

## Re: TCPv4 Counters "Connetions Active" and "Connections Passive" on W2K3 IIS 6 Server.

**Source:**

<http://www.tech-archive.net/Archive/Internet-Server/microsoft.public.inetserver.iis/2005-01/0581.html>

---

**From:** Joris Dobbelsteen (*joris.dobbelsteen\_at\_mail.com*)

**Date:** 01/10/05

Date: Mon, 10 Jan 2005 17:42:16 +0100

I believe the active and passive are similar to the FTP used names.  
Active is the number of connections that are initiated by the system.  
Passive is the number of connections that are received by the system.

They should indeed be increasing. For the assumption I guess you are using monitoring the IIS Server. So Active is an indication for the connections to the SQL server (or other services). Passive is the number of received connections (200 client connections / minute).

Check IIS Server for high loads on the CPU.  
Might be that the application is CPU very intensive.  
How about the bandwidth to the clients?

For the SQL server some indications might be:  
Monitor Disk for high loads, these may indicate problems here  
Monitor CPU, high loads indicate problems in this area. Might be caused by any number of problems probably you should look to optimize the queries or indexes. Worse designed databases can easily eat a server.  
SQLServer:SQL Statistics -> Batch Requests/sec is an indiction for the workload.  
SQLServer:Locks -> Lock Waits/sec or ... -> Lock Wait Time (ms). Increasing values indicates that active queries are waiting for other queries. Heavy locking will reduce performance.  
Also monitor database size (is it growing?)

Also database size, queries and indexes can make huge differences. I had a database that filled up and a query took 3-5 minutes to complete, some tuning reduced the time to 30 seconds and I believe it also scales much better for larger data sets.

If the problem is the SQL Server you can also use the SQL Server "Profiler" to see what queries are costing most CPU/Disk reads or writes. Capturing takes performance of the SQL server, but you can afterwards run the Index Optimizer Wizard and let it suggest some changes (run the wizard when its quite, it takes some performance too).

You can do the trace also on the server, storing it in a file. SQL Profiler can create the script to do so. This reduces the performance hit. Later you can load the file into the SQL profiler and analyze it.

Maybe the application can be optimized and reduce the load significantly...

But first find out what the problem is...

– Joris

"themeanies" <themeanies@nowhere.net> wrote in message  
news:10tu09pe9pqkp75@corp.supernews.com...

- > *Our main internal IIS server has been experiencing a slowdown recently*
- > *due to load. This is an internal fully patched Win2K3 server running 7*
- > *asp sites. Only one site is heavily accessed and it is database*
- > *connection intensive. Both the IIS server and SQL server are dual*
- > *gigabit teamed connections. Bandwidth between the two servers is not a*
- > *problem.*
- >
- > *Specifically my question is about the perfmon counters for TCPv4. The*
- > *following two counters are slowly increasing post re-boot. Is this*
- > *expected behavior?*
- >
- > *Connection Active and Connection Passive at a rate of about 50 and 200*
- > *per minute respectively.*
- >
- > *The code is very lean, but like I said very transactional.*
- >
- > *Do you have any suggestions for working through growing pains like this?*
- >
- > *tM*