

## DFS File Locking

Users of Microsoft Windows Server 2003 have the opportunity to utilise the native DFS Replication capabilities for both branch office backup as well as inter-office file server mirroring. When file server mirroring is enabled, the goal is to provide file sharing for employees. This mechanism is far more efficient than emailing files amongst collaborative teams, especially if the files are large in size.

Although DFS Release 2 (R2) is a more reliable and "network friendly" replication tool in comparison to its FRS predecessor. However, it is still incomplete and inadequate for today's more collaborative environments where data needs to be shared in real-time, amongst branch offices and project teams operating in multiple locations.

So what can you do to ensure that there are no version conflicts among multiple collaborative locations?

DFS lacks a central feature important for a collaborative environment where inter-office file servers are mirrored and data is shared: File Locking. Without integrated file locking, using DFS to mirror file servers exposes live documents to version conflicts. For example, if a colleague in Office A can open and edit a document at the same time that a colleague in Office B is working on the same document, then DFS will only save the changes made by the person closing the file last.

There is also another version conflict potential which arises even when the two colleagues are not working on the same file at the same time. DFS Replication is a single-threaded operation, a "pull" process. The result, synchronisation tasks are able to quite easily "queue" up and create a backlog. As a result changes made at one location are not immediately replicated to the other side. It is this time delay which creates yet another opportunity for file version conflicts to occur.



### There are solutions to the problems.

The best and most complete way to eradicate version conflicts when utilising DFS is to employ a true file locking solution. Such a solution needs to provide as a minimum, real-time detection of file use coupled with immediate remote locking. Such a solution is Peerlock. This assures that when a file is open at one location, that all other versions are locked down, preventing anyone from opening and revising it. However, when the file closes, the file lock is immediately released and ready for synchronisation by DFS in the normal way.

Whilst many customers enjoy the benefits afforded by adding file locking to DFS, there are still potential synchronisation backlogs while using DFS as a result of its single-threaded operation. For a true solution that offers real-time file locking and real-time replication, the Peer Collaboration Package is only answer. It eliminates version conflicts whilst at the same time provides full real-time replication in a fail-safe collaborative framework.

### Peer Collaboration Package Benefits

- Transparent file locking among N number of geographical office branches/Servers
- Cross Domain File Locking
- Real-Time File Locking among Servers
- Multi-Threaded File Locking and Release

PeerLock secures a user's files across a network of machines, ensuring that all copies of the files are locked while the user has them open. The network file locking afforded by PeerLock protects against multiple revisions occurring simultaneously on different machines.

When a user opens a file in a watched folder on his/her local machine, the file is immediately locked on the other machines specified in the user selection list. Other users cannot make modifications to this file. When the user closes the file, the files residing on the other machines are immediately unlocked, and can now be used to make changes. PeerLock is designed to integrate seamlessly with PeerSync editions to offer a total locking and synchronisation solution. PeerLock also adds much needed functionality to Microsoft DFS R2 which has no locking capabilities at all.

PeerLock gives you highly granular file management which translates directly into improved collaboration. PeerLock has locking options for precise control, increased visibility into locked files across collaborative environments, and offers a number of enhancements to streamline overall performance.

PeerLock eliminates several critical file management barriers (i.e., now files can be locked on any location even if the location requires different logon credentials) and facilitates more seamless collaboration by reducing file "release" intervals (longer "release" intervals increases the risk of "version conflict," one of the main reasons collaborative projects are late, over-budget or fail).

## Details

PeerLock is a powerful and innovative program that ensures that when a user is modifying a file, no other user will be allowed to make changes to that file on any machine that the user has chosen to lock. Installed on the two watched server machines, PeerLock Server makes sure that no file from the watched folders is accessed with write access while is in use on the correspondent location. PeerLock Server is configured by selecting "Source/Target folder pairs". PeerLock Server allows for 255 unique selections with each selection allowing for up to three target folders.

PeerLock makes network file locking possible while local files are in use and integrates seamlessly with PeerSync Server and PeerSync High Volume Server. This innovative program ensures that when a user is modifying a file, no other user will be allowed to make changes to that file on any machine that the user has chosen to lock. Furthermore, if Microsoft DFS is being utilised, PeerLock allows any files opened in a DFS resource to be locked on all other DFS servers. Seamlessly and transparently.

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