StorageX

Essentials

- Intuitive graphical user interface; same interface supports both CIFS and NFS migrations and many different types of heterogeneous storage platforms (EMC, NetApp, Windows, Unix)
- Fully automated, policy-driven file data migration and management engine
- Flexible, highly scalable solution that can scale to the hardware; also provides throttling settings for specifying data transfer rate limits
- Supports file data migrations from any source to any destination using standard CIFS and NFS protocols; copies both CIFS and NFS security permissions and file attributes
- Supports file data migrations at both aggregate (NAS device/volume/ qtree and tree quota) levels as well as granular (share-to-share and export-to-export) levels
- Phased Migration policies support copying both CIFS and NFS security permissions and file attributes
- Migration Projects manage the entire migration workflow, from initial baseline copy, to incremental copies to keep data in sync, to the final cutover
- Provides DFS namespaces management capabilities, including DFS namespace updates during CIFS file data migrations
- Does not required scripting knowledge or advanced storage administration skills

Software-Defined File Data Migration and Management

StorageX is an out-of-band, software-based storage management platform designed for enterprise file lifecycle management. StorageX simplifies the migration, consolidation, and archiving of file data in large, complex, heterogeneous file storage environments.

StorageX aggregates and centralizes the management of network file storage environments and streamlines workflows when adding, consolidating, or refreshing Network Attached Storage (NAS) and Windows storage systems.

The automated, policy-based approach to file storage management used by StorageX maximizes business user data access and minimizes cutover windows, user downtime, and other disruptions related to file storage rebalancing, migrations, consolidations, and tech refreshes.

Data Movement

Use StorageX to migrate unstructured file data during NAS tech refreshes or when cleaning up and restructuring unstructured file data estates. StorageX supports both CIFS and NFS migrations from within a single, unified console. StorageX also supports a wide variety of sources and destinations, including cross-platform support for EMC, NetApp, Windows, and UNIX-based file storage resources.

Phased Migrations

StorageX Phased Migration policies move file data stored in CIFS shared folders or NFS exports from sources to destinations. Phased Migration policies provide a large number of configuration options you can use to specify exactly how you want to manage security settings and file attributes during the migration process. Phased Migration policies also allow preservation of end user access to file data on the source while performing baseline and incremental data copies from the source to the destination in the background.

Continuous incremental copies ensure replication of new, locked, or recently modified files on the source to the destination and also allow you to verify the migration is completing successfully to plan. In the final cutover phase, StorageX options allow you to quickly and programmatically remove user access to the source, perform a short, final sync to copy any new files recently added or updated, and then share the new destination with users. This phased, programmatic approach with clearly defined migration phases and processes reduces cutover windows and migration risks.

Archival Migrations

StorageX Archival Migration policies identify folders that are candidates for migration to a lower-cost storage tier using criteria such as when files in a folder were last accessed, folder age, and folder size. You can then review the list of candidates to migrate or configure StorageX to automatically migrate the candidates for you.

Migration Projects

StorageX Migration Projects allow you to move large sets of NAS devices using a project-based approach. Instead of migrating data at the share or export level, Migration Projects migrate data at a NAS device or volume level. First design your project and create source and destination mappings, then have StorageX analyze your mappings using its rules-based Migration Project engine. During its analysis, StorageX identifies any conflicts or issues and allows you to make changes or corrections to the design. After you address any design issues, StorageX automatically creates, or provisions, destinations and creates migration policies. StorageX then uses the policies to migrate CIFS shared folders, NFS exports, file attributes, and permissions from sources to destinations.
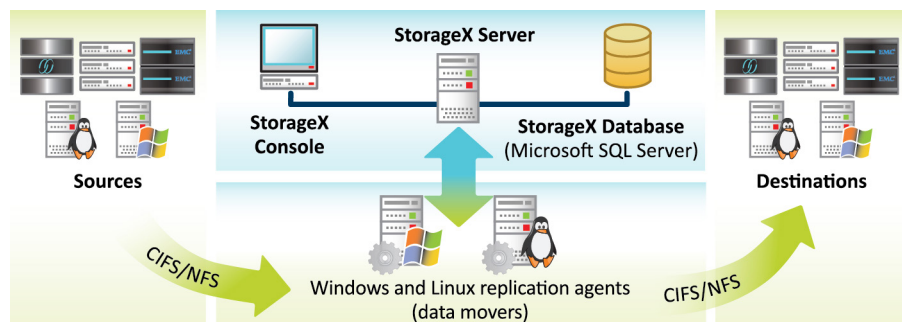
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DFS Namepace Management

StorageX began as a solution that centralized file sharing and file data management using Microsoft DFS technology. This core capability still exists in StorageX today.

Using StorageX DFS management capabilities, you can abstract your physical file storage environment into a logical, business-focused view that is meaningful to end-users. When you later need to rebalance file storage resources or replace resources during a tech refresh cycle, you can use StorageX DFS management capabilities in conjunction with migration policies to streamline and automate CIFS file data migrations even futher. Simply configure migration policies to automatically update DFS namespace links that reference the old source to now refer users to the new destination during the final cutover phase. This reduces cutover times and minimizes user disruption during CIFS file data migrations.

Architecture

The StorageX architecture consists of the StorageX server, StorageX Console, the StorageX server, the StorageX database, which is a Microsoft SQL Server database, and StorageX replication agents, or data movers.

The StorageX server and replication agents can be installed on virtual or physical servers. StorageX replication agents do the heavy lifting, moving file data based on policy and configuration information provided by the StorageX server. The StorageX server and StorageX Console run on Windows 2008 or later. StorageX replication agents run on Windows 2008 or later or Red Hat Enterprise Linux 6.

User Interface

The StorageX Console user interace takes the guesswork out of migrating and managing file data in heterogeneous storage environments. The StorageX Console is a simple, intuitive Windows user interface. You can quickly add storage resources to StorageX for management one-by-one or import an entire NAS estate at once. Views are cross-platform, and numerous wizards help you quickly and easily create migration policies, migration projects, and migration project designs. You can also use wizards to quickly perform storage resource provisioning tasks such as creating volumes, shares, and exports across protocols (CIFS and NFS) and platforms (NetApp, EMC, Windows, and Linux).

Vendor Support

StorageX currently supports various NAS devices (EMC VNX/VNX OE for File and Isilon/OneFS, NetApp/Data ONTAP 7-Mode and Cluster Mode, Windows, and Linux) as both sources and destinations, as well as stand-alone CIFS and NFS file storage resources.

About Data Dynamics

Data Dynamics is a leader in solutions for the discovery, reporting, migration and management of file-based storage. Its award-winning StorageX product suite, which was originally developed by NuView, Inc. and later acquired by Brocade, has been adopted by hundreds of enterprise customers, Fortune 500 companies, and large municipal governments as a solution for the full lifecycle management of their file-based storage infrastructure. Today, Data Dynamics is focused on developing future generations of StorageX as the industry's leading policy-based file data management solution.