

TPC-H performance measure

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1 概要

- DBMS : PostgreSQL 9.2
- RAID0 : iodrive x8 (chunk size = 64KB)
- 各テーブルの primary key 上に B-tree index を構築
- Scale Factor = 100
- shared buffer = 8GB
- 各クエリの実行時の状況を iostat と mpstat で 1 秒おきに監視

2 Query 実行中の sys の内訳分析

2.1 RAID0 (iodrive x8) read microbenchmark

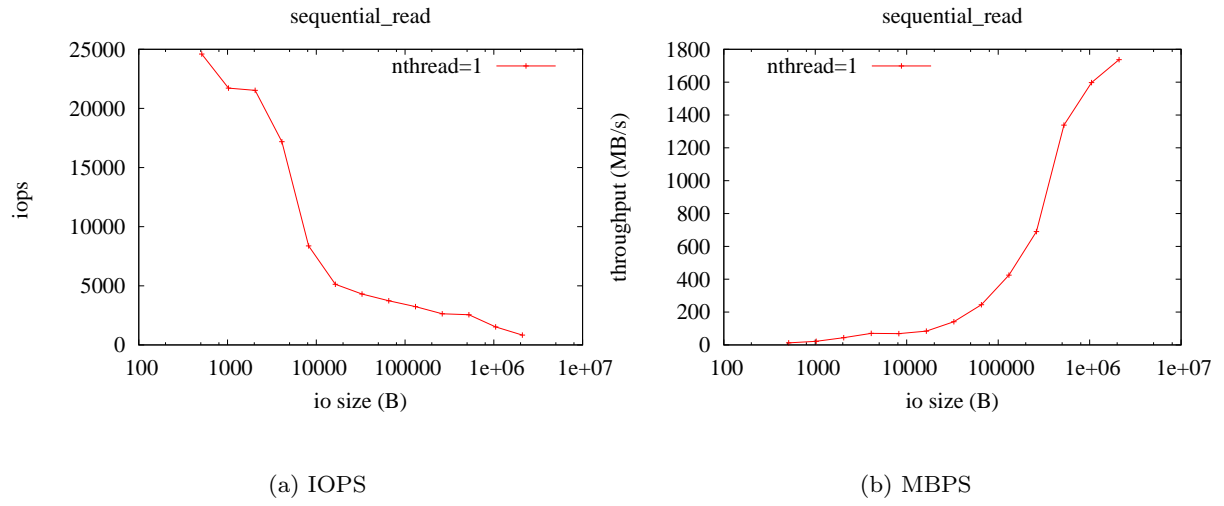


图 1 read microbenchmark

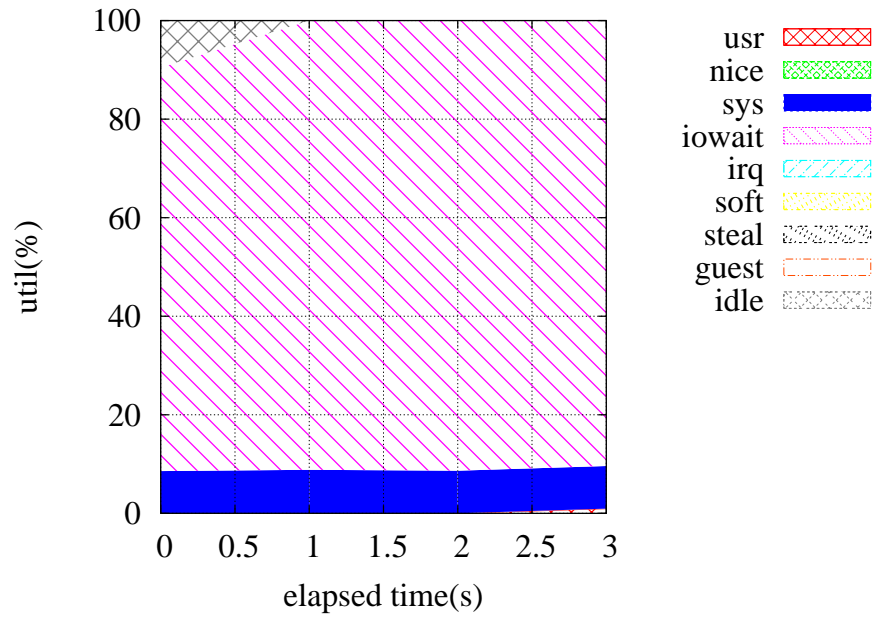


图 2 cpu utilization (iosize = 256KB)

2.2 Query : count lineitem

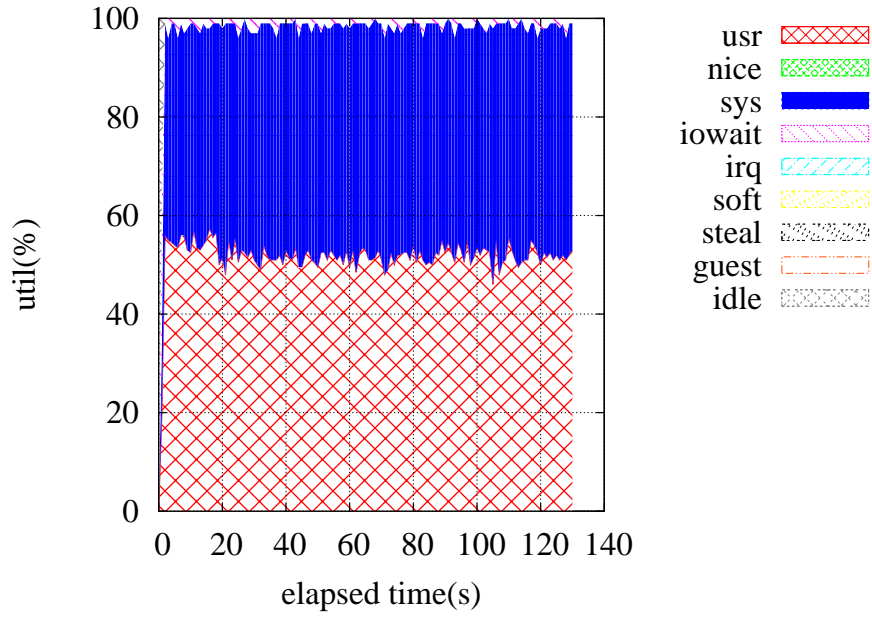
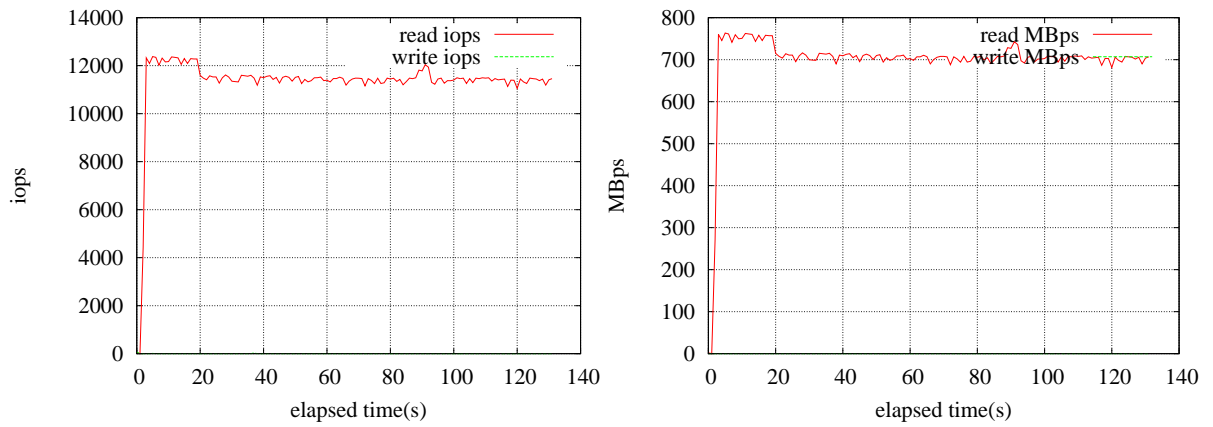


图 3 cpu utilization



(a) IOPS

(b) MBps

图 4 IO spec

3 index scan on lineitem (l_shipdate)

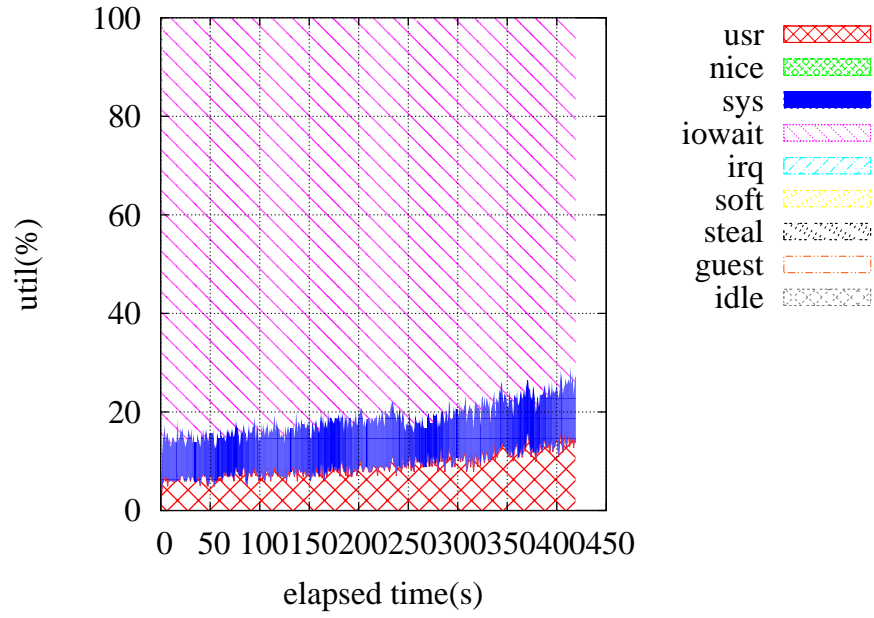
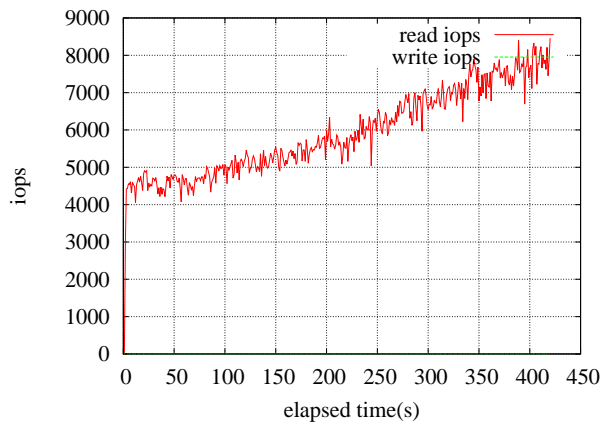
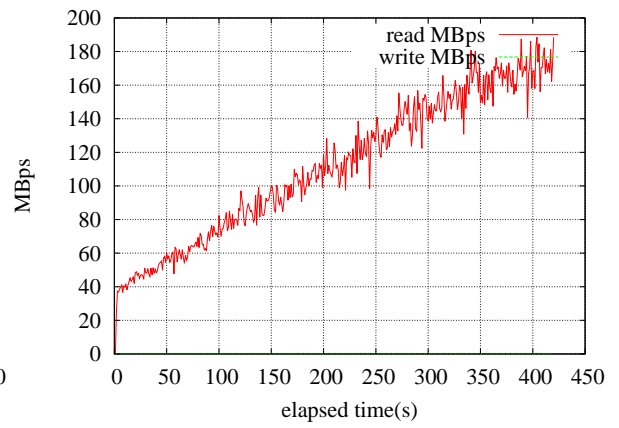


图 5 cpu utilization



(a) IOPS



(b) MBPS

图 6 IO spec