

Re: Flush SMB Cache on Windows Vista?

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<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.networks/2009-02/msg00057>

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 - *Date:* Wed, 18 Feb 2009 20:41:17 +0000 (UTC)
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Hello boris,

Thanks for the suggestion, Boris. I do believe that would do the job -- but that's a pretty large hammer. :) Unfortunately, I don't think that would be a viable workaround for us.

Jed

"Jed" <jth_nospam_alias_2@xxxxxxxxxxxxxxxxxxxx> wrote in message <news:6bf7df521a71d8cb5f274f97aaf1@xxxxxxxxxxxxxxxxxxxxxxxx>

The short version of my question is: Is there an API call that will dump the SMB cache on Windows Vista when SMB 2.0 is used for Windows Networking? There may be alternatives to dumping the cache that I haven't considered, so allow me to offer a bit of (simplified) background: We have a multi-user software, where multiple users may be simultaneously creating, opening, and accessing files on a shared drive. We have found then when our users upgrade their file servers to Server 2008, and they access the share from Windows Vista, the following scenario may occur: A file is created on a shared drive by User A. User B gets notification that the file has been created, so user B attempts to open that file. In most cases, this works properly. But, sometimes (probably dependent on cache refresh timing), User B's attempts to open the file fail with an error 2. I have replicated a replicated a simplified version of this test case in our test environment and I have found that when User B receives the error

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2 (file not found), no SMB2 traffic appears on the wire. That, and the fact that this only occurs when Windows Vista and Server 2008 are involved tells me the caching in SMB2 is causing the client to return the failure based on cached directory information.

Up until this point, I have attempted several alternate ways of attempting to refresh the cache on demand: I've attempted to use the following methods to "force" the cache to update, or traffic to go across the wire:

- Call `_access` or `GetFileAttributes` (simply test for file existence).

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`CreateFile` (tested specifying `dwCreationDisposition` of both `CREATE_NEW` and `OPEN_EXISTING`). Using `OPEN_EXISTING` behaves the same as `GetFileAttributes`. `CREATE_NEW` does work properly — but creating a file and then cleaning it up when the file is not present is not a good workaround.

- `GetFileInformationByHandleEx` also seems to bypass the cache and can provide up-to-date information on file existence — but even when file existence has been confirmed by `GetFileInformationByHandleEx`, the file open still fails, so I doubt the cache is being updated.

Sorry for the lengthy post; but I wanted to detail what I've already tried. Does anyone have any other workarounds to try? Aside from other

workarounds, it would be ideal for us to have an API that will force the

SMB cache to flush. Does any such API exist?

Jed

A workaround (an ugly one though) would be to reconnect to the network share in question.

It could be done by a batch file:

```
net use \\servername\sharename /d
```

```
net use \\servername\sharename
```

It can also be done via Net Win32 APIs:

`WNetCancelConnection2`

[http://msdn.microsoft.com/en-us/library/aa385427\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/aa385427(VS.85).aspx)

`WNetAddConnection2`

[http://msdn.microsoft.com/en-us/library/aa385413\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/aa385413(VS.85).aspx)

Boris

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