**[YCSB Benchmark Testing - Automated] :**

**MongoDB - Indexes on a separate partition**

[ root @ dbversity : ~ ] scp /home/mongod/ycsb-0.14.0.tar.gz [mognod@sd-cc1d-7c9e..com](mailto:sm70768@sd-cc1d-7c9e.nam.nsroot.net):/home/mognod

Password:

ycsb-0.14.0.tar.gz |  625MB | 66.9MiB/s | TOC: 00:00:09 | 100%

[ root @ dbversity : ~ ]

[ root @ dbversity : ~ ] cd /home/mongod/

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ] ll -lhtr

total 626M

-rw-r--r-- 1 mongod mongod  38K Aug 21 07:23 neo4j.conf.back

-rw-r--r-- 1 mongod mongod 626M Jan 25 05:10 ycsb-0.14.0.tar.gz

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ] tar -zxvf ycsb-0.14.0.tar.gz

ycsb-0.14.0/NOTICE.txt

ycsb-0.14.0/LICENSE.txt

ycsb-0.14.0/bin/ycsb.sh

ycsb-0.14.0/bin/ycsb.bat

----------

ycsb-0.14.0/lib/htrace-core4-4.1.0-incubating.jar

ycsb-0.14.0/lib/jackson-mapper-asl-1.9.4.jar

ycsb-0.14.0/lib/jackson-core-asl-1.9.4.jar

ycsb-0.14.0/lib/HdrHistogram-2.1.4.jar

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ] ll -lhtr

total 626M

-rw-r--r--  1 mongod mongod  38K Aug 21 07:23 neo4j.conf.back

-rw-r--r--  1 mongod mongod 626M Jan 25 05:10 ycsb-0.14.0.tar.gz

drwxr-xr-x 47 root root   4.0K Jan 25 05:39 ycsb-0.14.0

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ] cd ycsb-0.14.0

[ root @ dbversity : /home/mongod/ycsb-0.14.0 ]

[ root @ dbversity : /home/mongod/ycsb-0.14.0 ]

[ root @ dbversity : /home/mongod/ycsb-0.14.0 ] cd ..

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ] mv ycsb-0.14.0 /home/

[ root @ dbversity : /home/mongod ] ll -lhtr

total 626M

-rw-r--r-- 1 mongod mongod  38K Aug 21 07:23 neo4j.conf.back

-rw-r--r-- 1 mongod mongod 626M Jan 25 05:10 ycsb-0.14.0.tar.gz

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ]

[ root @ dbversity : /home/mongod ] cd /home/ycsb-0.14.0/

[ root @ dbversity : /home/ycsb-0.14.0 ] ll -lhtr

total 196K

-rw-r--r-- 1 dimon games  615 May 19 2018 NOTICE.txt

-rw-r--r-- 1 dimon games  12K May 19 2018 LICENSE.txt

drwxr-xr-x 2 dimon games 4.0K May 24  2018 workloads

drwxr-xr-x 2 root root  4.0K Jan 25 05:39 bin

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 accumulo1.6-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 accumulo1.7-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 accumulo1.8-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 aerospike-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 arangodb-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 arangodb3-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 asynchbase-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 cassandra-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 cloudspanner-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 couchbase-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 couchbase2-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 azuredocumentdb-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 azuretablestorage-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 dynamodb-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 elasticsearch-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 elasticsearch5-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 geode-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 googledatastore-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 googlebigtable-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 hbase098-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 hbase10-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 hbase12-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 hbase14-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 hbase20-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 hypertable-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 infinispan-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 jdbc-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 kudu-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 memcached-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 maprdb-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 maprjsondb-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 mongodb-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 nosqldb-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 orientdb-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 rados-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 redis-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 rest-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 riak-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 s3-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 solr-binding

drwxr-xr-x 3 root root  4.0K Jan 25 05:39 solr6-binding

drwxr-xr-x 4 root root  4.0K Jan 25 05:39 tarantool-binding

drwxr-xr-x 2 root root  4.0K Jan 25 05:39 lib

[ root @ dbversity : /home/ycsb-0.14.0 ]

[ root @ dbversity : /home/ycsb-0.14.0 ]

[ root @ dbversity : /home/ycsb-0.14.0 ] mkdir /ycsb

[ root @ dbversity : /home/ycsb-0.14.0 ]

[ root @ dbversity : /home/ycsb-0.14.0 ]

[ root @ dbversity : /home/ycsb-0.14.0 ]

[ root @ dbversity : /home/ycsb-0.14.0 ] cp -r NOTICE.txt LICENSE.txt workloads/ mongodb-binding/ bin/ lib/ /ycsb/

[ root @ dbversity : /home/ycsb-0.14.0 ]

[ root @ dbversity : /home/ycsb-0.14.0 ]

[ root @ dbversity : /home/ycsb-0.14.0 ] cd /ycsb/

[ root @ dbversity : /ycsb ] ll -lhtr

total 32K

-rw-r--r-- 1 root root  615 Jan 25 05:43 NOTICE.txt

-rw-r--r-- 1 root root  12K Jan 25 05:43 LICENSE.txt

drwxr-xr-x 2 root root 4.0K Jan 25 05:43 workloads

drwxr-xr-x 3 root root 4.0K Jan 25 05:43 mongodb-binding

drwxr-xr-x 2 root root 4.0K Jan 25 05:43 bin

drwxr-xr-x 2 root root 4.0K Jan 25 05:43 lib

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr mongodb-binding/

total 12K

-rw-r--r-- 1 root root 5.6K Jan 25 05:43 README.md

drwxr-xr-x 2 root root 4.0K Jan 25 05:43 lib

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] df -h

Filesystem Size  Used Avail Use% Mounted on

/dev/mapper/rootvg-lv\_root

                       47G   19G 26G  43% /

tmpfs 1.9G  8.0K  1.9G 1% /dev/shm

/dev/sda1 240M   99M  129M 44% /boot

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] mkdir /datafiles /dev/shm/indexfiles

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] /opt/mongodb/bin/mongod --wiredTigerDirectoryForIndexes --logpath /ycsb/mongod.log --dbpath /datafiles/ --port 27017 --fork

2019-01-25T05:55:00.966-0500 I CONTROL  [main] Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'

about to fork child process, waiting until server is ready for connections.

forked process: 17292

child process started successfully, parent exiting

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ps -ef | grep 27017

root 17292     1  5 05:55 ?        00:00:00 /opt/mongodb/bin/mongod --wiredTigerDirectoryForIndexes --logpath /ycsb/mongod.log --dbpath /datafiles/ --port 27017 --fork

root     17397 19663  0 05:55 pts/5    00:00:00 grep 27017

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] mongo --port 27017 --quiet

Welcome to the MongoDB shell.

For interactive help, type "help".

For more comprehensive documentation, see

<http://docs.mongodb.org/>

Questions? Try the support group

<http://groups.google.com/group/mongodb-user>

MongoDB Enterprise >

MongoDB Enterprise > use mydb

switched to db mydb

MongoDB Enterprise >

MongoDB Enterprise > db.mycol.createIndex({ name : 1})

{

"createdCollectionAutomatically" : true,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

MongoDB Enterprise > for(var i=0; i<= 10000; i++){

... db.mycol.insert({\_id:i, name: "SEPARATE DISC PARTTION FOR INDEXES"+i, iteration: "NO"+i})

... }

WriteResult({ "nInserted" : 1 })

MongoDB Enterprise >

MongoDB Enterprise > show collections

mycol

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > db

mydb

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > db.mycol.find()

{ "\_id" : 1, "name" : "SEPARATE DISC PARTTION FOR INDEXES0", "iteration" : "NO0" }

{ "\_id" : 0, "name" : "SEPARATE DISC PARTTION FOR INDEXES0", "iteration" : "NO0" }

{ "\_id" : 2, "name" : "SEPARATE DISC PARTTION FOR INDEXES2", "iteration" : "NO2" }

{ "\_id" : 3, "name" : "SEPARATE DISC PARTTION FOR INDEXES3", "iteration" : "NO3" }

{ "\_id" : 4, "name" : "SEPARATE DISC PARTTION FOR INDEXES4", "iteration" : "NO4" }

{ "\_id" : 5, "name" : "SEPARATE DISC PARTTION FOR INDEXES5", "iteration" : "NO5" }

{ "\_id" : 6, "name" : "SEPARATE DISC PARTTION FOR INDEXES6", "iteration" : "NO6" }

{ "\_id" : 7, "name" : "SEPARATE DISC PARTTION FOR INDEXES7", "iteration" : "NO7" }

{ "\_id" : 8, "name" : "SEPARATE DISC PARTTION FOR INDEXES8", "iteration" : "NO8" }

{ "\_id" : 9, "name" : "SEPARATE DISC PARTTION FOR INDEXES9", "iteration" : "NO9" }

{ "\_id" : 10, "name" : "SEPARATE DISC PARTTION FOR INDEXES10", "iteration" : "NO10" }

{ "\_id" : 11, "name" : "SEPARATE DISC PARTTION FOR INDEXES11", "iteration" : "NO11" }

{ "\_id" : 12, "name" : "SEPARATE DISC PARTTION FOR INDEXES12", "iteration" : "NO12" }

{ "\_id" : 13, "name" : "SEPARATE DISC PARTTION FOR INDEXES13", "iteration" : "NO13" }

{ "\_id" : 14, "name" : "SEPARATE DISC PARTTION FOR INDEXES14", "iteration" : "NO14" }

{ "\_id" : 15, "name" : "SEPARATE DISC PARTTION FOR INDEXES15", "iteration" : "NO15" }

{ "\_id" : 16, "name" : "SEPARATE DISC PARTTION FOR INDEXES16", "iteration" : "NO16" }

{ "\_id" : 17, "name" : "SEPARATE DISC PARTTION FOR INDEXES17", "iteration" : "NO17" }

{ "\_id" : 18, "name" : "SEPARATE DISC PARTTION FOR INDEXES18", "iteration" : "NO18" }

{ "\_id" : 19, "name" : "SEPARATE DISC PARTTION FOR INDEXES19", "iteration" : "NO19" }

Type "it" for more

MongoDB Enterprise >

MongoDB Enterprise > db.mycol.find().count()

100001

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > use admin

switched to db admin

MongoDB Enterprise >

MongoDB Enterprise > db.shutdownServer()

server should be down...

2019-01-25T06:05:15.085-0500 I NETWORK  [js] trying reconnect to 127.0.0.1:27017 failed

2019-01-25T06:05:15.085-0500 I NETWORK  [js] reconnect 127.0.0.1:27017 failed failed

MongoDB Enterprise >

MongoDB Enterprise > exit

2019-01-25T06:05:25.335-0500 I NETWORK  [js] trying reconnect to 127.0.0.1:27017 failed

2019-01-25T06:05:25.335-0500 I NETWORK  [js] reconnect 127.0.0.1:27017 failed failed

2019-01-25T06:05:25.336-0500 I QUERY    [js] Failed to end session { id: UUID("ec9846c8-9e63-4ceb-a590-eee11a6810b5") } due to SocketException: socket exception [CONNECT\_ERROR] server [couldn't connect to server 127.0.0.1:27017, connection attempt failed: SocketException: Error connecting to 127.0.0.1:27017 :: caused by :: Connection refused]

2019-01-25T06:05:25.339-0500 I NETWORK  [js] trying reconnect to 127.0.0.1:27017 failed

2019-01-25T06:05:25.339-0500 I NETWORK  [js] reconnect 127.0.0.1:27017 failed failed

2019-01-25T06:05:25.339-0500 I QUERY    [js] Failed to kill cursor 22832164596 due to SocketException: socket exception [CONNECT\_ERROR] server [couldn't connect to server 127.0.0.1:27017, connection attempt failed: SocketException: Error connecting to 127.0.0.1:27017 :: caused by :: Connection refused]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr /datafiles/collection/

total 2.8M

-rw------- 1 root root  32K Jan 25 06:05 4--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 2--4162995831310155665.wt

-rw------- 1 root root 2.7M Jan 25 06:05 10--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 0--4162995831310155665.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr /datafiles/index/

total 2.2M

-rw------- 1 root root  32K Jan 25 06:05 6--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 5--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 3--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 1--4162995831310155665.wt

-rw------- 1 root root 908K Jan 25 06:05 12--4162995831310155665.wt

-rw------- 1 root root 1.2M Jan 25 06:05 11--4162995831310155665.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] mv /datafiles/index/ /dev/shm/indexfiles/

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr  /dev/shm/indexfiles/index/

total 2.2M

-rw------- 1 root root  32K Jan 25 06:05 6--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 5--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 3--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 1--4162995831310155665.wt

-rw------- 1 root root 908K Jan 25 06:05 12--4162995831310155665.wt

-rw------- 1 root root 1.2M Jan 25 06:05 11--4162995831310155665.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]  ll -lhtr /datafiles/index/

ls: cannot access /datafiles/index/: No such file or directory

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ln -s /dev/shm/indexfiles/index/ /datafiles/index

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ls -la /dev/shm/indexfiles/index/

total 2180

drwx------ 2 root root     160 Jan 25 05:58 .

drwxr-xr-x 3 root root      60 Jan 25 06:06 ..

-rw------- 1 root root 1220608 Jan 25 06:05 11--4162995831310155665.wt

-rw------- 1 root root  929792 Jan 25 06:05 12--4162995831310155665.wt

-rw------- 1 root root   16384 Jan 25 06:05 1--4162995831310155665.wt

-rw------- 1 root root   16384 Jan 25 06:05 3--4162995831310155665.wt

-rw------- 1 root root   16384 Jan 25 06:05 5--4162995831310155665.wt

-rw------- 1 root root   32768 Jan 25 06:05 6--4162995831310155665.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ls -la /datafiles/index/

total 2180

drwx------ 2 root root     160 Jan 25 05:58 .

drwxr-xr-x 3 root root      60 Jan 25 06:06 ..

-rw------- 1 root root 1220608 Jan 25 06:05 11--4162995831310155665.wt

-rw------- 1 root root  929792 Jan 25 06:05 12--4162995831310155665.wt

-rw------- 1 root root   16384 Jan 25 06:05 1--4162995831310155665.wt

-rw------- 1 root root   16384 Jan 25 06:05 3--4162995831310155665.wt

-rw------- 1 root root   16384 Jan 25 06:05 5--4162995831310155665.wt

-rw------- 1 root root   32768 Jan 25 06:05 6--4162995831310155665.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr /datafiles/index

lrwxrwxrwx 1 root root 26 Jan 25 06:07 /datafiles/index -> /dev/shm/indexfiles/index/

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr /dev/shm/indexfiles/index/

total 2.2M

-rw------- 1 root root  32K Jan 25 06:05 6--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 5--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 3--4162995831310155665.wt

-rw------- 1 root root  16K Jan 25 06:05 1--4162995831310155665.wt

-rw------- 1 root root 908K Jan 25 06:05 12--4162995831310155665.wt

-rw------- 1 root root 1.2M Jan 25 06:05 11--4162995831310155665.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] /opt/mongodb/bin/mongod --wiredTigerDirectoryForIndexes --logpath /ycsb/mongod.log --dbpath /datafiles/ --port 27017 --fork

2019-01-25T06:09:55.051-0500 I CONTROL  [main] Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'

about to fork child process, waiting until server is ready for connections.

forked process: 20724

child process started successfully, parent exiting

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] mongo localhost:27017/mydb --quiet

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > for(var i=100001; i<= 200000; i++){ db.mycol.insert({\_id:i, name: "SEPARATE DISC PARTTION FOR INDEXES"+i, iteration: "NO"+i})  }

WriteResult({ "nInserted" : 1 })

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > exit

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr  /dev/shm/indexfiles/index/

total 4.4M

-rw------- 1 root root  16K Jan 25 06:09 1--4162995831310155665.wt

-rw------- 1 root root  32K Jan 25 06:10 3--4162995831310155665.wt

-rw------- 1 root root 1.9M Jan 25 06:21 12--4162995831310155665.wt

-rw------- 1 root root 2.4M Jan 25 06:21 11--4162995831310155665.wt

-rw------- 1 root root  36K Jan 25 06:35 6--4162995831310155665.wt

-rw------- 1 root root  36K Jan 25 06:35 5--4162995831310155665.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr /datafiles/

total 176K

-rw------- 1 root root   21 Jan 25 05:55 WiredTiger.lock

-rw------- 1 root root   45 Jan 25 05:55 WiredTiger

-rw------- 1 root root  114 Jan 25 05:55 storage.bson

drwx------ 2 root root 4.0K Jan 25 05:58 collection

lrwxrwxrwx 1 root root   26 Jan 25 06:07 index -> /dev/shm/indexfiles/index/

-rw------- 1 root root 4.0K Jan 25 06:09 WiredTigerLAS.wt

-rw------- 1 root root  32K Jan 25 06:09 \_mdb\_catalog.wt

drwx------ 2 root root 4.0K Jan 25 06:09 journal

-rw------- 1 root root    6 Jan 25 06:09 mongod.lock

-rw------- 1 root root  36K Jan 25 06:36 sizeStorer.wt

-rw------- 1 root root  68K Jan 25 06:36 WiredTiger.wt

-rw------- 1 root root 1.1K Jan 25 06:36 WiredTiger.turtle

drwx------ 2 root root 4.0K Jan 25 06:47 diagnostic.data

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] mongo localhost:27017/mydb --quiet

MongoDB Enterprise >

MongoDB Enterprise > use newdb

switched to db newdb

MongoDB Enterprise >

MongoDB Enterprise > db.newcol.createIndex({title:1})

{

"createdCollectionAutomatically" : true,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

MongoDB Enterprise > for(var i=0; i<= 10000; i++){ db.mycol.insert({\_id:i, title: "SEPARATE DISC PARTTION FOR INDEXES"+i, iteration: "NO"+i}) }

WriteResult({ "nInserted" : 1 })

MongoDB Enterprise >

MongoDB Enterprise > exit

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr /datafiles/

total 208K

-rw------- 1 root root   21 Jan 25 05:55 WiredTiger.lock

-rw------- 1 root root   45 Jan 25 05:55 WiredTiger

-rw------- 1 root root  114 Jan 25 05:55 storage.bson

lrwxrwxrwx 1 root root   26 Jan 25 06:07 index -> /dev/shm/indexfiles/index/

-rw------- 1 root root 4.0K Jan 25 06:09 WiredTigerLAS.wt

drwx------ 2 root root 4.0K Jan 25 06:09 journal

-rw------- 1 root root    6 Jan 25 06:09 mongod.lock

-rw------- 1 root root  36K Jan 25 06:50 \_mdb\_catalog.wt

-rw------- 1 root root  36K Jan 25 06:51 sizeStorer.wt

-rw------- 1 root root  96K Jan 25 06:51 WiredTiger.wt

-rw------- 1 root root 1.1K Jan 25 06:51 WiredTiger.turtle

drwx------ 2 root root 4.0K Jan 25 06:54 collection

drwx------ 2 root root 4.0K Jan 25 06:54 diagnostic.data

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr /datafiles/index/

total 4.5M

-rw------- 1 root root  16K Jan 25 06:09 1--4162995831310155665.wt

-rw------- 1 root root  32K Jan 25 06:10 3--4162995831310155665.wt

-rw------- 1 root root 1.9M Jan 25 06:21 12--4162995831310155665.wt

-rw------- 1 root root 2.4M Jan 25 06:21 11--4162995831310155665.wt

-rw------- 1 root root  32K Jan 25 06:49 6--4162995831310155665.wt

-rw------- 1 root root  36K Jan 25 06:49 5--4162995831310155665.wt

-rw------- 1 root root 4.0K Jan 25 06:50 1--3900947800863302651.wt

-rw------- 1 root root 4.0K Jan 25 06:50 2--3900947800863302651.wt

-rw------- 1 root root 120K Jan 25 06:54 4--3900947800863302651.wt

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr

total 48K

-rw-r--r-- 1 root root  615 Jan 25 05:43 NOTICE.txt

-rw-r--r-- 1 root root  12K Jan 25 05:43 LICENSE.txt

drwxr-xr-x 2 root root 4.0K Jan 25 05:43 workloads

drwxr-xr-x 3 root root 4.0K Jan 25 05:43 mongodb-binding

drwxr-xr-x 2 root root 4.0K Jan 25 05:43 bin

drwxr-xr-x 2 root root 4.0K Jan 25 05:43 lib

-rw-r--r-- 1 root root 6.1K Jan 25 06:54 mongod.log

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr bin/

total 40K

-rwxr-xr-x 1 root root 8.5K Jan 25 05:43 ycsb.sh

-rwxr-xr-x 1 root root 7.7K Jan 25 05:43 ycsb.bat

-rwxr-xr-x 1 root root  15K Jan 25 05:43 ycsb

-rw-r--r-- 1 root root 3.2K Jan 25 05:43 bindings.properties

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr lib/

total 2.7M

-rw-r--r-- 1 root root 1.5M Jan 25 05:43 htrace-core4-4.1.0-incubating.jar

-rw-r--r-- 1 root root 760K Jan 25 05:43 jackson-mapper-asl-1.9.4.jar

-rw-r--r-- 1 root root 223K Jan 25 05:43 jackson-core-asl-1.9.4.jar

-rw-r--r-- 1 root root 102K Jan 25 05:43 HdrHistogram-2.1.4.jar

-rw-r--r-- 1 root root 144K Jan 25 05:43 core-0.14.0.jar

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] ll -lhtr

total 64K

drwxrwxrwx  2 root root 4.0K Jan 25 05:43 workloads

drwxrwxrwx  3 root root 4.0K Jan 25 05:43 mongodb-binding

drwxrwxrwx  2 root root 4.0K Jan 25 05:43 lib

-rwxrwxrwx  1 root root 1.9K Jan 25 07:19 stopsar.sh

-rwxrwxrwx  1 root root 1.6K Jan 25 07:19 runsar.sh

drwxr-xr-x  4 root root 4.0K Jan 30 02:17 jdbc-binding

drwxr-xr-x  2 root root 4.0K Feb 11 09:27 conf

-rw-r--r--  1 root root  615 Feb 12 04:30 NOTICE.txt

-rw-r--r--  1 root root  12K Feb 12 04:30 LICENSE.txt

drwxr-xr-x  3 root root 4.0K Feb 12 06:58 logs

drwxrwxrwx  2 root root 4.0K Feb 12 07:13 bin

drwxr-xr-x 11 root root 4.0K Feb 15 05:13 ycsb2graph-master

drwxr-xr-x  8 root root 4.0K Feb 15 05:38 ycsb\_starter-master

drwxr-xr-x  7 root root 4.0K Feb 15 05:43 backups

[ root @ dbversity : /ycsb ]

[ root @ dbversity : /ycsb ] cd ycsb\_starter-master/

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] ll -lhtr

total 140K

drwxr-xr-x  6 root root 4.0K Jan 30 03:19 ycsb-jdbc-binding-0.12.0

drwxr-xr-x  5 root root 4.0K Jan 30 03:19 ycsb-mongodb-binding-0.15.0

-rw-r--r--  1 root root  20K Jan 30 03:20 mongodb-binding-0.15.0.jar

drwxr-xr-x  3 root root 4.0K Jan 30 05:23 mongodb-binding

drwxr-xr-x  2 root root 4.0K Jan 30 05:25 conf

-rw-r--r--  1 root root   78 Jan 30 07:36 mongodb.properties

-rwxr-xr-x  1 root root  594 Feb  4 02:56 MDbIdxOnSame.sh

-rw-r--r--  1 root root  119 Feb 11 01:00 MDbIdxOnSep.properties

-rw-r--r--  1 root root   37 Feb 11 02:13 MDbIdxOnSame.properties

-rwxr-xr-x  1 root root  650 Feb 14 04:28 create\_database.sh

-rwxr-xr-x  1 root root  576 Feb 14 04:28 MDbIdxOnSep.sh

-rwxr-xr-x  1 root root  576 Feb 14 04:29 mongodb.sh

drwxr-xr-x 13 root root 4.0K Feb 14 12:57 backups

-rw-r--r--  1 root root  57K Feb 15 01:58 index.html

-rwxr-xr-x  1 root root 2.9K Feb 15 05:37 dotest\_funcs.sh

-rwxr-xr-x  1 root root 1.5K Feb 15 05:38 ycsb\_starter.sh

drwxr-xr-x  2 root root 4.0K Feb 15 05:42 Results.MDbIdxOnSame.20190215\_053845

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat ycsb\_starter.sh

#!/bin/sh

#==============================================================

# DESCRIPTION: Execute all the ycsb testing at once

# and generate results to parse for graph

#        FILE: ycsb\_starter.sh

#       USAGE: ./ycsb\_starter.sh [db.properties|-][time|-]

#                                [extra]

#      AUTHOR: Wen Zhenglin

#        DATE: 2016-8-16

#     VERSION: 1.0

#

# Notes:

# workloadtype include a,b,c,d,e,f

# Revision history:

# 1.0 (2016-8-16)Created.

#==============================================================

###### /ycsb/ycsb\_starter-master/create\_database.sh mongodb.sh

# specify db config file

db="$1"

if [ "x$db" = "x" -o "x$db" = "x-" ]; then

  echo "No db is specified, use default one"

  db="$( ls | grep properties | tail -1 )"

fi

# source functions ( it will setup the base directory )

. ./dotest\_funcs.sh

# output control

log="$base/main.log"

echo "see the log $log"

exec 6>&1

exec >>$log

exec 2>>$log

# do all workloads for a single count

start () {

count="$1"

workloads="a b c f d e"

  for j in $workloads; do

/ycsb/runsar.sh $j $count &

    starttest "$j" "$count" "$extra"

  done

}

# auto detect test

i=1024

while true; do

  # To check the Threads whether it is exceeding 2048

  if [ $i -gt 2048 ]; then

    break

  fi

  # do test

  echo "Starting count: $i"

  start $i

  i="$(( i \* 2 ))"

done

echo

echo "End at: $( date +%F\_%T )"

exec 1>&6 6>&-

# end

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat dotest\_funcs.sh

#!/bin/sh

#==============================================================

# DESCRIPTION: ycsb dotest funcs

#

#        FILE: dotest\_funcs.sh

#       USAGE: . ./dotest\_funcs.sh

#      AUTHOR: Wen Zhenglin

#        DATE: 2016-8-22

#     VERSION: 1.0

#

# Revision history:

# 1.0 (2016-8-22)Created.

#==============================================================

#mongo localhost:27017/ycsb --eval  "db.usertable.drop()"

#mongo localhost:27017/ycsb --eval "db.usertable.createIndex({field1:1})"

#mongo localhost:27017/ycsb --eval "db.usertable.createIndex({\_id:1,field1:1})"

IsExist () {

file="$1"

  ls "$1" >/dev/null

  if [ $? -ne 0 ]; then

    return 1

  fi

}

# define db outside

#db="../conf/db.properties"

if ! IsExist "$db" ; then

  echo "db conf $db not exists"

  exit 1

fi

dbname="$( basename $db | awk '{ print $1 }' FS='.' )"

base="Results.$dbname.$( date +%Y%m%d\_%H%M%S )"

#base="Results.d"

mkdir "$base" 2>/dev/null

sqlexecutor="$( echo "$dbname" | awk '{ print $1 }' FS='\_' )"

. ./$sqlexecutor.sh

if [ $? -ne 0 ]; then

  echo "Can't source dosql function, can't do sql delete"

  exit 1

fi

# do a sql test

$dosql "show tables;" >/dev/null

if [ $? -ne 0 ]; then

  echo "Can't connect to the database"

  exit 1

fi

# setenv

# the parent dir is ycsb home

cmd="../bin/ycsb"

load="$cmd load mongodb -P $db -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -jvm-args="-Xmx2048m" -s"

run="$cmd run mongodb -P $db -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -jvm-args="-Xmx2048m" -s"

delete () {

  $dosql "db.usertable.drop()"

  $dosql "db.usertable.createIndex({field1:1})"

  cnt="$( $dosql "db.usertable.count()" )"

  cnt="$( echo "$cnt" | grep -v -e row -e count )"

  echo "deleted, current count is: $cnt"

}

load () {

k="$1"

count="$2"

extra="$3"

wk="../workloads/workload$k"

  if ! IsExist "$wk" ; then

    echo "workload $wk not exists"

    return 1

  fi

suffix="$( echo $k | tr 'a-z' 'A-Z' )"

f="$base/$dbname-Workload$suffix-$count.load"

  $load -P $wk -p recordcount=1000000 -threads $count > "$f"

}

run () {

k="$1"

count="$2"

extra="$3"

  echo "For $dbname start workload$k test..."

suffix="$( echo $k | tr 'a-z' 'A-Z' )"

f="$base/$dbname-Workload$suffix-$count.result"

wk="../workloads/workload$k"

  if ! IsExist "$wk" ; then

    echo "workload $wk not exists"

    return 1

  fi

histgram="-p recordcount=1000000 -p operationcount=1000000 -threads $count"

param="-P $wk $histgram"

  if [[ $- == \*i\* ]]; then

f="/dev/stdout"

  fi

  $run $param $extra > "$f"

  echo "Workload$k test done."

  echo

}

# provide workload type, count, and or extra

starttest () {

k="$1"

count="$2"

extra="$3"

  if [ "x$k" = "xa" -o "x$k" = "xe" ]; then

    delete "$k" "$count" "$extra"

    load "$k" "$count" "$extra"

  fi

  run "$k" "$count" "$extra"

}

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat mongodb.properties

1. jdbc.driver=mongodb.jdbc.MongoDriver
2. db.url=jdbc:mongo://localhost:27017/ycsb

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat MDbIdxOnSame.properties

1. jdbc.driver=mongodb.jdbc.MongoDriver

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat MDbIdxOnSep.properties

1. jdbc.driver=mongodb.jdbc.MongoDriver

#db.url=jdbc:mongo://localhost:27017/ycsb&waitQueueMultiple=700&maxPoolSize=70000

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat MDbIdxOnSame.sh

#!/bin/bash

#==============================================================

# DESCRIPTION: mongodb sql executor

#

#        FILE: MongoDB.sh

#       USAGE: ./MongoDB.sh

#      AUTHOR: Wen Zhenglin

#        DATE: 2016-8-25

#     VERSION: 1.0

#

# Revision history:

# 1.0 (2016-8-25)Created.

#==============================================================

sqlcmd="/opt/mongodb/bin/mongo localhost:27017/ycsb"

msql () {

  $sqlcmd <<eof

  $@

eof

}

dosql="msql"

#$dosql "show collections;"

#$dosql "use ycsb;"

#$dosql "db.usertable.drop();"

#$dosql "db.usertable.count();"

# end.

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat MDbIdxOnSep.sh

#!/bin/bash

#==============================================================

# DESCRIPTION: mongodb sql executor

#

#        FILE: MongoDB.sh

#       USAGE: ./MongoDB.sh

#      AUTHOR: Wen Zhenglin

#        DATE: 2016-8-25

#     VERSION: 1.0

#

# Revision history:

# 1.0 (2016-8-25)Created.

#==============================================================

sqlcmd="/opt/mongodb/bin/mongo localhost:27017/ycsb"

msql () {

  $sqlcmd <<eof

  $@

eof

}

dosql="msql"

#$dosql "show collections;"

#

#$dosql "db.usertable.drop();"

#$dosql "db.usertable.count();"

# end.

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] ll -lhtr

total 140K

drwxr-xr-x  6 root root 4.0K Jan 30 03:19 ycsb-jdbc-binding-0.12.0

drwxr-xr-x  5 root root 4.0K Jan 30 03:19 ycsb-mongodb-binding-0.15.0

-rw-r--r--  1 root root  20K Jan 30 03:20 mongodb-binding-0.15.0.jar

drwxr-xr-x  3 root root 4.0K Jan 30 05:23 mongodb-binding

drwxr-xr-x  2 root root 4.0K Jan 30 05:25 conf

-rw-r--r--  1 root root   78 Jan 30 07:36 mongodb.properties

-rwxr-xr-x  1 root root  594 Feb  4 02:56 MDbIdxOnSame.sh

-rw-r--r--  1 root root  119 Feb 11 01:00 MDbIdxOnSep.properties

-rw-r--r--  1 root root   37 Feb 11 02:13 MDbIdxOnSame.properties

-rwxr-xr-x  1 root root  650 Feb 14 04:28 create\_database.sh

-rwxr-xr-x  1 root root  576 Feb 14 04:28 MDbIdxOnSep.sh

-rwxr-xr-x  1 root root  576 Feb 14 04:29 mongodb.sh

drwxr-xr-x 13 root root 4.0K Feb 14 12:57 backups

-rw-r--r--  1 root root  57K Feb 15 01:58 index.html

-rwxr-xr-x  1 root root 2.9K Feb 15 05:37 dotest\_funcs.sh

-rwxr-xr-x  1 root root 1.5K Feb 15 05:38 ycsb\_starter.sh

drwxr-xr-x  2 root root 4.0K Feb 15 05:42 Results.MDbIdxOnSame.20190215\_053845

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat create\_database.sh

#!/bin/sh

#==============================================================

# DESCRIPTION: To create database ycsb

#

#        FILE: create\_database.sh

#       USAGE: ./create\_database.sh <sql-executor>

#      AUTHOR: Wen Zhenglin

#        DATE: 2016-8-30

#     VERSION: 1.0

#

# Revision history:

# 1.0 (2016-8-30)Created.

#==============================================================

sql="

use ycsb;

1. db.usertable.drop();
2. db.usertable.createIndex({field1:1});

"

# provide the sql executor to source

. ./$@

$dosql "$sql"

echo "show tables"

$dosql "show tables;"

echo "show count"

$dosql "db.usertable.count()"

echo "done"

# end.

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cat mongodb.sh

#!/bin/bash

#==============================================================

# DESCRIPTION: mongodb sql executor

#

#        FILE: MongoDB.sh

#       USAGE: ./MongoDB.sh

#      AUTHOR: Wen Zhenglin

#        DATE: 2016-8-25

#     VERSION: 1.0

#

# Revision history:

# 1.0 (2016-8-25)Created.

#==============================================================

sqlcmd="/opt/mongodb/bin/mongo localhost:27017/ycsb"

msql () {

  $sqlcmd <<eof

  $@

eof

}

dosql="msql"

#$dosql "show collections;"

#

#$dosql "db.usertable.drop();"

#$dosql "db.usertable.count();"

# end.

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] ps -ef | grep 27017

root      4619 30996  0 05:46 pts/1    00:00:00 python ../bin/ycsb run mongodb -P MDbIdxOnSame.properties -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -jvm-args=-Xmx2048m -s -P ../workloads/workloadb -p recordcount=1000000 -p operationcount=1000000 -threads 1024

root 4625  4619 99 05:46 pts/1    00:00:57 java -Xmx2048m -cp /ycsb/mongodb-binding/conf:/ycsb/conf:/ycsb/lib/htrace-core4-4.1.0-incubating.jar:/ycsb/lib/jackson-mapper-asl-1.9.4.jar:/ycsb/lib/HdrHistogram-2.1.4.jar:/ycsb/lib/jackson-core-asl-1.9.4.jar:/ycsb/lib/core-0.14.0.jar:/ycsb/mongodb-binding/lib/mongodb-binding-0.14.0.jar:/ycsb/mongodb-binding/lib/slf4j-api-1.7.25.jar:/ycsb/mongodb-binding/lib/mongodb-async-driver-2.0.1.jar:/ycsb/mongodb-binding/lib/snappy-java-1.1.7.1.jar:/ycsb/mongodb-binding/lib/logback-classic-1.1.2.jar:/ycsb/mongodb-binding/lib/logback-core-1.1.2.jar:/ycsb/mongodb-binding/lib/mongo-java-driver-3.8.2.jar com.yahoo.ycsb.Client -db com.yahoo.ycsb.db.MongoDbClient -P MDbIdxOnSame.properties -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -s -P ../workloads/workloadb -p recordcount=1000000 -p operationcount=1000000 -threads 1024 -t

root 8866  4058  0 05:47 pts/1    00:00:00 grep 27017

root 21587     1 36 Feb14 ?        06:00:48 /opt/mongodb/bin/mongod --logpath /ycsb/mongod3.log --dbpath /datafile/ --port 27017 --maxConns 65536 --fork

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] mongo ycsb

MongoDB shell version v4.0.2

connecting to: mongodb://127.0.0.1:27017/ycsb

MongoDB server version: 4.0.2

Server has startup warnings:

2019-02-14T13:10:09.905-0500 I STORAGE  [initandlisten]

2019-02-14T13:10:09.905-0500 I STORAGE  [initandlisten] \*\* WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine

2019-02-14T13:10:09.905-0500 I STORAGE  [initandlisten] \*\*          See <http://dochub.mongodb.org/core/prodnotes-filesystem>

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten]

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\* WARNING: Access control is not enabled for the database.

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\*          Read and write access to data and configuration is unrestricted.

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\* WARNING: You are running this process as the root user, which is not recommended.

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten]

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\* WARNING: This server is bound to localhost.

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\*          Remote systems will be unable to connect to this server.

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\*          Start the server with --bind\_ip <address> to specify which IP

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\*          addresses it should serve responses from, or with --bind\_ip\_all to

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\*          bind to all interfaces. If this behavior is desired, start the

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten] \*\*          server with --bind\_ip 127.0.0.1 to disable this warning.

2019-02-14T13:10:10.703-0500 I CONTROL  [initandlisten]

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > db.usertable.count()

733403

MongoDB Enterprise >

MongoDB Enterprise > db.usertable.findOne()

{

"\_id" : "user1130667052444817254",

"field1" : BinData(0,"KFMpOS4iOEJvNlptOlltPyIoO1d1Lz9qOVg5OVl/NywsOD9iKDxyKypmIzJ0NiQ+ISp4Lys4PiEyOFo3KEFxLzBqJ1ptMyE8MSowITIqOzJqNzFsIFQ/OS0qPituIjcmOiZ6Nw=="),

"field0" : BinData(0,"MydkJi4uOFxtIjJ2KTF4KjFiMDJ6JjY6Kio6LTA8KEV9Mz0iPDMsLEg7Ni1qP1MnLVdtKlk5OUAlKFB/KjhsPil4LDE8IVgxL1wtPDJkIjhsMjl0JDM4JCc0Mj0kKEo/K0chMQ=="),

"field7" : BinData(0,"P0NrLzR2NUJ9Lyo4KURhNyo2P1AzKSNuMDgqLSsqJTN2NjkyKC5sLig2IEwhLCgwNkp3N19jNVRxP0QtO0U5NTV2Ly46PFV9MjE2KC1yNF95K1ZpPiY8PVA1L0hjK0kjNj8uNA=="),

"field6" : BinData(0,"KCZmP105PDI6OUNpLU17JyE0JSg+JFcvPSd4NydqLS1sOldlJyluMjFuNzcuIEkhPlA/LCtyN1Z3LytoMSouJF01NSA+LVhzLlJ1IiZkKkc5MDp4LU85ISJqKVZrKldnLSd4Jw=="),

"field9" : BinData(0,"LCd2Jl57PjQ4NVg1L08nLVkvN1BtNyEwJEovMFg7JlR3LjJ4IDsyOVt1ISI2OUdrMkA3NTFuKTkgJDc2NUk/IDU2MjA6NCxsO1h5OjhmOCswKFc3J0FzIzwkMFgpNS08NzAsMQ=="),

"field8" : BinData(0,"MU95IihsMj8qNCs6Ny5oPkwpLEYnIV5vP0g1JU4rLFItJEQ1Iz5yJyN0KFFtNlw5IS52P0QhOFNxKj8uOl5jMlotIDV2KyM4MSN+KzE+IDwyNUFpM1prPl4tNTB+L1Z1ODZyKg=="),

"field3" : BinData(0,"JyQ2KDtwJS48MTN2LVwjKDB4KF4zLSBoJjl6JlYlIV8zKFh9NEshNScoMy40OT88KyQmOVdhOSRiOzdwLkx3NjB6LzNkPiZ+JSI8MFFrLV5xO1g3KiVwJ0BxJz0uIEQhIT84KQ=="),

"field2" : BinData(0,"JSc4KU0nIz9iOzosMCd4OjsqO1snJDh4JkAnMDZqKkdxMyJ6Ll4zODA6JUYnLCciISsoMTAwJ0prNygoNCc+JFp9IkgzPDskO0w7LD8yJkcvICAyPU5zK0A7Mk5lIkAtLjVwJg=="),

"field5" : BinData(0,"IV51L0J5OVk5ICA2Iy8+ISFkLV0xLEx/Nz82MU97Pl13L0YnPjRiNkxvKy10LiU2L1F9L1VhJDh0Ikx1I0snPDsiPjlsMi54MUE1LD5qN0wnPVA1ICEgPFJ1LCU2PUt9M0xtJg=="),

"field4" : BinData(0,"OClwK1QtMjdsPjhgNEFrJk0pICV+Il9hOS8mMVQlLl5xI19xPTdkOjwmIEVjI1ZxKVxlOiZyO0M7KEw9IVB1NjQqOEQ9KCw4Ik41LF8pJTEuPEZ7JDsqLTJqN0RzNiR8NFI7JA==")

}

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > db.usertable.getIndexes()

[

        {

"v" : 2,

"key" : {

                        "\_id" : 1

},

"name" : "\_id\_",

"ns" : "ycsb.usertable"

        },

        {

"v" : 2,

"key" : {

                        "field1" : 1

},

"name" : "field1\_1",

"ns" : "ycsb.usertable"

        }

]

MongoDB Enterprise >

MongoDB Enterprise > db.serverStatus().connections

{ "current" : 3, "available" : 51197, "totalCreated" : 185303 }

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise >

MongoDB Enterprise > exit

bye

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cd ../ycsb2graph-master/

[ root @ dbversity : /ycsb/ycsb2graph-master ]

[ root @ dbversity : /ycsb/ycsb2graph-master ] ll -lhtr

total 108K

-rw-r--r-- 1 root root  176 Sep 1  2016 series.template

-rw-r--r-- 1 root root  699 Sep 1  2016 README.md

-rw-r--r-- 1 root root  538 Sep 1  2016 page.template

drwxr-xr-x 2 root root 4.0K Sep  1  2016 js\_offline

-rw-r--r-- 1 root root 1.1K Sep  1  2016 graph.template

drwxr-xr-x 3 root root 4.0K Sep  1  2016 example

-rw-r--r-- 1 root root 4.3K Jan 31 05:05 out.html

drwxr-xr-x 2 root root 4.0K Feb  5 02:53 backups

-rwxrwxrwx 1 root root 5.4K Feb  5 02:56 ycsb2graph.sh

drwxr-xr-x 2 root root 4.0K Feb 15 02:12 2048\_same

drwxr-xr-x 2 root root 4.0K Feb 15 02:12 2048\_sep

drwxr-xr-x 2 root root 4.0K Feb 15 05:11 Results.MDbIdxOnSame.20190214\_131104

drwxr-xr-x 2 root root 4.0K Feb 15 05:11 Results.MDbIdxOnSep.20190214\_062406

drwxr-xr-x 2 root root 4.0K Feb 15 05:17 results\_same

drwxr-xr-x 2 root root 4.0K Feb 15 05:18 results\_sep

-rw-r--r-- 1 root root  40K Feb 15 05:18 index.html

[ root @ dbversity : /ycsb/ycsb2graph-master ]

[ root @ dbversity : /ycsb/ycsb2graph-master ]

[ root @ dbversity : /ycsb/ycsb2graph-master ] cat ycsb2graph.sh

#!/bin/sh

#==============================================================

# DESCRIPTION: Generate graph for ycsb testing results

#

#        FILE: ycsb2graph.sh

#       USAGE: ./ycsb2graph.sh [result-directories...]

#      AUTHOR: Wen Zhenglin

#        DATE: 2016-8-16

#     VERSION: 1.0

#

# Revision history:

# 1.0 (2016-8-16)Created.

#==============================================================

# For one result directory or multiple result directory

# It can be single db result per directory, or mix for multiple db result

# It can even combine the old result

# So in order to do comparison, you only just do one more test for that db

resultDir=( $@ )

if [ "x$resultDir" = "x" ]; then

resultDir="."

fi

if [ ${#resultDir[@]} -gt 1 ]; then

pageDir="$( dirname $resultDir )"

else

pageDir="$resultDir"

fi

echo "Use the results directory: ${resultDir[@]}"

# check at least one result file exist

results="$( find ${resultDir[@]} -name '\*.result' )"

if [ "x$results" = "x" ]; then

  echo "Result file is not found"

  exit 1

fi

types="$( echo "$results" | awk '{ print $NF }' FS='/' | \

awk '{ print $2 }' FS='-' | sort | uniq )"

cnt="$( echo $types | wc -l )"

if [ $cnt -eq 0 ]; then

  echo "No any workloads results be found"

  exit 1

fi

#append op-count to to the filename

#dbname-WorkloadA-100.result

getAvg () {

  #unit Nonoseconds

  grep Average

}

noNaN () {

  getAvg | grep -v NaN

}

getOps () {

  #unit count

  grep Operations

}

getRunTime () {

  xargs grep -H 'RunTime'

}

getThroughput () {

  xargs grep -H 'Throughput'

}

# uniq and compare, use the max count one

# it often just the same

getCategory () {

cate=""

contents="$( cat | awk '{ print $NF }' FS='/'  | \

awk '{ print $1 }' FS='.result' | \

                           awk '{ print $3 }' FS='-' | sort -n | uniq )"

  while read l; do

    if [ "x$l" = "x" ]; then

      continue

    fi

    if [ "x$cate" = "x" ]; then

cate="'$l'"

    else

cate="$cate,'$l'"

    fi

  done <<eof

$contents

eof

  echo "$cate"

}

getData () {

contents="$1"

data=""

  while read l; do

    if [ "x$l" = "x" ]; then

      continue

    fi

    j="$( echo $l | awk '{ print $3 }' )"

    echo "$l" | grep -e Throughput -e FAILED > /dev/null

    if [ $? -ne 0 ]; then

      # convert to milliseconds

      # for runtime, it is to seconds

j="$( awk "BEGIN {printf \"%.3f\", $j/1000}" )"

    fi

    if [ "x$data" = "x" ]; then

      data="$j"

    else

data="$data,$j"

    fi

  done <<eof

$contents

eof

  echo "$data"

}

getSubtitle () {

k="$1"

subtitle=""

  case "$k" in

    WorkloadA) subtitle="Update heavy, Read/Update ratio: 50/50" ;;

    WorkloadB) subtitle="Read mostly, Read/Update ratio: 95/5" ;;

    WorkloadC) subtitle="Read only, Read/Update ratio: 100/0" ;;

    WorkloadD) subtitle="Read latest, Read/Update/Insert ratio: 95/0/5" ;;

    WorkloadE) subtitle="Short ranges scan, Scan/Insert ratio: 95/5" ;;

    WorkloadF) subtitle="Read-Modify-Write, Read/Read-Modify-Write ratio: 50/50" ;;

    \*) subtitle="Unknown workload name" ;;

  esac

  echo "$subtitle"

}

genGraph () {

id="$1"

dbs="$2"

output="$3"

  symbols=( circle square diamond triangle triangle-down )

allseries=""

  i=0

  while read db; do

    if [ "x$db" = "x" ]; then

      continue

    fi

contents="$( echo "$output" | grep -w "$db" )"

data="$( getData "$contents" )"

    if [ "x$data" != "x" ]; then

name="$db"

      symbol="${symbols[i]}"

      . ./series.template

    fi

    (( i++ ))

  done <<eof

$dbs

eof

  k="$( echo $id | awk '{ print $1 }' FS='-' )"

desc="$( echo $id | sed "s/$k-//" )"

title="$k $desc"

subtitle="$( getSubtitle "$k" )"

ytitle="Latency (Milliseconds)"

xtitle="No of Threads"

  echo "$desc" | grep FAILED >/dev/null

  if [ $? -eq 0 ]; then

ytitle="Operations"

  fi

  if [ "$desc" = "OVERALL-RunTime" ]; then

ytitle="RunTime (Seconds)"

  fi

  if [ "$desc" = "OVERALL-Throughput" ]; then

ytitle="Throughput (ops/sec)"

  fi

  . ./graph.template

headline=""

}

analyze () {

type="$1"

files="$2"

category="$( echo "$files" | getCategory )"

  dbs="$( echo "$files" | awk '{ print $NF }' FS='/' | \

awk '{ print $1 }' FS='-' | uniq )"

out=""

headline="<h2>$type</h2>"

opkind="$( echo "$files" | xargs grep '^\[' | grep -v -e TOTAL \

-e CLEANUP -e OVERALL | awk '{ print $1 }' FS=',' | \

awk '{ print $2 }' FS=':' | \

sort -d | uniq )"

  while read op; do

key="$( echo $op | sed 's/\[/\\[/' )"

opname="$( echo $op | tr -d '[]' )"

out="$( echo "$files" | xargs grep "$key" | noNaN )"

color=""

    echo "$op" | grep FAILED > /dev/null

    if [ $? -eq 0 ]; then

color="color: '#FF9800'"

out="$( echo "$files" | xargs grep "$key" | getOps )"

    fi

    if [ "x$out" != "x" ]; then

      genGraph "$type-$opname" "$dbs" "$out"

    fi

done<<eof

$opkind

eof

color=""

  out="$( echo "$files" | getRunTime )"

  if [ "x$out" != "x" ]; then

    genGraph "$type-OVERALL-RunTime" "$dbs" "$out"

  fi

  out="$( echo "$files" | getThroughput )"

  if [ "x$out" != "x" ]; then

    genGraph "$type-OVERALL-Throughput" "$dbs" "$out"

  fi

}

while read type; do

  echo "start $type"

files="$( echo "$results" | grep "$type" | sort -V )"

  analyze "$type" "$files"

done <<eof

$types

eof

. ./page.template

echo "$page" > "$pageDir/index.html"

echo "see the url: http://`hostname -i`:8080/$pageDir"

#end.

[ root @ dbversity : /ycsb/ycsb2graph-master ]

[ root @ dbversity : /ycsb/ycsb2graph-master ]

[ root @ dbversity : /ycsb/ycsb2graph-master ]

[ root @ dbversity : /ycsb/ycsb2graph-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] sh -x ycsb\_starter.sh MDbIdxOnSame.properties &

[1] 21730

[ root @ dbversity : /ycsb/ycsb\_starter-master ] + db=MDbIdxOnSame.properties

+ '[' xMDbIdxOnSame.properties = x -o xMDbIdxOnSame.properties = x- ']'

+ . ./dotest\_funcs.sh

++ IsExist MDbIdxOnSame.properties

++ file=MDbIdxOnSame.properties

++ ls MDbIdxOnSame.properties

++ '[' 0 -ne 0 ']'

+++ basename MDbIdxOnSame.properties

+++ awk '{ print $1 }' FS=.

++ dbname=MDbIdxOnSame

+++ date +%Y%m%d\_%H%M%S

++ base=Results.MDbIdxOnSame.20190214\_131104

++ mkdir Results.MDbIdxOnSame.20190214\_131104

+++ echo MDbIdxOnSame

+++ awk '{ print $1 }' FS=\_

++ sqlexecutor=MDbIdxOnSame

++ . ./MDbIdxOnSame.sh

+++ sqlcmd='/opt/mongodb/bin/mongo localhost:27017/ycsb'

+++ dosql=msql

++ '[' 0 -ne 0 ']'

++ msql 'show tables;'

++ /opt/mongodb/bin/mongo localhost:27017/ycsb

++ '[' 0 -ne 0 ']'

++ cmd=../bin/ycsb

++ load='../bin/ycsb load mongodb -P MDbIdxOnSame.properties -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -jvm-args=-Xmx2048m -s'

++ run='../bin/ycsb run mongodb -P MDbIdxOnSame.properties -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -jvm-args=-Xmx2048m -s'

+ log=Results.MDbIdxOnSame.20190214\_131104/main.log

+ echo 'see the log Results.MDbIdxOnSame.20190214\_131104/main.log'

see the log Results.MDbIdxOnSame.20190214\_131104/main.log

+ exec

+ exec

+ exec

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ]

[ root @ dbversity : /ycsb/ycsb\_starter-master ] cd Results.MDbIdxOnSame.20190214\_131104/

[ root @ dbversity : /ycsb/ycsb\_starter-master/Results.MDbIdxOnSame.20190214\_131104 ]

[ root @ dbversity : /ycsb/ycsb\_starter-master/Results.MDbIdxOnSame.20190214\_131104 ]

[ root @ dbversity : /ycsb/ycsb\_starter-master/Results.MDbIdxOnSame.20190214\_131104 ]

[ root @ dbversity : /ycsb/ycsb\_starter-master/Results.MDbIdxOnSame.20190214\_131104 ] ll -lhr

total 8.0K

-rw-r--r-- 1 root root 2.2K Feb 14 13:11 MDbIdxOnSame-WorkloadA-1.load

-rw-r--r-- 1 root root 3.5K Feb 14 13:11 main.log

[ root @ dbversity : /ycsb/ycsb\_starter-master/Results.MDbIdxOnSame.20190214\_131104 ]

[ root @ dbversity : /ycsb/ycsb\_starter-master/Results.MDbIdxOnSame.20190214\_131104 ] tailf main.log

+ ../bin/ycsb load mongodb -P MDbIdxOnSame.properties -p 'mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000' -jvm-args=-Xmx2048m -s -P ../workloads/workloada -p recordcount=1000000 -threads 1

java -Xmx2048m -cp /ycsb/mongodb-binding/conf:/ycsb/conf:/ycsb/lib/htrace-core4-4.1.0-incubating.jar:/ycsb/lib/jackson-mapper-asl-1.9.4.jar:/ycsb/lib/HdrHistogram-2.1.4.jar:/ycsb/lib/jackson-core-asl-1.9.4.jar:/ycsb/lib/core-0.14.0.jar:/ycsb/mongodb-binding/lib/mongodb-binding-0.14.0.jar:/ycsb/mongodb-binding/lib/slf4j-api-1.7.25.jar:/ycsb/mongodb-binding/lib/mongodb-async-driver-2.0.1.jar:/ycsb/mongodb-binding/lib/snappy-java-1.1.7.1.jar:/ycsb/mongodb-binding/lib/logback-classic-1.1.2.jar:/ycsb/mongodb-binding/lib/logback-core-1.1.2.jar:/ycsb/mongodb-binding/lib/mongo-java-driver-3.8.2.jar com.yahoo.ycsb.Client -db com.yahoo.ycsb.db.MongoDbClient -P MDbIdxOnSame.properties -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -s -P ../workloads/workloada -p recordcount=1000000 -threads 1 -load

Command line: -db com.yahoo.ycsb.db.MongoDbClient -P MDbIdxOnSame.properties -p mongodb.url=mongodb://localhost:27017/ycsb?ssl=false&waitQueueMultiple=800&maxPoolSize=80000 -s -P ../workloads/workloada -p recordcount=1000000 -threads 1 -load

YCSB Client 0.14.0

Loading workload...

Starting test.

2019-02-14 13:11:05:601 0 sec: 0 operations; est completion in 0 second

DBWrapper: report latency for each error is false and specific error codes to track for latency are: []

2019-02-14 13:11:15:472 10 sec: 29449 operations; 2944.9 current ops/sec; est completion in 5 minutes [INSERT: Count=29449, Max=112895, Min=144, Avg=285.89, 90=269, 99=2421, 99.9=6839, 99.99=17439]

[ root @ dbversity : /ycsb/ycsb2graph-master ] sh ycsb2graph.sh Results.MDbIdxOnSame.20190214\_131104/ Results.MDbIdxOnSep.20190214\_062406/

Use the results directory: Results.MDbIdxOnSame.20190214\_131104/ Results.MDbIdxOnSep.20190214\_062406/

start WorkloadA

start WorkloadB

start WorkloadC

start WorkloadD

start WorkloadE

start WorkloadF

see the url: [http://127.0.0.1:8080/](http://153.40.70.58:8080/).

[ root @ dbversity : /ycsb/ycsb2graph-master ]

Sources :

<https://github.com/chinglinwen/ycsb2graph>

<https://github.com/chinglinwen/ycsb_starter>