

TPC-H performance measure

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1 概要

- DBMS : PostgreSQL 9.2
- RAID0 : iohdrive 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 結果

vmswappiness = 60

query 1

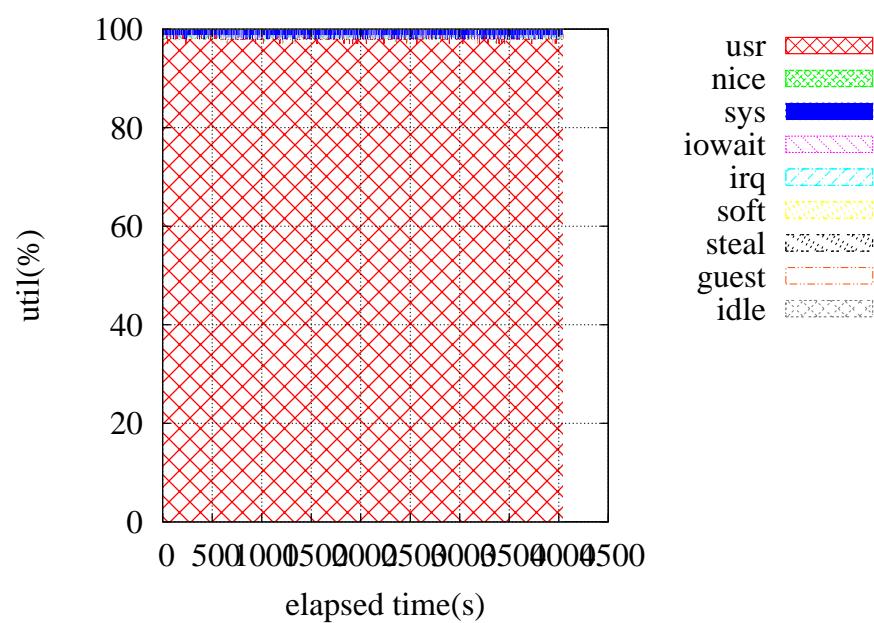


图 1 cpu utilization

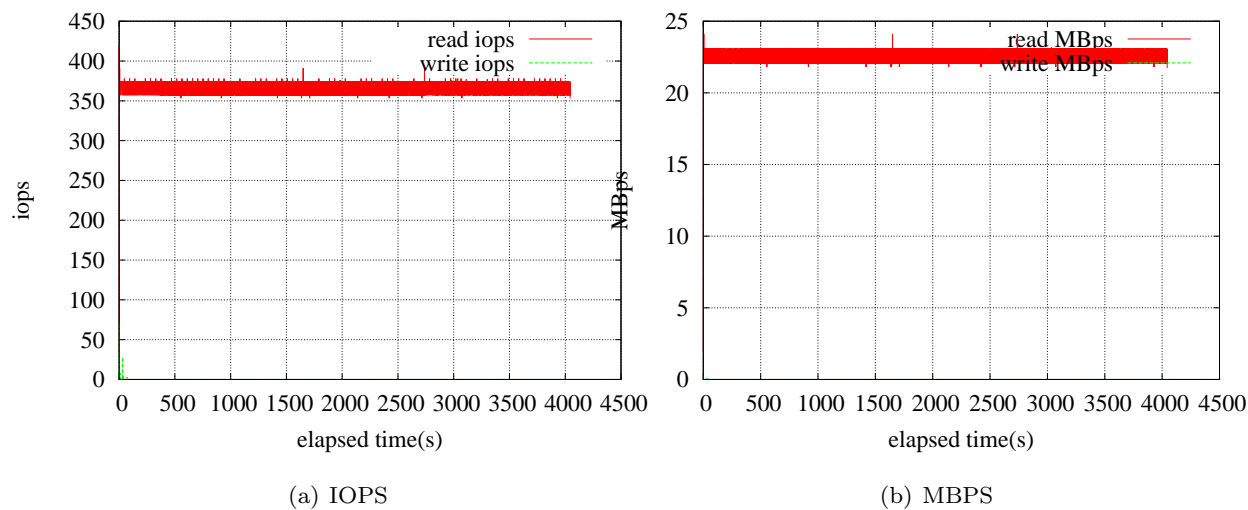


图 2 IO spec

countlineitem

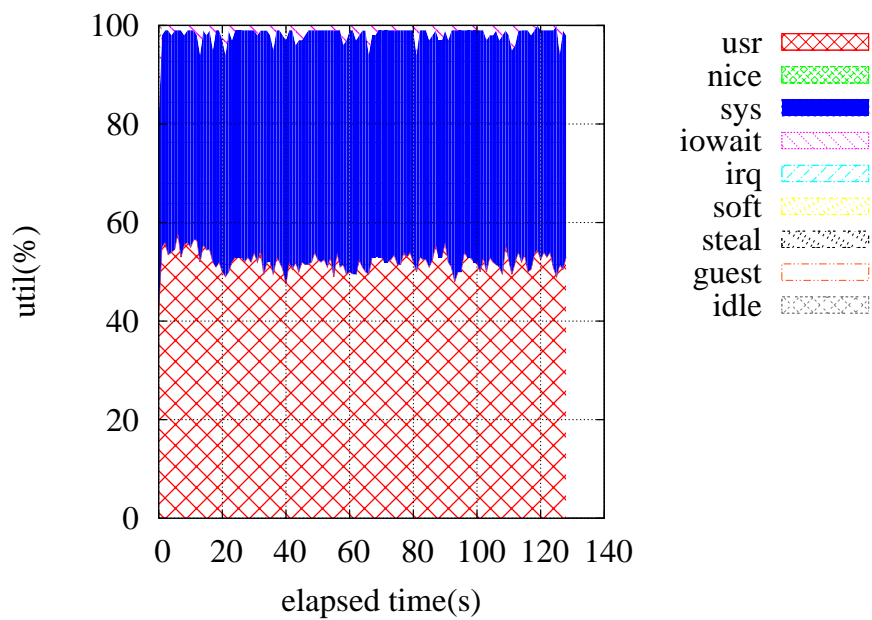


图 3 cpu utilization

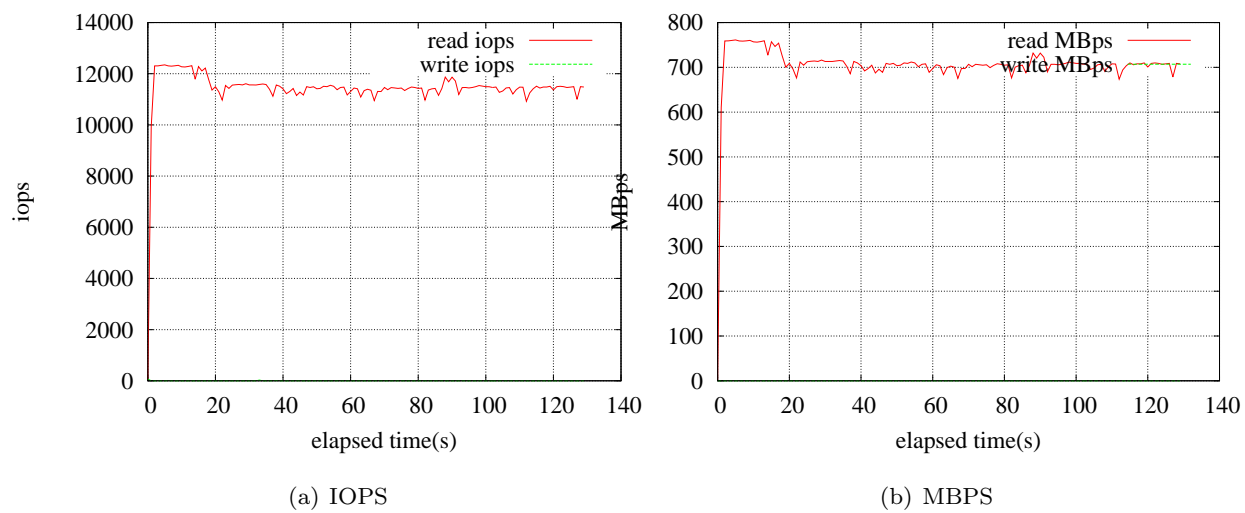


图 4 IO spec

vmswappiness = 0

query 1

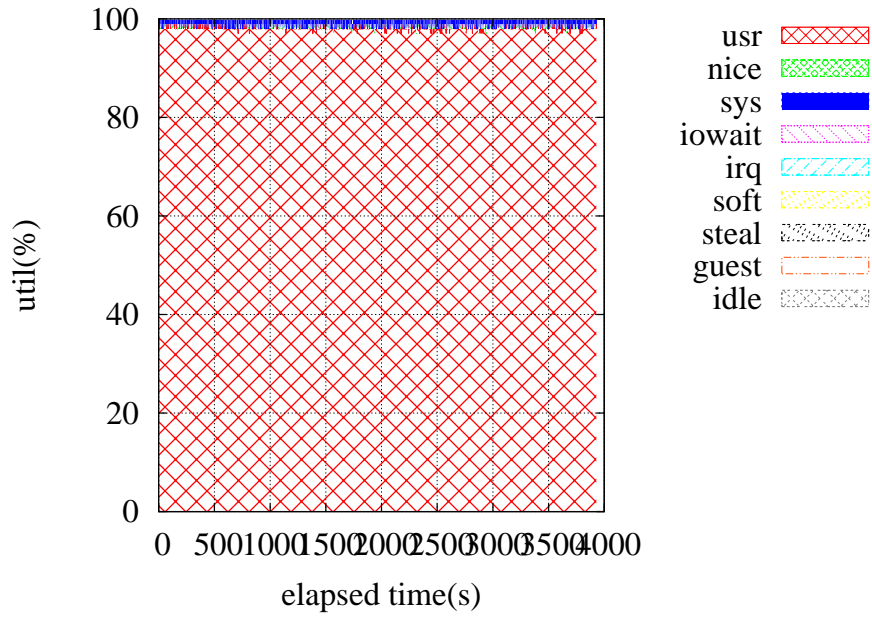


图 5 cpu utilization

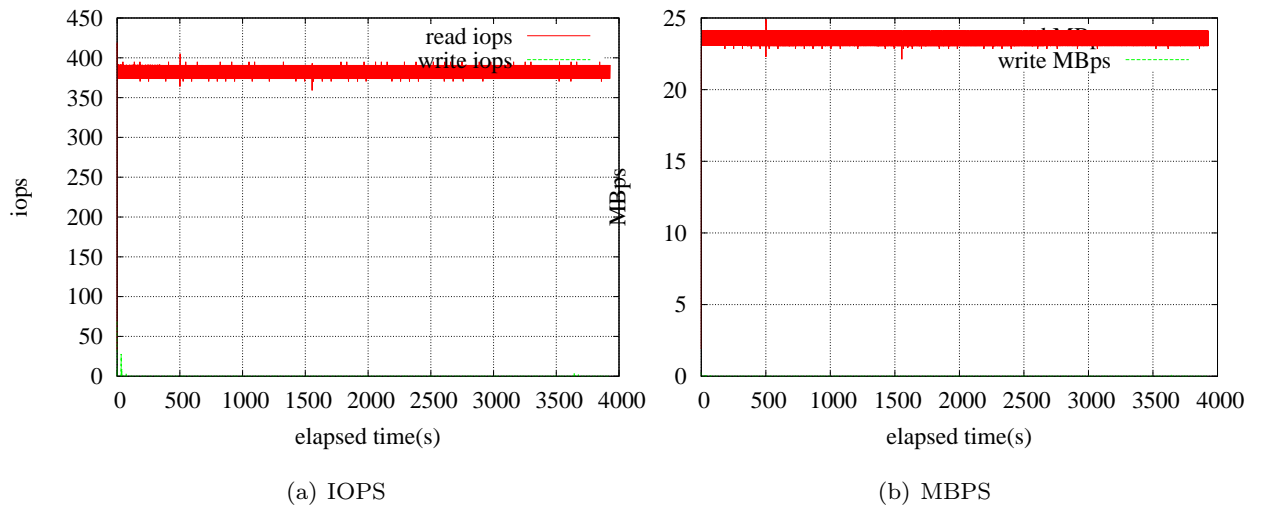


图 6 IO spec

query 3

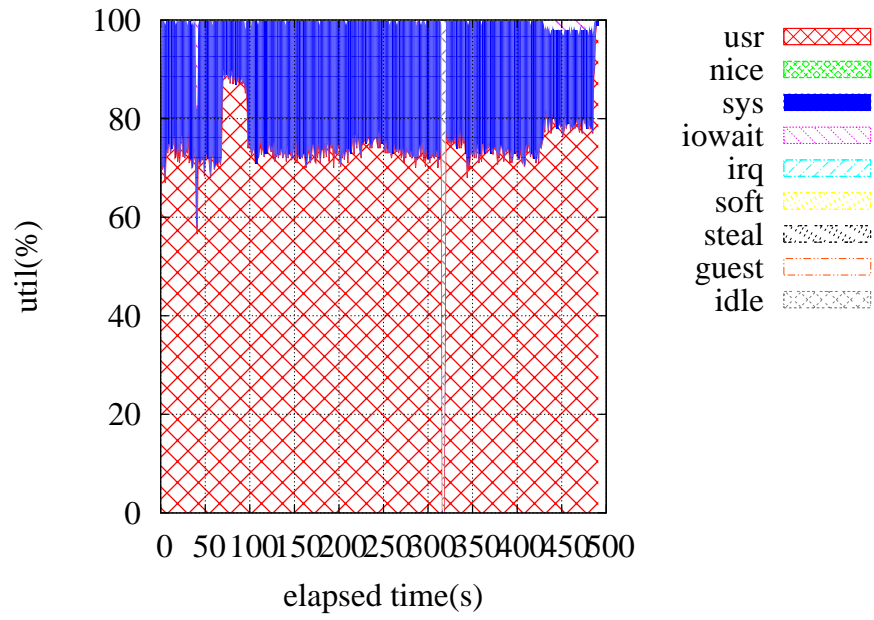


图 7 cpu utilization

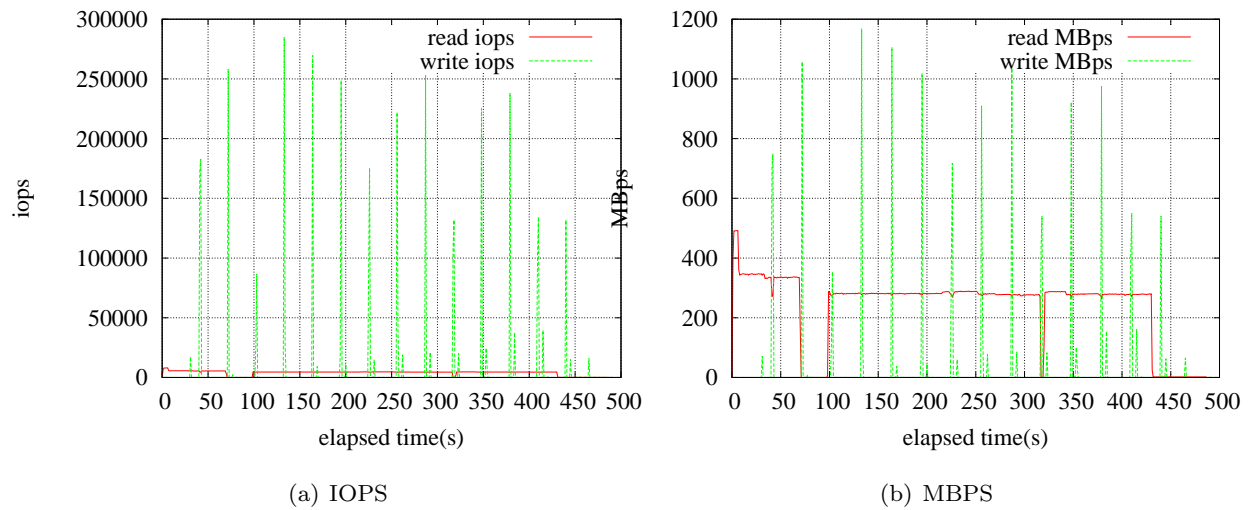


图 8 IO spec

countlineitem

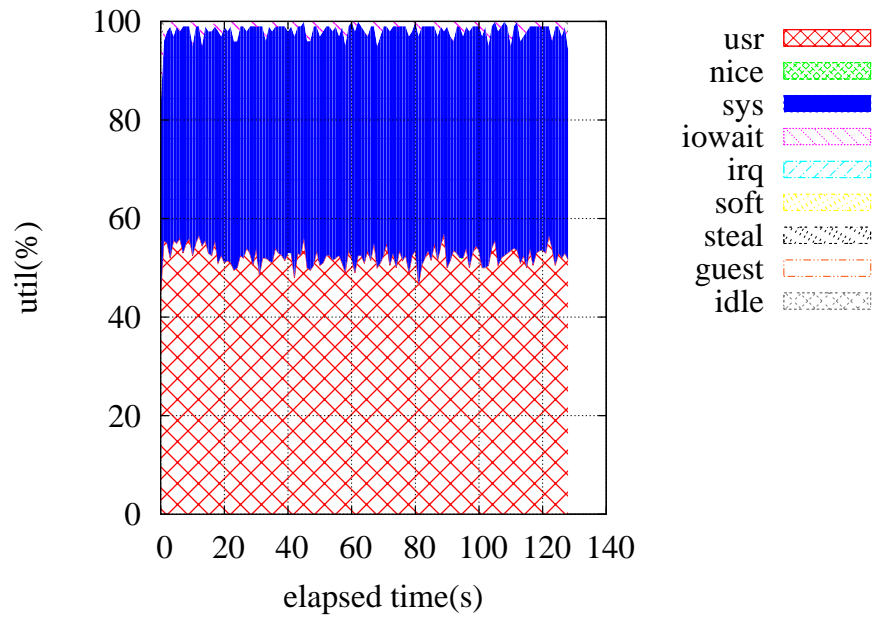


图 9 cpu utilization

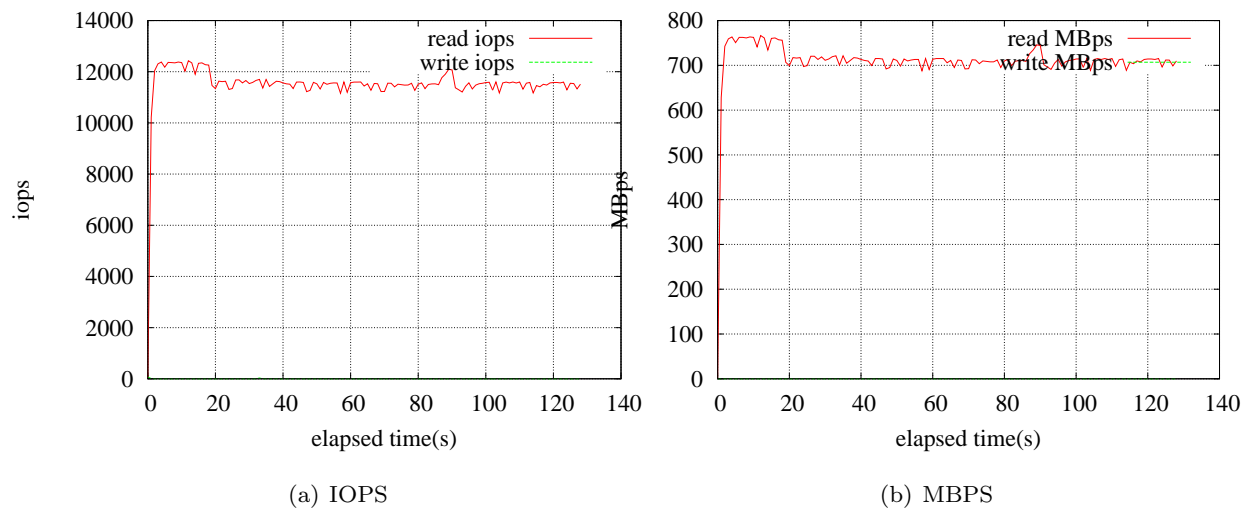


图 10 IO spec

vmswappiness = 0, swap off

query 1

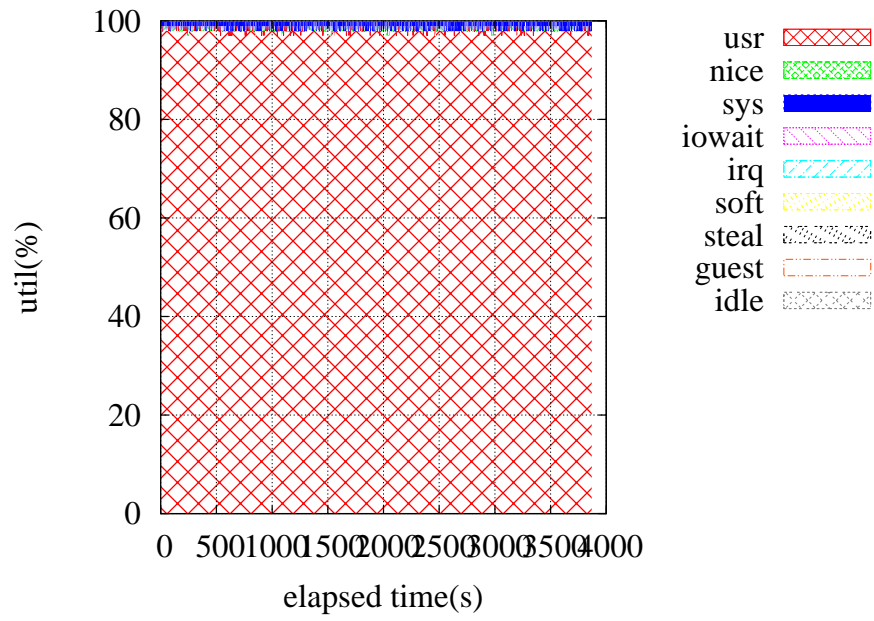


图 11 cpu utilization

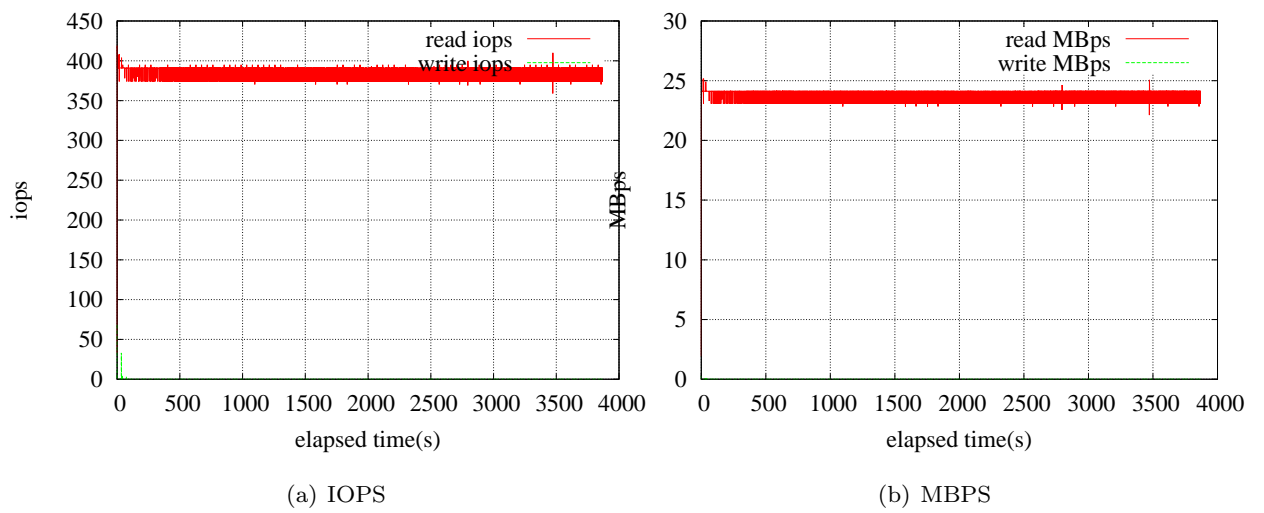


图 12 IO spec

query 3

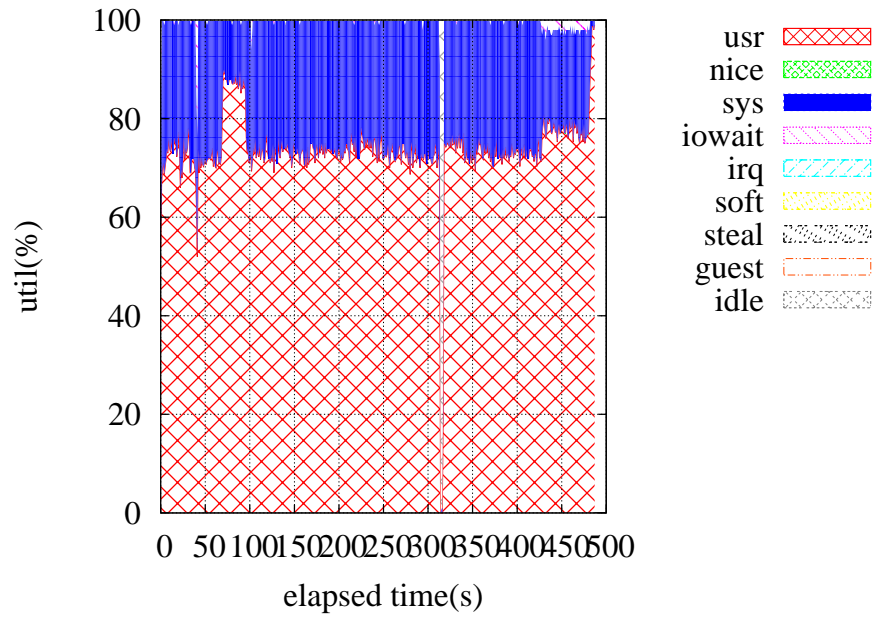


图 13 cpu utilization

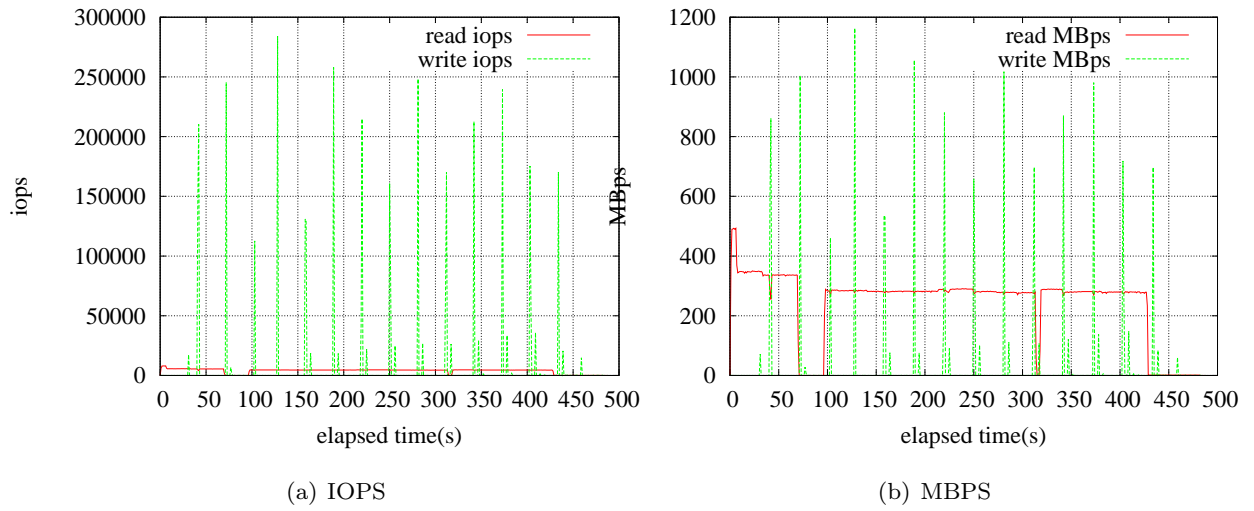


图 14 IO spec

countlineitem



图 15 cpu utilization

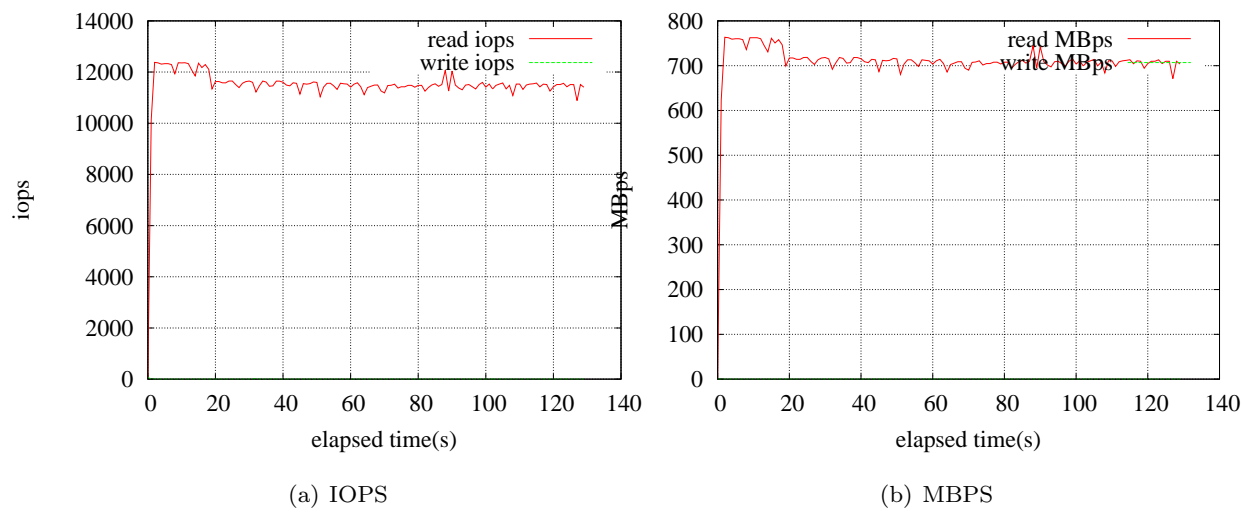


图 16 IO spec