CLAIMS

What is claimed is:

1. A method comprising:

determining a remote file system state, wherein the remote file system state includes remote folder hash values, and wherein the remote folder hash values are determined at least partially based on sub-folder hashes associated with remote instances of shared sub-folders, file hashes associated with remote instances of shared files, sub-file hashes associated with remote instances of shared sub-files, shortcut hashes associated with remote instances of shared shortcuts, or a combination thereof at the remote file system;

determining a local file system state, wherein the local file system state includes local folder hash values, and wherein the local folder hash values are determined at least partially based on sub-folder hashes associated with local instances of shared sub-folders, file hashes associated with local instances of shared files, sub-file hashes associated with local instances of shared sub-files, shortcut hashes associated with local instances of shared shortcuts, or a combination thereof at the local file system;

comparing the remote file system state and the local file system state to determine any differences in the remote folder hash values within the remote file system state and the local folder hash values within the local file system state; and

synchronizing at least a portion of any shared folder, in which the remote folder hash value is different from the local folder hash value, within the local file system and the remote file system.

2. The method of claim 1, wherein an inconsistent file hash pairing includes a local file hash for a local instance of the particular shared file that is different from a remote file hash for a remote instance of the particular shared file.

3. The method of claim 2, further comprising:

synchronizing the particular shared file with the inconsistent file hash pairing.

4. The method of claim 2 or 3, further comprising:

determining a time stamp for the local instance of the particular shared file;

determining a time stamp for the remote instance of the particular shared file; and

synchronizing the particular shared file to the most recent of the local instance of the particular shared file and the remote instance of the particular shared file.

5. The method of any one of the preceding claims, further comprising:

determining whether a particular shared file includes an inconsistent file hash pairing, wherein the inconsistent file hash pairing includes a missing local file hash for a local instance of the particular shared file or a missing remote file hash for a remote instance of the particular shared file.

6. A method comprising:

determining a remote file system state;

determining a local file system state;

comparing the remote file system state and the local file system state to determine whether a remote instance of a shared folder, a remote instance of shared sub-folder, or a remote instance of a shared file includes a remote file system attribute that is different from a local file system attribute of a corresponding local instance of the shared folder, a corresponding local instance of a shared sub-folder, or a corresponding local instance of the shared file; and

synchronizing the shared folder, the shared sub-folder, or the shared file in which the remote file system attribute is different from the local file system attribute.

7. The method of claim 6, wherein the remote file system attribute includes a remote folder value assigned to the remote instance of the shared folder, a remote sub-folder value assigned to the remote instance of the shared sub-folder, or a remote file value assigned to the remote instance of the shared file.

8. The method of claim 7, wherein the remote folder value comprises a remote folder hash, the remote sub-folder value comprises a remote sub-folder hash, and the remote file value comprises a remote file hash.

9. The method of claim 8, wherein the remote folder hash, the remote sub-folder hash, and the remote file hash are determined based on a remote hash table for the remote file system.

10. The method of any one of claims 6 to 9, wherein the local file system attribute includes a local folder value assigned to the local instance of the shared folder, a local sub-folder value assigned to the local instance of the shared sub-folder, or a local file value assigned to the local instance of the shared file.

11. The method of claim 10, wherein the local folder value comprises a local folder hash, the local sub-folder value comprises a local sub-folder hash, and the local file value comprises a local file hash.

12. The method of claim 11, wherein the local folder hash, the local sub-folder hash, and the local file hash are determined based on a local hash table for the local file system.

13. A shared folder and file synchronization system, comprising:

one or more computer-readable media having thereon a synchronization module and a file system;

a processing unit operably coupled to the computer-readable media, the processing unit adapted to execute the synchronization module, wherein the synchronization module is configured to:

determine a remote file system attribute associated with a remote instance of a shared data structure within a remote file system;

determine a local file system attribute associated with a local instance of a shared data structure within a local file system;

determine whether the remote file system attribute is different from the local file system attribute; and

selectively synchronize the remote instance of the shared data structure within the remote file system with the local instance of the shared data structure within the local file system so that content within the shared data structure is the same at the remote file system and the local file system.

14. The system of claim 13, wherein the shared data structure comprises a shared folder, a shared sub-folder, a shared file, or a combination thereof.

15. The system of claim 13 or 14, wherein the remote file system attribute comprises a remote folder hash, a remote sub-folder hash, or a remote file hash retrieved from a remote hash table associated with the remote file system and wherein the local file system attribute comprises a local folder hash, a local sub-folder hash, or a local file hash retrieved from a local hash table associated with the local file system.