



# The status of Tencent patches into Spider

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# Tencent patches

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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

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Will's comment

“Idd spider.dll under right way”

Description of this changes

For debugging on windows.

Merge status

Finished



## 2. limit pre\_scan

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### 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

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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

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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

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



## 5. optimization for limit x,y

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Description of this changes

For optimizing limit with offset for partitioned Spider table without index scan.

Merge status

Finished





## 6. function, connection pool

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### 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

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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

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### 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

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### 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

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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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