# Unstructured Data Management

## Discover:
## File Insight

The first step in managing files is discovering what's out there. File Insight builds an actionable inventory of files and identifies key details such as:

- Quantity and size of files and directories
- Volume of data owned by users and groups
- File activity by last accessed & modified date
- Distribution of file types

## Mobilize:
## StorageX Migration

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:

- Fully automated, policy based migration engine
- Intuitive user interface with design validation
- Integrated SMB and NFS support
- Scale-out replication agent architecture
- Multi-threading based on file aware algorithms
- Three phase process to reduce user disruption
- QOS preserves network during migration
- Reporting on migration progress & completion

## Manage:
## StorageX Namespace

StorageX DFS management capabilities can abstract a physical file storage environment into a logical, business-focused view that is meaningful to end-users and flexible to manage. StorageX DFS management capabilities can rebalance file storage resources or replace resources without disruption to user access.

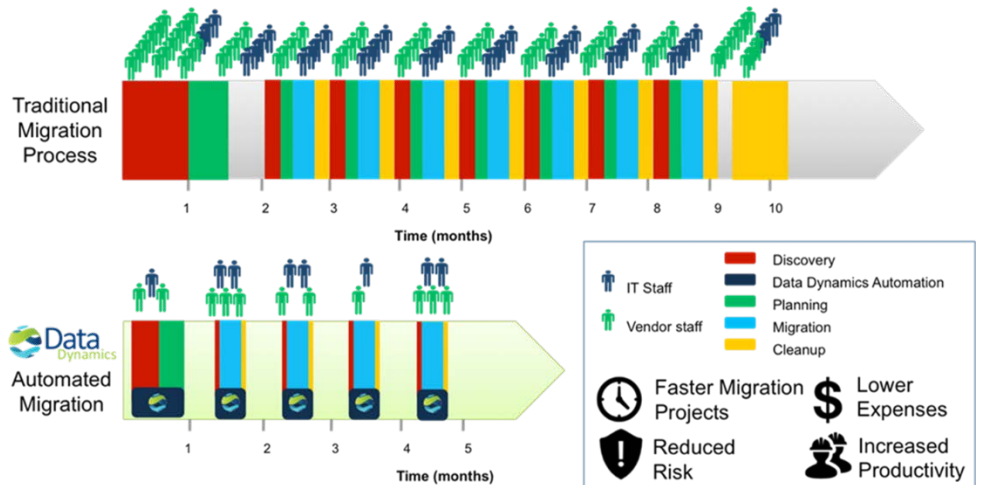## DISCOVER, REPORT, MIGRATE & MANAGE FILE-BASED STORAGE

In today's enterprise driven and consumer centric economy, things move at a lightning-fast pace. In just a minute, businesses generate, transfer, consume, and preserve large amounts of unstructured file data on hundreds of file servers and NAS devices across their IT infrastructure.

This phenomenon continually drives the expansion of network storage resources and increases the need to optimize the underlying storage infrastructure through hardware refreshes, re-tiering, and consolidation. Add growing user demands, rising file data, ageing storage systems, and perpetual technology refresh cycles to this list and it creates a significant IT challenge.

To keep pace with these challenges, enterprises are looking for a simple, seamless, and robust solution to plan and execute data mobility, for migrations and optimization initiatives. The solution should help shorten the overall timelines, optimize the utilization of internal or external resources and be cost effective.

StorageX from Data Dynamics Inc. is the solution of choice to help address this challenge and migrate data from older technologies and competitive devices to NetApp file based storage. 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. This automated approach significantly reduces the migration project time, lower expenses, reduce risk and increase productivity.



## NetApp API Integration

Data Dynamics StorageX has integration with NetApp 7-mode and NetApp cDOT APIs which allows for StorageX to:

- Discover
  - NetApp System Configuration (DNS, LDAP, NTP, WINS, CIFS Home Directory, Virtual Resources, Local Users and Groups, Management Accounts)
  - NetApp Storage Configuration (Aggregates, Volume/File Systems, QTree, Quota, SMB Share Properties, NFS Export Properties)
  - Correlate Microsoft DFS Namespace Links to Shares
- Provision
  - Create File System Containers (Volumes)
  - Create and Clone Share and Export Policies
  - Create QTrees
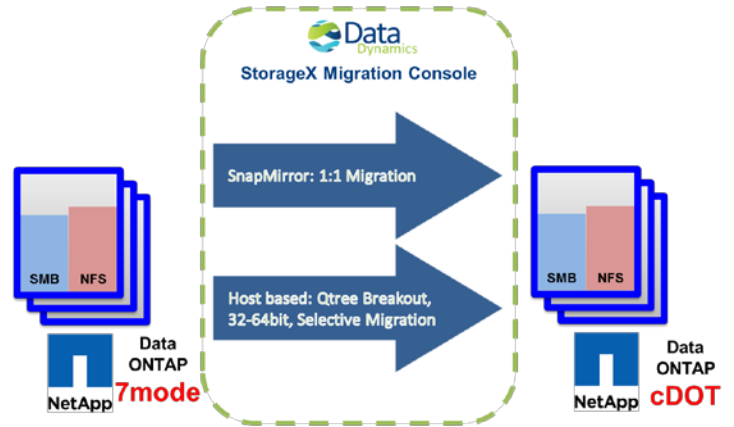- Initiate NetApp SnapMirror Relationships

## Automated, Policy Based File Data Mobility and Management

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Data Dynamics StorageX is able to simplify 7 mode to cDOT transitions through providing a single migration console which manages the data migration using both NetApp SnapMirror and StorageX host based replication agent techniques depending on the migration design and capability of the storage systems.
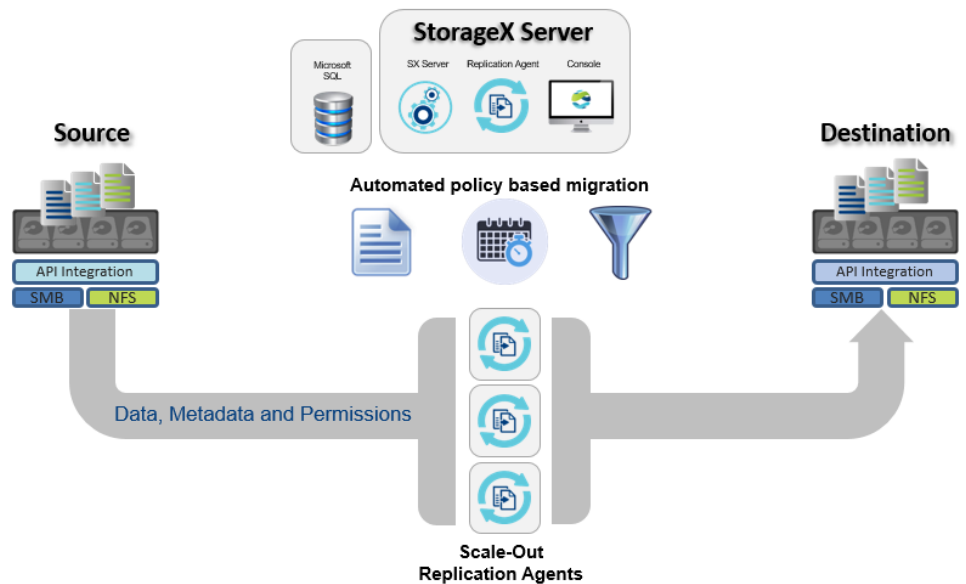
### Data Dynamics 7mode to cDOT Transition



## 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 replication agents that execute copy jobs and manage multi-threading.  The architecture is fully out-of-band, 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. StorageX replication agents run on Windows 2008 or later or Red Hat Enterprise Linux 6 or 7.

API integration with NetApp Snap Mirror allow array-based migrations to be managed within the same console as host-based migrations

## About Data Dynamics

Data Dynamics is a leading provider of unstructured data management solutions that enable the agile discovery, analysis, optimization, migration and management of large data assets across the information lifecycle. Its award-winning StorageX product suite eliminates multi-vendor storage silos providing enterprises with an intelligent, policy-based, cloud storage management platform to empower data portability, usability and insight for business agility and operational efficiency. StorageX has been adopted by hundreds of enterprise customers, Fortune 500 companies, and large municipal governments to increase storage portability for the simplified adoption of next-generation heterogeneous datacenter and cloud infrastructures.