Re: AS2005 x64 vs x86 performance

Source:
http://www.tech−archive.net/Archive/SQL−Server/microsoft.public.sqlserver.olap/2006−08/msg00074.html

- *From*: "Akshai Mirchandani [MS]" <akshaim@xxxxxxxxxxxxxxxxxxxx>
- *Date*: Wed, 26 Jul 2006 09:47:33 −0700

Sorry, I can't explain this behavior... It would appear to be some sort of
locking issue where the operation may be waiting to obtain a commit lock and
is blocked by some other session.

Perhaps you have enabled proactive caching and it is busy doing some work?
When you run Profiler against the server do you see any other activity?

Also, I would suggest that you try my earlier suggestion of installing the
x86 version on the x64 hardware and see if the behavior is similar.

Thanks,
Akshai
−−
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http://forums.microsoft.com/MSDN/ShowForum.aspx?ForumID=83&SiteID=1

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"Radu Colceriu" <radu_colceriu@xxxxxxxxxxx> wrote in message
news:uceEFwIsGHA.4612@xxxxxxxxxxxxxxxxxxxxxxx

> I've traced with profiler the XMLA sent to AS. I've modified a role diving
> it Admin priviledges. The management studio sent 2 XMLA to as wich total
> execution time was around 15 sec. I was alone on the server.
> Each execution made one execution unit 100%.
>
> In the meantime the server was not able to respond queries sent to other
> database. As soon as the XMLA was executed the queries get answered.
>
> I have AS 2005 EE x64., 2x processor license.
>
> Thanks,
> Radu

−−− first
<Alter AllowCreate="true" ObjectExpansion="ObjectProperties"
xmlns="http://schemas.microsoft.com/analysisservices/2003/engine>
<Object>
<DatabaseID>ROEFIX_PROD</DatabaseID>
<RoleID>Einkauf</RoleID>
</Object>
<ObjectDefinition>
<Role xmlns:xsd="http://www.w3.org/2001/XMLSchema
xmlns:xsi="http://www.w3.org/2001/XMLSchema−instance>
<ID>Einkauf</ID>
<Name>Einkauf</Name>
<Members>
<Member>
<Name>RRO\escharin</Name>
</Member>
<Member>
<Name>RRO\agut</Name>
</Member>
</Members>
</Role>
</ObjectDefinition>
</Alter>

<PropertyList xmlns="urn:schemas−microsoft−com:xml−analysis">
<Timeout>0</Timeout>
<SspropInitAppName>Microsoft SQL Server Management
Studio</SspropInitAppName>
<LocaleIdentifier>3079</LocaleIdentifier>
<ClientProcessID>2076</ClientProcessID>
</PropertyList>

−−− second
<Alter AllowCreate="true" ObjectExpansion="ObjectProperties"
xmlns="http://schemas.microsoft.com/analysisservices/2003/engine>
<Object>
<DatabaseID>ROEFIX_PROD</DatabaseID>
<DatabasePermissionID>Einkauf</DatabasePermissionID>
</Object>
<ObjectDefinition>
<DatabasePermission
xmlns:xsd="http://www.w3.org/2001/XMLSchema
xmlns:xsi="http://www.w3.org/2001/XMLSchema−instance>
<ID>Einkauf</ID>
<Name>Einkauf</Name>
<RoleID>Einkauf</RoleID>
<Process>true</Process>
<ReadDefinition>Allowed</ReadDefinition>
<Read>Allowed</Read>
<Administer>true</Administer>
</DatabasePermission>

</ObjectDefinition>
</Alter>

<PropertyList xmlns="urn:schemas−microsoft−com:xml−analysis">
<Timeout>0</Timeout>
<SspropInitAppName>Microsoft SQL Server Management Studio</SspropInitAppName>
<LocaleIdentifier>3079</LocaleIdentifier>
<ClientProcessID>2076</ClientProcessID>
</PropertyList>

"Akshai Mirchandani [MS]" <akshaim@xxxxxxxxxxxxxxxxxxx> wrote in message news:eU7qMyAsGHA.1272@xxxxxxxxxxxxxxxxxxxxxx

> It sounds like the difference is unrelated to query performance and disk i/o etc.
>
> My guess is that it is something environmental −− perhaps you have lots of active sessions on the 64−bit server which causes transaction commit to be an expensive operation because it has to refresh active sessions. Or the cached data on the 64−bit server is much larger and it the commit operation is releasing memory pages... Or perhaps you have lots of other databases on the 64−bit server that are not present on the 32−bit server.
>
> Have you tried to restart the AS process on the 64−bit box? Also, I would suggest taking a look at the event log to see if there are unusual errors/warnings reported there...
>
> Another option to try would be to rename your current data folder and start from a new data folder, restore the backup file and work from there...
>
> Thanks,
> Akshai
> −−
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> "Radu Colceriu" <radu_colceriu@xxxxxxxxxxx> wrote in message news:OCWuSv7rGHA.4580@xxxxxxxxxxxxxxxxxxxxxx

Hi,

The query performance is quite good. My issues are related with XMLA
command execution (metadata operations) like create/modify aggregation
design, roles a.s.o.

The server is dual dual−core with HT .(8 virt exec units). When an XMLA
is executed one of the execution units goes 100% for some seconds
(10−20).
For example I've just redesigned the aggregations for a MOLAP partition
using the wizard. At the last step (pressing Finish) the window freeze
for (10−20) sec and the msmdsrv.exe process going 100% on one execution
unit. I've used the management studio on the server via remote desktop.
I've taked the backup of the OLAP database, restore−it to a PC (3.2Ghz
P4, x86) and make the same operation wich there takes 1−2 sec.
All XMLA commands are somehow very slow executed on the server. The SLQ
is SP1 build 2153. The Win2003 OS is up to date with SP1 and all online
updates available.

Thanks,
Radu

"Akshai Mirchandani [MS]"
<akshaim@xxxxxxxxxxxxxxxxxxx> wrote in message
news:OlxE6e1rGHA.516@xxxxxxxxxxxxxxxxxxxxxx

> It is not accurate that a single partition query cannot be
> parallelized. It is the formula engine that is serialized in evaluating
> calculations. Some metadata operations will also be serialized (like
> create/alter/delete).
>
> However, your description below is a little confusing to me −− do you
> find that it is only the metadata operations (create/alter/process)

that are slow on the x64 box. Are queries
fast? That may indicate
network issues if just processing is slow...

Are the number of databases on the x64 box
equivalent to the 32−bit
box? And the environments? Perhaps
Profiler would help narrow things
down a little more.

One thing you could try is to install a new
x86 instance on the x64 box
and see how slow/fast it works −− if it is
also slow, then that would
indicate an environment/hardware issue.

Also, keep in mind that 64−bit is not
expected to necessarily give you
better performance −− but rather better
scalability. In fact, an x64
application has to deal with double pointer
sizes and this can cause
some perf degradation in some cases. In
other cases, the larger
physical memory available makes better
caching possible which helps
performance of queries.

Thanks,
Akshai
−−
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"Radu Colceriu"
<radu_colceriu@xxxxxxxxxxx> wrote in
message
news:eLuV0b$qGHA.4336@xxxxxxxxxxxxxxxxxxxxxxx

> It's sad to hear that the
> MDX queries on a single
> partition cannot be

paralelised :(

The disk sys on the xeon srv
is a FC SAN where I have
an array of 4 FC
HDD in RAID 10... quite
fast.

What is bothering me are
the XMLA commands. For
example, saving
aggregations (XMLA) on
the PC is almost twice as
fast as on the XEON
server ... Xeon 2.8GHz, PC
3.2 GHz... so in this case
GHz >
Mutiprocesor :(

"Jéjé"
<willgart_A_@xxxxxxxxxxxxxx>
wrote in message
news:eSz1rT$qGHA.4508@xxxxxxxxxxxxxxxxxxxxxxx

a standard
MDX query
against a
non
partitionned
cube use
only 1
thread
so 1 CPU.
if you have
partitions or
a query
which ask
for
measures
from
different
measure
group you
should see
more then 1
CPU to
works at

the same
time.

its true,
sometimes a
single PC is
better then a
Xeon
server, but
not
when you
start to have
multiple
users or
processes.

sorry to say
this, but I
also found
SATA
drives far
better then
SCSI
drives!!!
SCSI drives
are good
only when
the
controller
has enough
cache.
so take a
look at your
disks and
test them.

"Radu
Colceriu"
<radu_colceriu@xxxxxxxxxxx>
wrote in
message
news:%23IxPW18qGHA.1852@xxxxxxxxxxxxxxxxxxxxxxx

HI..

I
have
an
setup
like
–

2xXeon
2.8
dual−core
8GRAM,
Win2003
x64,
SQL
2005
EE
x64
–
PC
P4
3.2G
2
G
RAM.
Win
2003
x86
SQL
2005
EE
x86

I
don't
know
why
but
on
the
PC
the
AS
is
working
much
faster
than
on
the
Xeon
system.

Especially
designig
agregation/creating
roles/
creating
partitions

a.s.o.
So
it
seems
that
the
same
XMLA
is
executed
almost
twice
as
fast
on
the
PC
than
on
the
dual
xeon.

On
the
dual
xeon
maschine
each
time
an
XMLA
is
executed,
one
of
the
8
(2xdualcore
+
hyperthreading)
"cores"
is
100%
but
all
other
are
doing
nothing.

On
the
same
maschines
SQL
is
running
much
faster
on
the
Xeon
maschine
than
on
the
PC.

Any
ideeas?

Thanks,
Radu

.