

Re: Deadlock questions

Source:

<http://www.tech-archive.net/Archive/SQL-Server/microsoft.public.sqlserver.server/2004-07/3472.html>

From: Greg Linwood (g_linwood@hotmail.com)

Date: 07/25/04

Date: Sun, 25 Jul 2004 14:17:53 +1000

I just tried the tinyurl site & it seems to be up now, but in case you still can't get at it, here's the long version:

<http://groups.google.com.au/groups?hl=en&lr=&ie=UTF-8&frame=right&th=e61687c0b5d1727a&seekm=Q9foUNG>

Regards,
Greg Linwood
SQL Server MVP

"Hassan" <fatima_ja@hotmail.com> wrote in message
news:uL0J52EcEHA.2812@TK2MSFTNGP11.phx.gbl...

> *Also cant view the site you mentioned regarding parallelism deadlock*

>

>

> *"Greg Linwood" <g_linwood@hotmail.com> wrote in message*

> *news:uDiqgU5bEHA.1652@TK2MSFTNGP09.phx.gbl...*

> > *Hi Hassan*

> >

> > *There's an example of a parallelism deadlock in the newsgroup archive*
> *here:*

> > *<http://tinyurl.com/4atwl>. These can be nasty to solve.*

> >

> > *As far as how the report structure from the article would read*
normally –

> > *the nodes basically have their information represented upside down in*
the

> > *article, as if the report has been partially pulled from the SQL*

> *Enterprise*

> > *Manager's log viewer. Most people who actually read & use these reports*
in

> > *the real world access them directly from the log files (not the SQL EM*

> > *viewer) so that they can be read in the intended order. The key thing*

> *here*

> > *is that the locked resources are declared at the top of the Node report*

> > *block, which makes the report slightly intuitive. From the log, this*

> > *particular report would be formatted something like this:*

> >

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> > *Wait-for graph*
> > *Node:1*
> > *KEY: 8:1653632984:2 (da00ce043a9e) CleanCnt:1 Mode: U Fl ags: 0x0*
> > *Grant List 0::*
> > *Owner:0x1937f2a0 Mode: S Flg:0x0 Ref:1 Life:00000000 SPID:55*
ECID:0
> > *SPID: 55 ECID: 0 Statement Type: EXECUTE Line #: 1*
> > *Input Buf: RPC Event: sp_cursoropen;1*
> > *Requested By:*
> > *ResType:LockOwner Stype:'OR' Mode: X SPID:60 ECID:0 Ec:(0x1F1BB5B0)*
> > *Value:0x193*
> > *Victim Resource Owner:*
> > *ResType:LockOwner Stype:'OR' Mode: S SPID:55 ECID:0 Ec:(0x33AE1538)*
> > *Value:0x193*
> >
> > *Node:2*
> > *KEY: 8:1653632984:1 (2d018af70d80) CleanCnt:1 Mode: X Flags: 0x0*
> > *Grant List 0::*
> > *Owner:0x1936e420 Mode: X Flg:0x0 Ref:0 Life:02000000 SPID:60*
ECID:0
> > *SPID: 60 ECID: 0 Statement Type: UPDATE Line #: 1*
> > *Input Buf: Language Event: Update tblQueuedEvents Set NotifyID = 2,*
> > *ResynchDate*
> > *Requested By:*
> > *ResType:LockOwner Stype:'OR' Mode: S SPID:55 ECID:0 Ec:(0x33AE1538)*
> > *Value:0x193*
> >
> > *Regards,*
> > *Greg Linwood*
> > *SQL Server MVP*
> >
> > *"Hassan" <fatima_ja@hotmail.com> wrote in message*
> > *news:%23COH\$PsbEHA.384@TK2MSFTNGP10.phx.gbl...*
> > > *Thanks Greg,*
> > >
> > > *How would the graph actually read ? Have you any idea how the graph*
> > > *would*
> > > *look like should it involve parallelism or threads as is also*
> > > *mentioned*
> > > *in*
> > > > *the article ?*
> > > >
> > > > *"Greg Linwood" <g_linwood@hotmail.com> wrote in message*
> > > > *news:uf1WjzibEHA.3596@tk2msftngp13.phx.gbl...*
> > > > > *Hi Hassan*
> > > > >
> > > > > *Answered inline:*
> > > > >
> > > > > *"Hassan" <fatima_ja@hotmail.com> wrote in message*
> > > > > *news:eOyTG6dbEHA.2840@TK2MSFTNGP11.phx.gbl...*
> > > > > > *I had some questions based on this article*

Re: Deadlock questions

>>>> > <http://www.support.microsoft.com/?id=832524>
>>>>>
>>>>> With regards to the deadlock graph, it states
>>>>>
>>>>> "Next, in Node 1, Request By, SPID 55 requested a shared lock,
Mode:
>>> S,
>>> on
>>>>> IndexId=1. In Node 2, Request By, SPID 60 requested an exclusive
> lock,
>>>> Mode:
>>>>> X, on IndexId=2. Because these lock requests occur at the same
time,
>>> the
>>>>> deadlock occurs. Each SPID's granted locks are preventing the
>>> requested
>>>>> locks from continuing"
>>>>>
>>>>> How does it know that SPID 55 is requesting a lock on IndexId=1
and
>>> that
>>>>> SPID 60 is requesting a lock on IndexId=2. Am i suppose to assume
> that
>>>> bcos
>>>>> of the granted locks ?
>>>>>
>>>>> Yes, that's correct. It makes sense because this is the nature of a
>>>>> deadlock – that resource owners are waiting on each other for locks
>>> against
>>>>> the resources each other already has granted.
>>>>>
>>>>>>
>>>>>> Which SPID is the deadlock victim here ..i.e which SPID was killed
?
>>> Is
>>>> it
>>>>>> SPID 60 ?
>>>>>>
>>>>>> Yes. The report in the article is not formatted correctly which
makes
>>> this
>>>> a
>>>>>> little confusing.
>>>>>>
>>>>>>>
>>>>>>>> Any info in addition to that article is highly appreciated.
>>>>>>>>
>>>>>>>>
>>>>>>>>> I have responded to the private newsgroup about this article already
>>>>>>>>> but
>>>>>>>>>> so

>>>> *far I've been ignored. I was hoping this article would be corrected*
>> *before*
>>>> *being released so I'm disappointed to see that you've encountered it*
> *in*
>>> *such*
>>>> *a confused state.*
>>>>
>>>> *Here are some additional comments I posted to the private newsgroup*
>> *which*
>>>> *you might find helpful:*
>>>>
>>>> *A few issues I picked up in this article:*
>>>>
>>>> *(a) "The following is a sample of the output that you might see in*
the
>> *SQL*
>>>> *Server error log when you use the -T1205 startup parameter. ". That*
>> *should*
>>>> *be -T1204, not -T1205*
>>>>
>>>> *(b) The example graph report is messed up & does not read in order.*
> *Sure*
>>> *the*
>>>> *EM reads log files in reverse, but this one seems right out of*
> *kilter -*
>>> *for*
>>>> *the purpose of the article, it should probably be set out in proper*
>>> *order..*
>>>>
>>>> *(c) The statement "An IndexId that is equal to 2 is a nonclustered*
>> *index."*
>>>> *seems not to communicate it's intended message very well. A non*
>> *clustered*
>>>> *index may have a value of 2 or greater, not just 2.*
>>>>
>>>> *(d) The article suggests first to use startup parameters rather than*
>> *dbcc.*
>>>> *Why suggest to users that they stop the server when they don't have*
> *to?*
>>>>
>>>> *Otherwise, this would be a useful article to the many who ask about*
> *this*
>>> *in*
>>>> *the NGs..*
>>>>
>>>> *Regards,*
>>>> *Greg Linwood*
>>>> *SQL Server MVP*
>>>>>
>>>>> *Thanks*
>>>>>

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