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How Managed File Transfer Solves Distributed File System Challenges

MFT: An Alternative to DFS

Today, many organizations use a complex system of multiple servers (located locally or in the cloud) to house data used for everyday processes. Real-time access is vital for daily work to commence and ensure the company remains successful and profitable.

Many companies use a distributed file system (DFS) solution to meet the challenge. DFS provides basic file replication functionality on networks. However, DFS applications have high costs concerning setup and management time, and reliability could be better.

A managed file transfer (MFT) solution offers much more flexibility and reduces the cost of ownership, making it a strong DFS alternative.

Let’s look at how:

DFS vs. MFT: A Comparison

When considering a DFS solution, most IT leaders first look to Microsoft's DFS Replication (DSF-R) tool.
It is native to Windows and works alongside DFS Namespaces. Many users, however, find the solution troublesome.

For the sake of a DFS-to-MFT comparison, below are DFS-R and SureSync MFT characteristics.

	DFS-R	SureSync MFT
File Locking	• DFS-R provides only one way of dealing with "multiple updates." • This occurs when two users update the same file on different physical servers before one of the copies can be synchronized. • The result: two different copies of the same file exist on two different machines. • With DFS-R, the newer file will be replicated. This results in the changes made by the other user being lost.	• SureSync MFT's file locking function minimizes the "multiple updates" issue. • When a user opens a file, SureSync MFT will lock all other copies on the other machines involved in the synchronization. • If a different user tries to open that same file, they will receive read only access. • Once the original user saves and closes the file, SureSync MFT will synchronize the copy to the other machines and then release the lock.

	DFS-R	SureSync MFT
Synchronizing	• DFS-R replicates data using one multi-way algorithm which can't be changed. • DFS-R in 2008 R2 and newer allows for the configuration of a "read-only" one way rule. • One-way support is not available in older Windows operating system versions.	• SureSync MFT offers a wide variety of synchronization rules including both one way and multi-way rule methods to allow users a fine level of control over the synchronization of your data. • NOTE: One method does not suit all needs.
Throttling	• DFS-R can throttle bandwidth usage based on a per connection basis with a fixed throttle. • DFS-R does not perform "bandwidth sensing" to change throttling based on changing network conditions.	• SureSync MFT provides users with more throttling control. SureSync MFT can throttle based on a QoS style throttle, such as using 1Mbps. • In addition, SureSync MFT offers a more advanced throttle called dynamic throttling. • With dynamic, throttling, the bandwidth usage is based on a percentage of bandwidth available. • SureSync MFT provides additional throttling options for the maximum number of file copies active for a machine and maximum disk busy time allowing the administrator great control in ensuring that the synchronization process does not overwhelm the network, or the servers involved.

	DFS-R	SureSync MFT
Encryption	• DFS-R cannot synchronize files encrypted with the Encrypted File System (EFS).	• SureSync MFT can synchronize files that are encrypted using EFS.
File System Support	• DFS-R cannot synchronize files stored on FAT or ReFS volumes.	• SureSync MFT can synchronize files on these volumes. • With ReFS, full functionality is available. • FAT volumes do not support the Change Journal so only Scheduled replication is available.
Active Directory	• DFS-R requires all machines be in an Active Directory and requires an Active Directory Schema update.	• SureSync MFT can synchronize to servers in domains and to standalone machines. • SureSync MFT allows the administrator to define a different user account to be used by the replication process for each machine. • SureSync MFT does not require an Active Directory Schema update.

	DFS-R	SureSync MFT
Integration	• DFS-R will work in tandem with DFS Namespaces to create fault tolerant access to network shares.	• SureSync MFT can work alongside DFS Namespaces as well. • SureSync MFT can be used “under the covers” to synchronize the file shares in question between servers while DFS is used to map all the shares into the logical file system structure. • This allows users to leverage the benefits of DFS while also taking advantage of the more powerful SureSync MFT synchronization package.

As you can see, SureSync MFT provides a much more powerful and comprehensive feature set when compared to DFS-R. The solution allows users to take advantage of multiple rule types. One option allows users to select to run synchronizations manually, scheduled, or in real-time as files change.

SureSync MFT also provides an extensive suite of advanced options including delta copies (copying the changed portion of a file), compression, encryption, bandwidth throttling, open file support, detailed logging, email alerts, real-time synchronization status, file locking, and more.

Ready to switch from DFS to MFT?

Taking advantage of these features makes network synchronizations faster and more efficient while allowing for finer control.

Let’s get started:

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