

# Re: replication latency

---

*Source:*

<http://www.tech-archive.net/Archive/SQL-Server/microsoft.public.sqlserver.replication/2006-09/msg00095.html>

---

- *From:* "XNMB" <[ChristianBautista@xxxxxxxxxx](mailto:ChristianBautista@xxxxxxxxxx)>
  - *Date:* 6 Sep 2006 03:24:34 -0700
- 

Thanks for your input Hilary.

Your problem is that you should be using merge replication. Queued updating does not scale well when you have a significant portion of your DML occurring on the subscriber.

I don't think merge would be a good option since we need changes to be applied to and from Publisher/Subscribers as close to real time as possible. The setup is more of a server-to-server environment rather than server-to-client. Also, given the sheer number of transactions/commands executed/applied in any of the servers, probability of conflict will be very high using merge.

I am also wondering why you have the mix of Queued and Immediate.

We need transactions committed as quickly as possible in Manila (Server C). 2PC (used in immediate updates) does not meet this requirement. This means applications would need to wait for the subscriber to connect to the publisher before transactions are committed, defeating the purpose of using a local DB server (to speed up performance). Server B uses immediate since it's connected to the same local network of Server A hence a 2PC doesn't have much impact in performance. Updates are delivered to the publisher almost instantaneously, which is not the case if Server C (Manila) were configured using immediate updates.

Also are you sure you need bi-directional functionality?

Yes, of course. The crux of this setup is to distribute different sites and applications among these 3 DB servers (in our effort to balance the load). All data are required by all sites/applications running in any of the servers, as close to real time as possible.

Re: replication latency

Any more suggestions?

Thanks you very much to everyone for your help.

xnmb

Hilary Cotter wrote:

Your problem is that you should be using merge replication. Queued updating does not scale well when you have a significant portion of your DML occurring on the subscriber. I am also wondering why you have the mix of Queued and Immediate.

Also are you sure you need bi-directional functionality?

—

Hilary Cotter  
Director of Text Mining and Database Strategy  
RelevantNOISE.Com – Dedicated to mining blogs for business intelligence.

This posting is my own and doesn't necessarily represent RelevantNoise's positions, strategies or opinions.

Looking for a SQL Server replication book?  
<http://www.nwsu.com/0974973602.html>

Looking for a FAQ on Indexing Services/SQL FTS  
<http://www.indexserverfaq.com>

"XNMB" <ChristianBautista@xxxxxxxx> wrote in message  
<news:1157512485.658280.266700@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>

Hello, the current setup is as follows:

Paris DB Server A [Publisher/Distributor/1Gbps LAN link/8Mbps WAN link]  
Paris DB Server B [Subscriber/Same LAN as Server A/1Gbps LAN link]  
Manila DB Server C [Subscriber/4Mbps WAN link (shared by entire company  
~100–150 workstations)]

Server B has 2 Publications:

Publication FULL: Transactional/Immediate updating subscriptions

Re: replication latency

Re: replication latency

[Subscriber: Server B]  
Publication MANILA:Transactional/Queued updating subscriptions  
[Subscriber: Server C]

Scenario:

- 1) Server A is primary production DB. ~10 sites/applications using DB. HEAVY on writes/reads
- 2) Server B is secondary production DB. ~2-5 sites/applications using DB. 60% read/40% write
- 3) Server C is intended for use by Manila users. ~1-5 sites/applications
- 4) Server C is CURRENTLY UNUSED by any application. Only activity at this time is receiving replicated commands from Distributor (Server A)
- 5) No latency issues with Server A-->Server B and vice versa.
- 6) Here's what I typically get on peak hours [Publication MANILA/Subscriber Server C]

Undistributed Commands Tab [Subscription Details]  
# of commands in Distribution (undelivered to subscriber): 1744838  
Estimated time to apply: 06:08:55

Tracer Tokens:  
Publisher to Distributor: 00:00:05 (I think this is default  
-PollingInterval value)  
Distributor to Subscriber: Taking too long to display

6) I have tweaked and experimented with the following distrib.exe switches with no luck:

-BcpBatchsize  
-CommitBatchSize  
-CommitBatchThreshold  
-PollingInterval

PLEASE HELP!

THANK YOU VERY MUCH!

xnmb

Re: replication latency

Hilary Cotter wrote:

Queued is slower than transactional. I am curious as to which is your publisher, which is your subscriber. And how is data flowing?

In which direction is it slow.

I would also advise you to look at using a multiple publications with the independent agent option and replicating the execution of stored procedures as well.

--

Hilary Cotter  
Director of Text Mining and Database Strategy  
RelevantNOISE.Com – Dedicated to mining blogs for business intelligence.

This posting is my own and doesn't necessarily represent RelevantNoise's positions, strategies or opinions.

Looking for a SQL Server replication book?  
<http://www.nwsu.com/0974973602.html>

Looking for a FAQ on Indexing Services/SQL FTS  
<http://www.indexserverfaq.com>

"Louie Lubangco" <lubangco@xxxxxxxxxxxxxxxxxxxx>  
wrote in message  
<news:e3BMBELOGHA.1536@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>

Hi all!

i'll go directly to my problem.

Our main db server is in Paris,France being replicated here in the Philippines. during peak hours ,which is around 9AM–3PM(PARIS TIME), replication takes more than an hour to finish. i know this is intolerable

Re: replication latency

that's why im here to seek advice,tips from  
you guys.

Thanks in advance,  
Louie from PH