

# Re: Calling FileStream.Create after File.Move gets old file handle

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- *From:* "Damien" <[Damien.The.Unbeliever@xxxxxxxxxxxxx](mailto:Damien.The.Unbeliever@xxxxxxxxxxxxx)>
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C# Dev wrote:

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Greetings all,

Have a question regarding File.Move / FileStreams

My steps,

1. Create file1 demo.log [FileMode.CreateNew]
2. Move file to demo1.log
3. Create file2 with same name as in #1: demo.log [FileMode.CreateNew]

Now, problem is that the filehandle in #1 and #3 are the same.  
Are they expected to be?

I suspect this is the reason why file2 inherits the CreateDate from file1  
which is my main problem :-/

Can anyone please enlighten me what is going on?

Cheers

Anyone?

If this can be replicated it seems like a bug to me..

I've managed to repeat this, using VB.Net. I believe it may be a windows filesystem "feature". I cannot find a reference for it, but I believe it's been done like this to support scenarios where an application is about to write out an updated copy of a file, but wants to support being able to retrieve the "old" version, if there's a problem during the write.

## Re: Calling FileStream.Create after File.Move gets old file handle

Obviously, you cannot overwrite the existing file, so you have to rename it first, and then write out the new version using the old filename. And then windows (I believe. Might be .Net, but I suspect windows) steps in and says "Aha! This is obviously just an updated copy of the file that's just been moved, it should inherit some meta-data, such as the creation date (and permissions)". I think it's done on a per-process basis (so if one process renames a file, and another writes the new one, it will not inherit the meta data).

Now, final two bits. First, they have the same handle because the first free handle is obtained when you open the file, and then is freed by the Close() call, so that when you come to open the second file, it finds the first free handle (which happens to be the same handle previously used). Had you reopened the moved file (for reading say), before you had created the second file, you'd have probably had different handle values.

Secondly, if you need the new file to have the correct creation datetime, I think you'll need to open it twice. Create it, Close it, Call SetCreationTime, then open it for writing.

Damien

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