NETWORK PROBLEMS AFTER WINDOWS UPDATE, 8th MAY 2018

Symptoms

With networked installations of EQ (with a shared data folder) you may see some or all of the following issues within EQ:

- Blank records appear in quotes, orders, invoices, purchase orders (headers and contents)
- Saving quotes/orders overwrites previously saved older quotes/orders
- Placing purchase orders sends products onto the wrong purchase order numbers

Cause

Windows is caching files on client PCs and not writing the data back to the shared EQ data folder instantly.
A Microsoft Windows update (KB4103721) has changed the operation of network file cache in Windows 10 and causes data to be delayed. A delay writing the data to EQ's databases causes severe data integrity issues with symptoms as explained above.

Further experience can be seen in this Microsoft Developer Network post:
https://social.msdn.microsoft.com/Forums/en-US/008e9250-111a-4a94-a2b8-b38296194b86/vfp-network-issues-with-windows-10-1803?forum=visualfoxprogeneral

Resolution

Before proceeding please ensure you have a recent Windows system backup. These steps should be carried out on every Windows 10 networked PC. Change the values for **DirectoryCacheLifetime** and **FileInfoCacheLifetime** to reduce the delay from 10 seconds to 0 seconds. You can either use Windows Powershell or Windows Registry Editor to change these.

a) Windows Powershell

(Easiest access is from right-clicking on the **Start** button > run **Windows Powershell (Admin)**

You can view the current settings on Windows 10 using this Windows Powershell command:
`get-smbclientconfiguration`

You can set the 2 parameters with these Powershell commands:
`set-smbclientconfiguration -DirectoryCacheLifetime 0`
`set-smbclientconfiguration -FileInfoCacheLifetime 0`

b) Registry Editor

Navigate to the following location:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\LanmanWorkstation\Parameters

Add 2 new entries for:
"FileInfoCacheLifetime"
"DirectoryCacheLifetime"

With dword:00000000

Alternatively, you can merge a registry .reg file with these values. You can download a file we have prepared as a zip file here: http://www.eqsoftware.net/documents/Win10_CacheSettings.zip
Extract the zip file and **double-click** the reg file to merge entries into your registry. (You will need to be logged on to Windows as an administrator user to merge entries into your registry).

Once you have completed either of these steps, you need to run a Database Integrity Check within EQ. See the **Tools** menu > **Database Integrity**.