

DB System Choice #27

Closed

 ppyordanov opened this issue on Oct 29, 2014 · 4 comments

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ppyordanov commented on Oct 29, 2014

DBMS choice needs to be researched further.

ppyordanov self-assigned this on Oct 29, 2014

ppyordanov added this to the **Planning** milestone on Oct 29, 2014

ppyordanov referenced this issue from a commit on Oct 29, 2014

PY [AUTOWIRED-SQL-DB] YES, autowired device to MySQL

b84959a

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ppyordanov commented on Oct 29, 2014

Expected DB load:

- 10 days data generation, approx 5 hours/day (50 hrs)
- 10 evaluation participants (500 hrs total)
- 2 data readings/ min.

500 h = 500 * 3600 s = 1 800 000 s

DR = 1 800 000/30 = 60 000 records

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ppyordanov commented on Oct 31, 2014

There is more information about this issue here: #11

This was referenced on Oct 31, 2014

DB System #11

NoSQL DBMS Evaluation #30

MySQL [SQL DB] Evaluation #29

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ppyordanov commented on Nov 4, 2014

Conclusions

Mongo DB does an excellent job regarding data insertions - its capabilities/ insertion algorithm/ have no match considering this. Data retrieval, update and delete of single records is also very fast, however, it is difficult to argue if much faster than MySQL .

All of the benchmarks have been completed without caching mechanisms being used. Not surprisingly, Mongo DB has shown around x1.5 up to x2 faster data manipulation than MySQL and this tendency is present for all of the data sets (I did not even think of running a 5 million data set insertion script for the SQL DBMS).

Efficient data caching is one of the main advantantages of MySQL in this comparison. Although I have not uploaded results with memory caching in use, I noticed that query execution (especially database reading) for more lengthy operations dramatically decreases up to a multiplier of 2 after each consecutive call to the database, which will inevitably lead to a very improved efficiency in the long run. I

Labels

None yet

Milestone

Planning

Assignee

ppyordanov

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1 participant

ppyordanov

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would assume that it would be even much better than mongo. On the other hand, *Mongo DB* delivers a great first impression for the users who will visit the page more rarely (in other words, not make use of in-memory cache).

There is no need to consider the relational db structural benefits against the document-based, as the plans for MySQL did not involve querying more than a table at a time (or 2) and this would not affect the final decision much.

I did a quick search for similar tests/evaluations, and found some information confirming my observations so far:

- <http://www.moredevs.ro/mysql-vs-mongodb-performance-benchmark/>

/ #30

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ppyordanov commented on Jan 21



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🔒 ppyordanov closed this on Jan 21

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