What triggers the recall of an offline file?

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Hierarchical storage management is <u>one of the taxes</u> software developers have to pay. What can you safely do to an offline file? What will trigger its recall? (First, a note on terminology: *Recalling* a file means to restore it from remote storage to local storage. A file that has been recalled is *online*; a file that has been placed on remote storage is *offline*.) Merely opening the file will not recall it. Therefore, you can still open the file and use the handle in functions like `GetFileInformationByHandle` , `GetFileTime` , and `GetFileSecurity` without triggering a recall. But if you read from or write to the file (or map the file, which is the moral equivalent of reading and writing), then the file will be recalled from storage. What about the `FILE_FLAG_OPEN_NO_RECALL` flag? This flag doesn't affect when the remote storage is accessed. (It's still read/write/map.) What it does is tell the hierarchical storage manager to leave the file offline. In other words, if you open an offline file with the `FILE_FLAG_OPEN_NO_RECALL` flag, then when you read from the file, the file contents will be read from tape directly and the file will remain in its offline state. I'm told that the `FILE_FLAG_OPEN_NO_RECALL` flag is intended for backup programs so that they can back up all your files (even the offline ones) while still keeping them offline.

(Note: Do not confuse these types of offline files with <u>another feature also confusingly called offline files</u>. This is what happens when you let the Marketing department choose the names of your features.)

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