature can reduce risk by identifying things such as open file shares and orphaned files that can be moved off the the active file share and placed in a secure bucket within the archive. StorageX Users can easily access data via the StorageX File Retrieval Portal allows users to search and find their data based upon any metadata, through standard S3 browser or through a RESTful API integration.



Analytics, Search and Indexing

StorageX supports heterogeneous storage environments (NFS, SMB/CIFS) and discovers all file metadata to build a large scalable index via scanning the shares and exports. This index is then easy to query using compound queries via the management console to identify very targeted data sets.

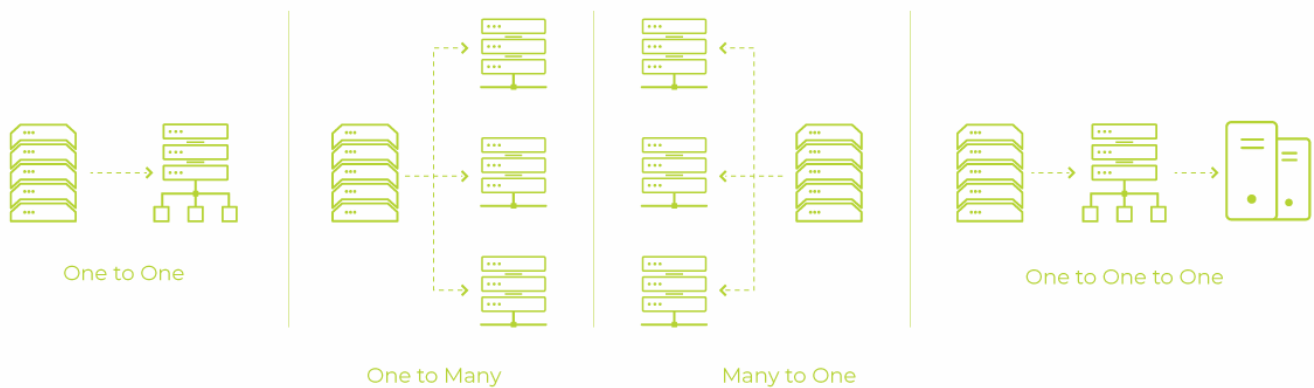
During this discovery phase, duplicate files can be identified helping storage administrators to reduce storage consumption.

This analytics aspect serves as a feed service to make decisions about file data organization, load balancing, copy between servers and sites and evacuate data via archiving or tiering. Analytics granularity contributes to the knowledge of what is going on in the file storage environment, who accesses what, what files are the most accessed, statistical numbers... that can potentially invite the storage administrator to create new data management policies.



Microsoft DFS

The last interesting feature is covered by the complete support of Microsoft DFS. StorageX natively understands DFS domain-based and standalone namespaces contributing to the easy management of large Microsoft file services deployments.



Flexible replication configurations allows you to create policy driven DR strategies, automating the replication of data to meet your specific needs



StorageX has demonstrated real operations gain and quality of service outcome at a number of sites. It represents a very mature and comprehensive data management platform that scales with the environments and needs.



Conclusion

Choosing the right data management solution is not easy but this selection process is highly facilitated by challenges storage managers face everyday. With the goal to maintain up and running file services with data volume exploding while the IT budget remains flat, the mission is tough and delicate.

StorageX brings together several core functions from the same enterprise data management platform supporting any file servers, NAS and object storage as soon as NFS, SMB and S3 are exposed.

For Migration, Replication, Tiering, Archiving, Analytics, Search and Indexing, StorageX is the perfect storage manager companion and confirms its unique market positioning as a leader in that category. Try it now, you will adopt it right away.

Data Dynamics, a global leader in enterprise data management, stands at the forefront of the industry-wide shift towards Digital Trust & Data Democracy. Trusted by 300+ organizations, including 25% of the Fortune 20, the company is recognized for its commitment to creating a transparent, unified, and empowered data ecosystem. Whether addressing data risk, privacy, sovereignty, optimization, sustainability, or facilitating seamless, policy-driven data migration across hybrid and multi-cloud environments, the company is ushering in a new era where data ownership, control, & actionability reside with the data owners.



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