

## About Data Dynamics and StorageX Mobility Platform

Mobility is a constant with unstructured data, because of growth, system refresh, tiering, archiving and optimization.

## StorageX is a true enterprise solution for file mobility, offering:

- 1. Fully automated, policybased migration engine
- 2. Intuitive user interface with design validation.
- Scale-out Universal Data Engine (UDE) architecture with integrated SMB and NFS support.
- Migration process and QoS capabilities minimize user disruption.
- 5. Full API integration with ONTAP 7, ONTAP 8, and ONTAP 9.
- 6. Automatically update DFS links and NFS Automounts.
- 7. Reporting on migration progress and completion.

#### StorageX based Migration

## NetApp 7 Mode to Cluster Mode (cDOT)

- 1:1 Migration orchestration of data, share/export configurations, volumes, metadata and permissions.
- 2. Transformative migrations.
- 3. QTree breakout to volumes.
- 4. 32-bit to 64-bit aggregate conversion.
- 5. Selective migration.
- 6. Permissions management and cleanup.
- 7. Data movers: NetApp SnapMirror or Data Dynamics replication agent.

#### Competitive Storage to NetApp

- 1. Intuitive migration projects.
- 2. SMB and NFS standardsbased migration.

# StorageX Replication Solution for NetApp 9.3 Migration

#### The Challenge of Upgrading to ONTAP 9.3

Looking to upgrade to NetApp ONTAP 9.3?

It's simple in most cases, but avoiding some of the complexities with a direct methodology can help complete your project faster and with less risk. Evaluating and analyzing your current workload *before* you migrate can help manage your data to your optimal correct cost structure.

There are several ways your NetApp Filers with legacy hardware can move your data to the ONTAP 9.3—and choosing the right method can help you realize all the benefits of this advanced platform. However, considerations like 32-bit aggregates conversions, Unicode Conversion, q-tree to volume conversion, and SnapMirror compatibility can make for a multistep migration. These can introduce limitations in how you manage cutovers, lengthening the time to value.

The StorageX<sup>R</sup> software provides a single control point for all migrations. StorageX can help in both reducing complexity and putting data where it needs to be available, based on the intelligence you gained from our unique ability to analyze your unstructured files' metadata. The platform is extremely scalable to handle the largest migrations.

#### The StorageX Solution

StorageX can empower your team to migrate directly to 9.3 in just one step.

StorageX is an unstructured data mobility platform that combines data discovery, policy-based rules engines, organic data movers, integration with Microsoft's DFS. It has API integration with both 7-mode and Clustered ONTAP, including SnapMirror.

This gives you the ability to migrate, restructure, or consolidate your NAS estate at volume, share, or export levels. At the same time, you know that all SMB shares, NFS exports, and their respective permissions are moved to ensure security management.



#### StorageX Architecture

StorageX begins with the StorageX Server, which runs on a physical or virtual machine.

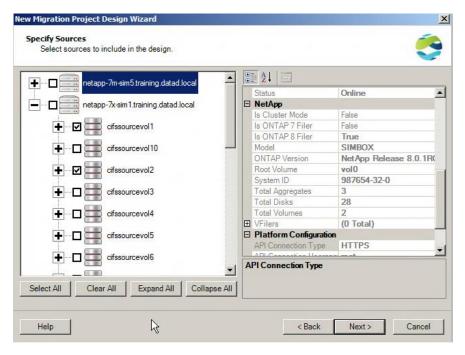
#### It contains:

- A Console to centralize management of all policies.
- A Microsoft SQL Server database to track all policies and projects.
- The scale-out, virtualserver-based Universal Data Engine that executes copy jobs and manages multithreading.

The architecture is fully out-ofband, with the StorageX Server interacting with NAS systems via policies rather than holding or modifying data itself.

The StorageX server and StorageX Console run on Windows 2008 or later. The StorageX Universal Data Engine runs on Windows 2008 or later, or Red Hat Enterprise Linux 6 or 7.

API integration with NetApp SnapMirror allows array-based migrations to be managed within the same console as hostbased migrations



In the StorageX Console, specify your source volumes to be moved.

#### StorageX Compared to Traditional Methods

Native tools like 7MTT and SnapMirror can be inflexible and are sometimes bound by legacy containers. And external tools like Rsync, Robocopy, SecureCopy provide flexibility but lack automation. These often require many hours of specialized employee time or heavy scripting to use effectively.

StorageX combines the best of both—project flexibility, legacy container neutrality, and automation—with detailed file analytics.

StorageX has full API integration, meaning it can copy your data *and* create the target to match the source. This can decrease cutover windows and the overall project duration, providing a positive customer experience and accelerating the rate of Clustered ONTAP adoption.



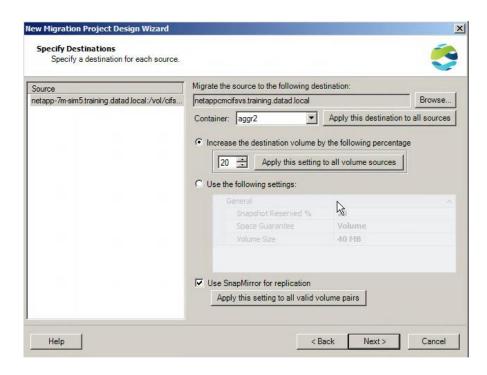
#### StorageX Architecture

The StorageX architecture starts with the StorageX server, which runs on a physical or virtual machine. It contains a console that can centralize the management of all policies, a Microsoft SQL Server database that keeps track of all policies and projects, and scale-out virtual server based StorageX Universal Data Enginer that execute copy jobs and manage multi-threading.

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Specify the target container for StorageX to provision and migrate data to.

#### Complete Project Flexibility

StorageX tailors your migration to ONTAP 9 from 7, 8.1.x, or 8.2.x around your business needs: you're not bound by software versions, volumes, Q-Trees, shares, or exports.

For volume to volume migration, StorageX can leverage NetApp's proven SnapMirror technology to copy the data. Or for q-tree to volume migration, 32-bit to 64-bit aggregate conversions, and other scenarios, StorageX leverages its proprietary Universal Data Engine. Migrations can be as granular as shares or exports. StorageX not only moves the data but can provision the volumes and overlay the shares and export policies.

StorageX incorporates Active Directory authentication to ensure only privileged users can access the flow of data. The StorageX administrator grants access to either AD users or Groups. In addition, you can access the robust reporting engine to view project information on all migration activities.



#### **About StorageX 8.0**

StorageX platform eliminates vendor lock-in and provides a policy-based, storage management platform to provide the insight, agility, and operational efficiency to transform data assets into a competitive advantage.

Data Dynamics, Inc. enables customers to realize the power of their digital data by placing it where it needs to be, when it needs to be, in the form it needs to be. Customers can achieve a faster ROI on capital storage purchases, get data to the Cloud faster, and maintain vendor independence from storage and cloud providers.

Customers can benefit from IAM3...Intelligent data and file storage management allowing for Analysis of data in single, secure, and actionable fashions, while Moving, Managing, and Modernizing file data in a single, secure, and fast deployment across heterogenous storage resources.

For more information, visit www.datadynamicsinc.com.

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#### Automated, Policy-Based File Data Mobility and Management

StorageX automates data discovery, policy-based mobility and management for migration, consolidation, tiering, and archiving of unstructured data in complex file storage environments.

The policy-based approach to file storage management maximizes the value of data to business and minimizes risk, user downtime, cutover windows, and other disruptions related to file storage migrations, rebalancing, consolidations, and tech refreshes.



The highly-scalable StorageX Architecture operates fully out of band—so you maintain ownership of your files without any vendor lock-in.

#### **About Data Dynamics**

Data Dynamics is a leader in intelligent file management solutions that empower enterprises to seamlessly analyze, move, manage, and modernize critical data across hybrid, cloud, and object-based storage infrastructures for true business transformation. Its award-winning StorageX platform eliminates vendor lock-in and provides a policy-based, storage management platform to provide the insight, agility, and operational efficiency to transform your data assets into competitive advantage. Used today by 24 of the top Fortune 100 companies, StorageX has optimized more than 160 PB of storage, saving more than 80 years in project time and \$80 million in total storage costs. For more information, please visit: www.datadynamicsinc.com.