The status of Tencent patches into Spider

Spiral-Arms
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Tencent patches

1. fix cmake in windows
2. limit pre_scan
3. "force index" push down
4. fix bug at opening table
5. optimization for limit x,y
6. function, connection pool
7. fix table_name size of spider_tables
1. fix cmake in windows

Will’s comment
“ldd spider.dll under right way”

Description of this changes
For debugging on windows.

Merge status
Finished
2. limit pre_scan

Will’s comment
“pre_scan would cause remote mysql net write timeout, especial for scenes like mysqldump/insert ... select ... , because mysqldump cost lots of time for each remote shard mysql”

Description of this changes
For avoiding timeout at using parallel search.

Merge status
Finished
3. "force index" push down

Will’s comment
“We would need to specify the index sometimes, push down "force index" may help.”

Description of this changes
For pushdown index hints.

Merge status
Finished
4. fix bug at opening table

Will’s comment
“share->init would cause dead loop”

Description of this changes
A specific case at opening table caused eternal loop.

Merge status
Finished
5. optimization for limit $x,y$

Will’s comment

“before, query with limit $x,y$ would fetch $x+y$ rows from each remote mysql, then return $y$ rows to client
after, query with limit $x,y$ would determine the target partition first by using select count(*) in turn, then got the result from one or more partition

In the game scene, game server always using 'limit $x,y$' to load core data from database to game server's cache. As a result, the optimization for 'limit $x,y$' is necessary in game scene.”
5. optimization for limit x,y

Description of this changes
For optimizing limit with offset for partitioned Spider table without index scan.

Merge status
Finished
6. function, connection pool

Will’s comment

“1. add parameter, spider_max_connections default 0 means disable the connection pool; spider_max_connections > 0 means enable connection pool and each remote instance can have spider_max_connections connections from spider node at most.

2. spider_conn_wait_timeout defaults 10s, control the wait time when the connection pool has spider_max_connections connections and can not create a new connection.
6. function, connection pool

the core logic of connection pool is using 'pthread_cond_timedwait' when connection pool is full, using pthread_cond_signal when spider_free_conn_from_trx
more detail see the function spider_get_conn_from_idle_connection and spider_free_conn_from_trx"
6. function, connection pool

Description of this changes
For adding max connection pool size feature to Spider.
(Spider already had connection pool feature, but it was always unlimited pool size.)

Merge status
Finished
7. fix `table_name` size of `spider_tables`

Will’s comment

“change the length of `table_name` from 64 to 256”

Description of this changes

For expanding `table_name` size on Spider system tables for long table and partition name. `table_name` size is now 199. (64+'#P#'+64+'#SP#'+64)

Merge status

Finished
Conclusion

All patches from Tencent are already merged into Spider tree.

Thanks to Will and Tencent Games DBA members!

It’s time to merge latest Spider into 10.2-spider tree!
Thank you for taking your time!

Any Questions? You can see me later! Come to visit me!!

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