Database corruption recovery

Windows Server 2012 R2 provides support for rebuilding corrupt databases without unexpected data loss caused by a nonauthoritative initial sync.

What value does this change add?

When DFS Replication detects database corruption, it rebuilds the database and then resumes replication normally, with no files arbitrarily losing conflicts. When replicating with a Read-only partner, DFS Replication resumes replication without waiting indefinitely for an administrator to manually set the primary flag.

What works differently?

Previously, a corrupt database would trigger DFS Replication to delete the database and start the nonauthoritative initial sync process again, as if replication was being set up for the first time. Any files on the recovering server would lose all conflicts automatically, even if they were the latest version of the file. Those conflicts would move into the **ConflictAndDeleted** or **PreExisting** folders, leading to perceived or real data loss.

In Windows Server 2012 R2, when DFS Replication detects database corruption, it rebuilds the database by using local file and update sequence number (USN) change journal information, and then marks each file with a Normal replicated state. DFS Replication then contacts its partner servers and merges the changes, which allows the last writer to save the most recent changes as if this was normal ongoing replication.