

## RE: SQL and Bandwidth use

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Not an area I know much about but if it's not the network card then maybe it's the handshaking.

The client has to receive a buffer (or packet or whatever) then tell the server to send the next I guess which could be what's limiting it. How much memory is on the client and what does it do with the data. If it's a lot then things like displaying on a monitor or writing to disk could be the bottleneck.

"kyfunguy5@hotmail.com" wrote:

- > *To all:*
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- > *I have a situation at work I cannot explain.*
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- > *Dell PowerEdge server, Dual Xeon 2.4GHz processors, 4 GB RAM. Windows NT 4.0*
- > *SP 6a.*
- > *250GB RAID 5 drives, connected to server via fiberlink in a SAN.*
- > *Approximately 230GB of space is free.*
- > *12GB SQL Database, created by Great Plains Dynamics software based package.*
- > *100Mb/sec Ethernet backbone LAN, full duplex. Server has 2 100Mb 3COM NICs –*
- > *set as teaming pair, connected to a 3COM 3300 switch.*
- >
- > *Run Query against database, in Great Plains Client software. Via monitoring*
- > *software (Net Limiter) on client PC generating query (Windows XP), bandwidth*
- > *usage by client is peaks a 450kb/sec on query and goes no higher (no where*
- > *near 100Mb/sec bandwidth). While monitoring total bandwidth on segment via*
- > *Network Associates Sniffer product, network bandwidth utilization stays*
- > *below 2%. Client PC is on same segment as SQL server (not passing through*
- > *router). The SQL server barely measures a blip in Processor work (2%), or*
- > *RAM increase (RAM usage is at 450MB, 3,550MB free). It appears as though the*
- > *actual Queries take very little time to run (less then 5 seconds), it just*
- > *takes a very long time to transmit the data from the SQL server, to the*
- > *client (matter of 1–2 minutes). Net Limiter software reports about 100MB of*
- > *data downloaded to client from SQL Server.*
- >
- > *Exact same query was run again on another PC (Win 2000 Pro), and both PC's*
- > *measured about the same bandwidth usage (~500kb/sec).*

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- > *Same Query was run on both client PC's simultaneously, with both still*
- > *taking only about 500kb/sec bandwidth each.*
- >
- > *My questions:*
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- > *Is it possible that the client software is purposely limiting the bandwidth*
- > *usage, to prevent hogging all/most of LAN bandwidth? If so, is there*
- > *anything I can do to change this?*
- > *Are there any changes to either the SQL server, or the client PC's*
- > *themselves, that can be done to throttle up the bandwidth usage?*
- >
- > *I'm a hardware person, no a software or SQL person. My SQL Database manager*
- > *is blaming the network for causing the slow queries ... but I can't find any*
- > *reason for the network to be limiting the bandwidth from the clients to the*
- > *SQL server. It appears to me that the actual limit, is by the software*
- > *itself. I just need to know if anyone can confirm this, and if so, why.*
- >
- > *Thanks.*
- >