W11

김우진
2017314712

1. INTRODUCTION

In this week, we will have a research about SQLite database engine

2. METHODS

We will compare with the SQLite and client-server RDBMS(Advantages of the SQLite, Disadvantages of the SQLite)

How SQLite supports cross-platform database

Compare the SQLite and Filesystem

3. Performance Evaluation

3.1 Experimental Setup

Type	Specification
OS	Ubuntu 18.04.65 LTS
CPU	Intel(R) Core(TM) i5-10400F CPU @ 2.90GHz
Memory	3994720 kB
Kernel	Linux ubuntu 5.4.0-144-genericcat /proc

3.2 Experimental Results

Cache size	real	user	sys
100	1.879	0.020	0.935
500	1.910	0.016	0.933
1000	1.812	0.012	0.932
2000	1.886	0.007	0.981

Page_size	real	user	Sys
512	1.865	0.022	0.943
1024	1.716	0.020	0.977
2048	1.856	0.017	0.979
4096	1.784	0.044	0.872
8192	1.742	0.012	0.978
16384	1.741	0.023	0.980

Locking mode	real	user	Sys
Normal	1.792	0.004	0.945
exclusive	0.979	0.005	0.676

synchronous	real	user	Sys
0	0.375	0.024	0.349
1	1.792	0.004	0.945
2	2.097	0.029	0.067

4. Conclusion

결과를 보면 어느 특정 수치를 계속 늘린다고 시간이 줄어들지 않는다는 것을 확인 할 수 있다. 특정 값어치를 조합해야만 가장 최적화된 결과를 제출할 수 있다는 것을 알 수 있다.