

TECHNICAL OVERVIEW:

Data Resiliency with Data Dynamics

Data, in today's world, is an asset greater in many ways than more tangible assets like money, infrastructure, or hardware. It has value because it helps our organizations to grow and thrive, to succeed; knowledge, as the saying goes, is power.

What that value means, however, is that data is an asset that needs to be protected, to be kept secure from potential threats. You need your data to be simultaneously secured, available, and accessible, even in the face of natural disasters, hardware failures, or civic unrest. If something does happen, your data must be recoverable without having to be fully recreated from scratch.

This requires that you **build data resiliency** into your environment, including distributed storage, automatic backup and failover functionality, and data replication, all of which will help to minimize downtime and data loss for your business.

StorageX handles this need for data resiliency in two ways:

1 Disaster Recovery

Monitor your file storage resources and DFS namespaces and automatically fail over from your primary resource and namespace links to a backup resource and namespace links in the event of a failure.

2 Replication

Synchronize data between two or more file storage resources, DFS namespaces, or object storage resources in your environment. You can also replicate data from file storage to object storage.

Disaster Recovery



What good is data storage if a simple power outage can stop your business in its tracks? Just as companies have backups in place for their electrical systems, they should also have backups in place for any storage systems. Your users need to be able to access their data no matter what, or your overall business could be impacted.

Disaster Recovery policies in the StorageX Console enable you to safeguard data in your file storage environment and in your Microsoft DFS namespaces. These policies monitor the health of your resources and replicate data to one or more backup locations, so that when your resources experience an outage or failure, the DFS links that point to those resources automatically redirect to the backup.

Replication



Even if you don't use DFS in your environment, you still need to make sure you have **redundant copies of your data**, for the same reasons mentioned above. Outages and service interruptions can and do happen every day and at every company, regardless of size. As an enterprise stakeholder, you need to ensure that a backhoe down the block from your main office doesn't cripple your business for days.

Using StorageX, you can **replicate your data** between file storage resources, between object storage resources, or between file and object storage resources, using **Replication policies**. Unlike archiving your data from file storage to object storage, where the source data is deleted after being archived, you can use these policies to keep data on multiple storage resources synchronized, copying data from a primary resource to a backup resource on a **scheduled basis**.

These Replication policies are available both in the **StorageX Console (file-to-file replication)** and in the **StorageX Management Portal (file-to-object and object-to-object replication)**.