QuickStore - With multiple workstations performance is slower than expected with networked users

Max Holden - 2017-12-18 - in Software

Question:

We upgraded our network and have been running some tests to understand the dynamics of the system.

All the workstations were disconnected from the hub and then reconnected one by one; we ran the inventory summary report for store 19 as a baseline on each workstation to gauge the network speed.

We experienced no performance degradation as all the workstations were brought on-line. (For example, my computer ran the report in 20 seconds when it was the only station

connected, and stayed at 20 seconds when all stations were connected.

The range of performance was 7-90 seconds across all workstations, correlating to the power of each PC.)

This basically satisfied us that the network performance is good (the report ran in 6 seconds directly on the server).<?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />

Next, we tested performance within QuickStore as users were added.

With 9 users logged on to the main menu only, performance stayed at 20 seconds on my workstation. However, when just one other user merely opened up a screen (for example the item list), without actually running anything, performance dropped dramatically, from 20 seconds up to 162 seconds on my station! (Similar results on the other stations.)

While I can see where multiple users might slow performance, these results just don't seem reasonable and are a big hit to our productivity when using QuickStore.

Answer:
After reviewing NT Server documentation and testing here, what you experienced with only one user accessing the QuickStore data files was a "performance boost". When more than one station has access to the data, the NT server can no longer increase the performance - providing the illusion that performance decreases.

The Network Tune-Up utility turns off the ability for the Server to boost performance when only one station has access to a data set.

The documentation that I have read indicates that allowing the server to boost the performance can cause data corruptions when users are accessing and releasing data files. Therefore, the best way for the Server to run is where performance is never boosted across the network - like you have it now.

Having OPLOCKS enabled was probably the reason you had corrupted data files, so you should leave the system as it is. We have two other locations that have 8-15 PC's running with an NT Server exactly as your system is configured. Testing here and at those locations indicated that running QuickStore on the Server performed like you indicated, and also performed like you indicated on the workstations. Like I said before, NT can't boost performance when more than one station has the files.

At our office we also tested QuickBooks performance in similar situations. When our server

was allowed to boost performance, we could run a P&L Report in less than 2 seconds across the network. When another user was in QuickBooks or the ability for the server to boost performance was turned off, the same report took 35 seconds to run. This is a decrease of 17 times - exactly what I found in QuickStore.

I hope this answers your question. Unfortunately, NT can't run at the same speed when more than one station has access to a data file. And from a data integrity standpoint, NT shouldn't be allowed to boost performance or the likelihood of a data corruption is high. See the following link for more details:

http://www.dataaccess.com/whitepapers/opportunlockingreadcaching.html.

You may not like the performance you see when you compare the difference between running QuickStore on the server and running it on a workstation, but this is really the best NT Server can do.