

Re: Internal connection fatal error

Source:

<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.framework.adonet/2004-08/0127.html>

From: Max Metral (*memetral_at_hotmail.com*)

Date: 08/03/04

Date: Mon, 2 Aug 2004 20:51:07 -0400

The system is **definitely** loaded. At that time we were doing about 50 pages per second, all hitting the db. It's just the nature of the app... We tuned things down another notch, and it's gotten a bit better, but I still see errors, and this isn't the way the system should fail... (i'll try the QFE Angel suggests, maybe that will move the problem one step further).

Another strange thing... The db is CPU bound it seems. The disk queue length stays very low, even under heavy load, but the dual hyperthreaded procs are maxed out. I've never seen the db be the bottleneck in a db before, it seems it's almost always disk or mem or something. What sorts of things might be big culprits here? UDFs? The memory bus bandwidth? The Quake server? (just kidding)

--Max

"William (Bill) Vaughn" <billvaRemoveThis@nwlk.com> wrote in message news:edFy80DeEHA.724@TK2MSFTNGP10.phx.gbl...

> *80 connections in the pool tells me this is a heavily loaded system.*

Saying

> *that means that it's being asked to process more work than it can handle.*

> *Think of the connection pool (number of connections in the pool) as the*

> *system tachometer. 100 connections is "overrev". Even a heavily loaded*

> *system should make do with far fewer connections in the pool.*

> *Yes, if an operation fails at the server, the connection can be broken.*

This

> *is not that uncommon so your error handlers need to be prepared for it.*

If

> *the connection breaks, the connection is unusable--but the pooler will still*

> *try to reuse it (once). Your app gets an exception when it tries to use a*

> *broken connection, but the pooler tears it down. In ADO 2.0, the whole*

pool

> *is tossed if the pooler thinks the server has crashed and you can choose to*

> *toss the pool on your own.*

> *When an application "inherits" a connection, it's cleared (reset) of its*

> *"Environment" settings so you should not have one instance inherit "stuff"*
> *from another--UNLESS you disabled the reset mechanism to get better*
> *performance.*
>
> *hth*
>
> --
>
> _____
> *William (Bill) Vaughn*
> *Author, Mentor, Consultant*
> *Microsoft MVP*
> *www.betav.com*
> *Please reply only to the newsgroup so that others can benefit.*
> *This posting is provided "AS IS" with no warranties, and confers no*
> *rights.*
> _____
>
> *"Max Metral" <memetral@hotmail.com> wrote in message*
> *news:OCIXOr1dEHA.3864@TK2MSFTNGP10.phx.gbl...*
> > *LAN connection, which isn't especially loaded (.27% according to*
> *perfmon).*
> > *The pool stabilizes at about 80 connections under heavy load, although I*
> > *just got one of these errors with 10 in the pool. I also wonder whether*
> > *it's some sort of "dirty" connection in the pool, is this possible?*
> *i.e.*
> > *something like:*
> >
> > *1) Expensive query in web page*
> > *2) user hits stop, recordset still "in" the connection*
> > *3) connection goes back in pool*
> > *4) another thread gets conn*
> > *5) conn is in weird state, all bets off (also would explain errors like*
> > *missing columns, sort of)*
> >
> > *I realize this kind of diagnosis is indistinguishable from guessing, but*
> > *you*
> > *never know*
> >
> > *"William (Bill) Vaughn" <billvaRemoveThis@nwind.com> wrote in message*
> > *news:OqP135xdEHA.384@TK2MSFTNGP10.phx.gbl...*
> > > *Turn on Perfmon and watch the connection pool. Is it constantly*
> > > *growing*
> > > *over*
> > > *time or does it flatten out after a few minutes under load? Is the*
> > > *network*
> > > *stable? Are you connecting over a LAN, WAN or web? If you lose a*
> > > *connection*
> > > *due to IO problems on the wire, you can get this type of exception.*
> > >
> > > --
> > > _____

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> > >
> > > *"Max Metral" <memetral@hotmail.com> wrote in message*
> > > *news:OPsOqrmdeHA.3212@TK2MSFTNGP12.phx.gbl...*
> > > > *I've seen other posts about such errors, but never a solution. It*
> > > > *seems*
> > > > *to*
> > > > > *appear randomly under load. We are pretty vigilant about "using"*
> > > > > *IDataReader's and Connections, so it's pretty unlikely that we're*
> > > > > *doing*
> > > > > *something outwardly wrong that would excuse this sort of behavior.*
> > > > *The*
> > > > > *stack is:*
> > > > >
> > > > > *TARGETSITE: System.Data.SqlClient.SqlDataReader*
> > > > > *ExecuteReader(System.Data.CommandBehavior,*
> > > > > *System.Data.SqlClient.RunBehavior, Boolean)*
> > > > >
> > > > > *STACKTRACE: at*
> > > > > *System.Data.SqlClient.SqlCommand.ExecuteReader(CommandBehavior*
> > > > > *cmdBehavior,*
> > > > > *RunBehavior runBehavior, Boolean returnStream)*
> > > > > *at System.Data.SqlClient.SqlCommand.ExecuteReader()*
> > > > > *at Web.MyPage.Page_Load(Object sender, EventArgs e)*
> > > > > *<removed by me>*
> > > > >
> > > > > *Perhaps related, we also see random errors like this about columns*
> > > > > *we*
> > > > > *KNOW*
> > > > > > *exist in recordsets that are being returned:*
> > > > > >
> > > > > > *MESSAGE: eventId*
> > > > > > *SOURCE: System.Data*
> > > > > > *TARGETSITE: Int32 GetOrdinal(System.String)*
> > > > > > *STACKTRACE: at System.Data.Common.FieldNameLookup.GetOrdinal(String*
> > > > > > *fieldName)*
> > > > > > *at System.Data.SqlClient.SqlDataReader.GetOrdinal(String name)*
> > > > > > *at MyObject..ctor(IDataReader eventReader, EventArgs eventData)*
> > > > > > *<removed by me>*
> > > > > >
> > > > > > > *This is definitely unacceptable behavior from ADO, SQL Server, or*
> > > > > > > *both...*
> > > > > > > *No*
> > > > > > > > *code that an end user writes in a managed language should be able to*

> > > *create*
> > > > *this kind of untraceable havoc.*
> > > >
> > > > *Any thoughts?*
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