

# RocksDB Festival

## 3rd

Supported by IITP, StarLab.

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박경미, 황예진

[kmi0817@naver.com](mailto:kmi0817@naver.com), [hyj3463@naver.com](mailto:hyj3463@naver.com)

BGR

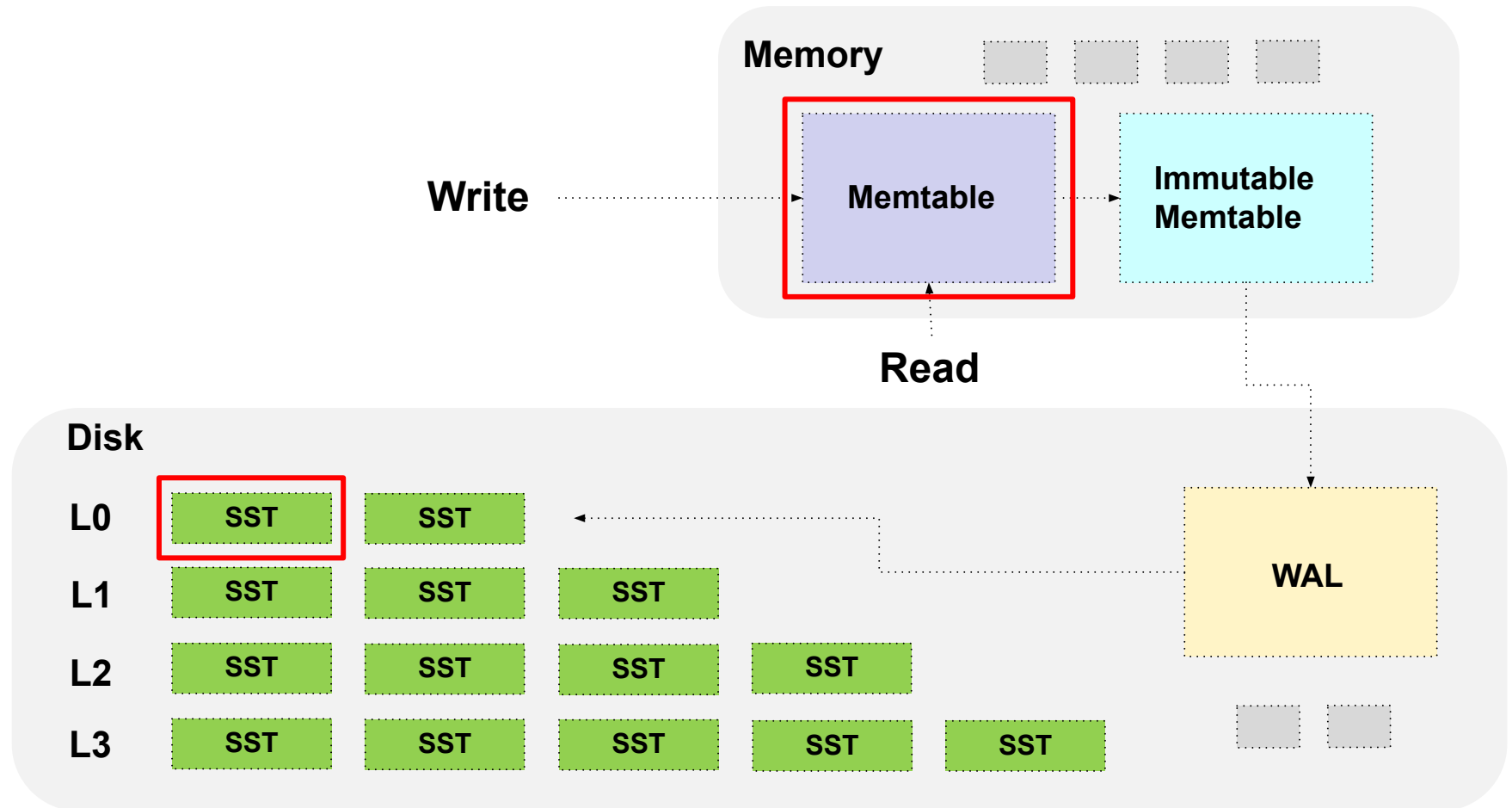
# RocksDB Festival

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- Contents
  - ✓ Overview
  - ✓ Related Options
  - ✓ Experiment
    - number of memtable
    - block size
    - level0 file num compaction trigger
    - block cache size
  - ✓ Next week

# RocksDB Festival

- Overview



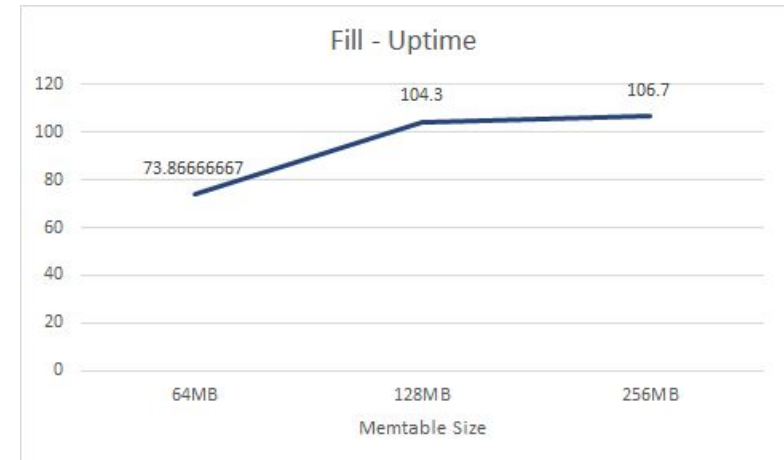
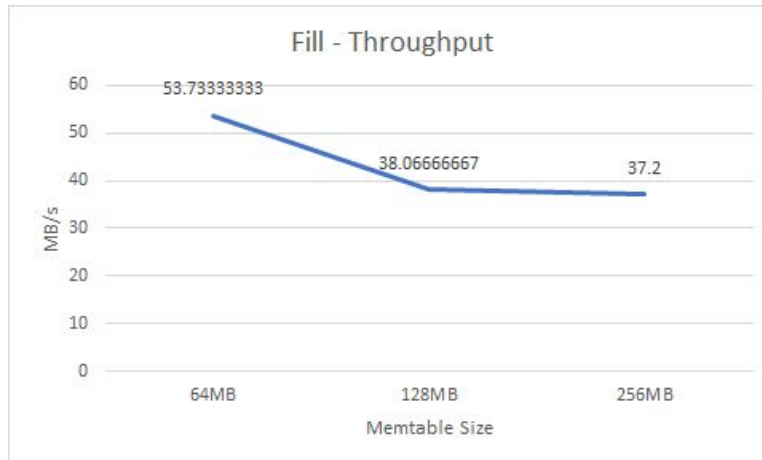
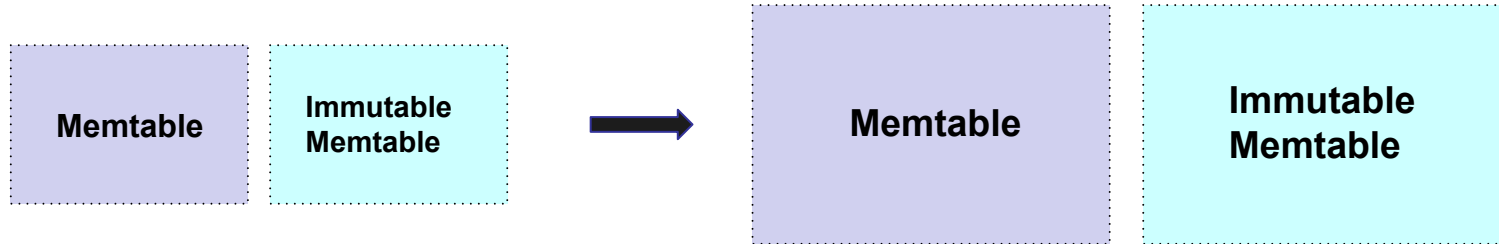
- Experiment Info

- ✓ RocksDB      version 6.21
- ✓ CPU          1 \* Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz
- ✓ Key          16 bytes
- ✓ Values        1KB
- ✓ Entries       4,000,000
- ✓ Other options are defaults

# RocksDB Festival

- Experiment 1

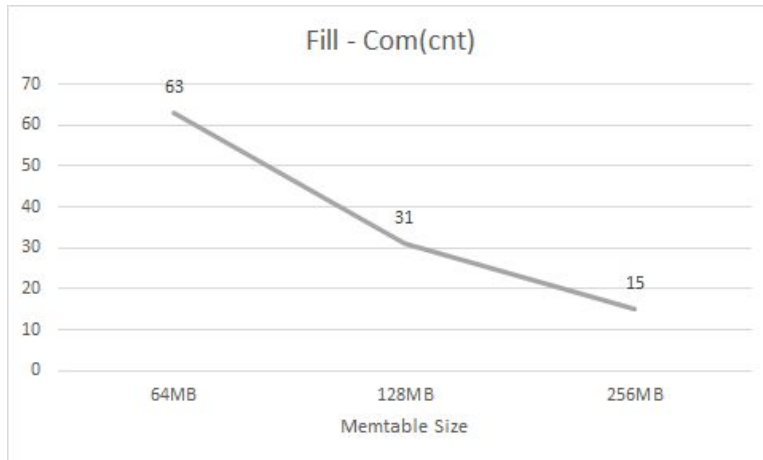
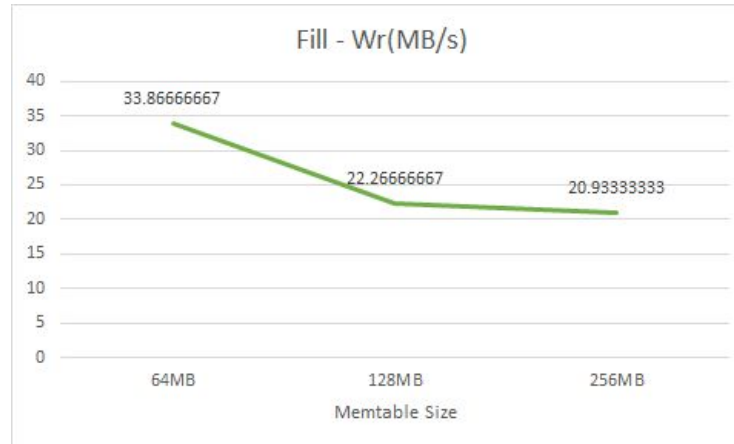
- ✓ memtable size (fillseq, value=1024, entries=4,000,000)



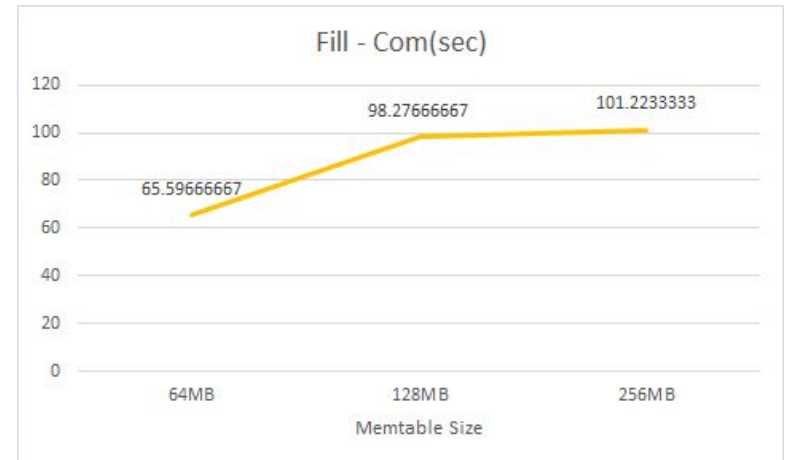
# RocksDB Festival

- Experiment 1

- ✓ memtable size (fillseq, value=1024, entries=4,000,000)



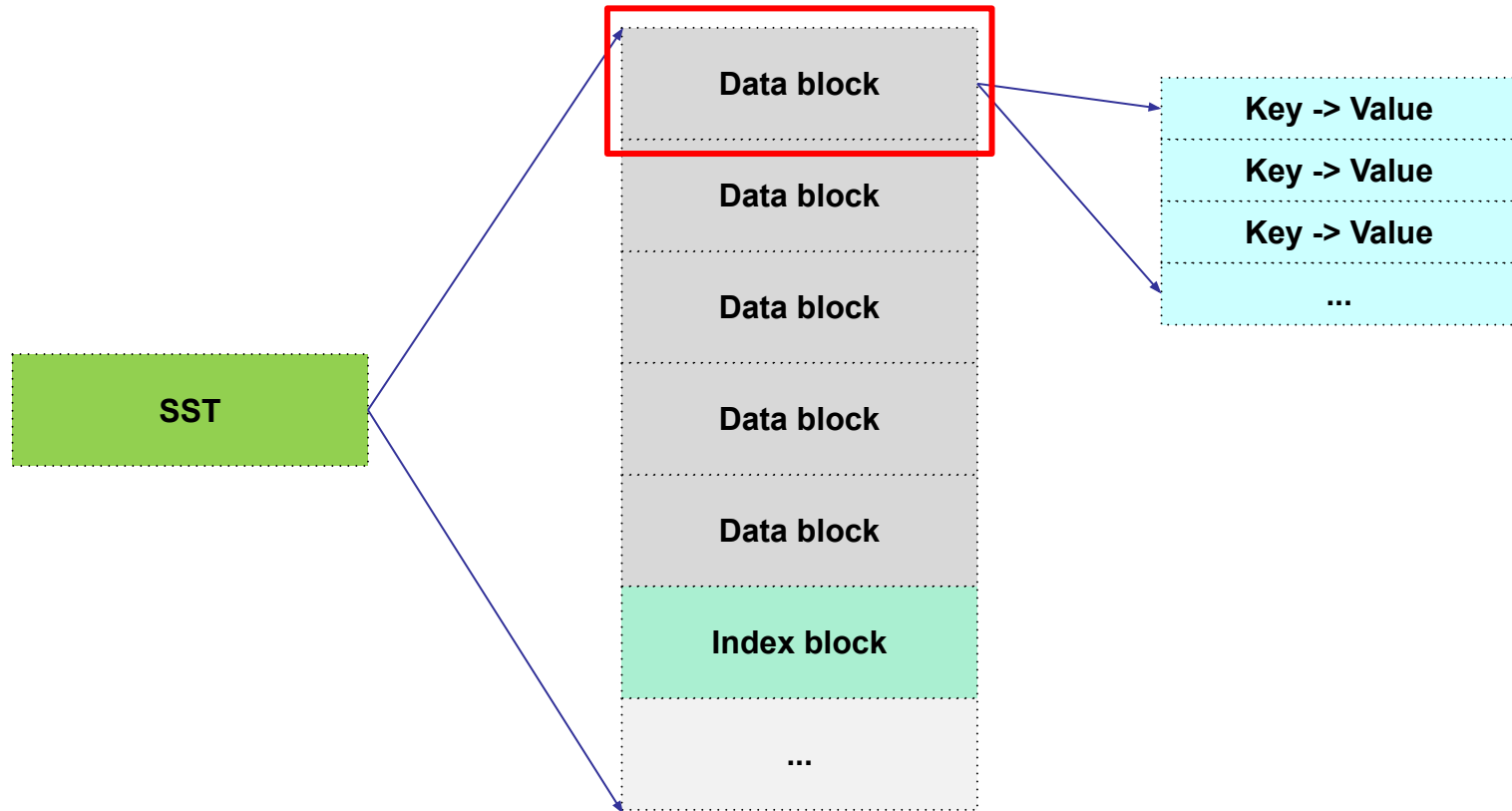
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# RocksDB Festival

- Experiment 2

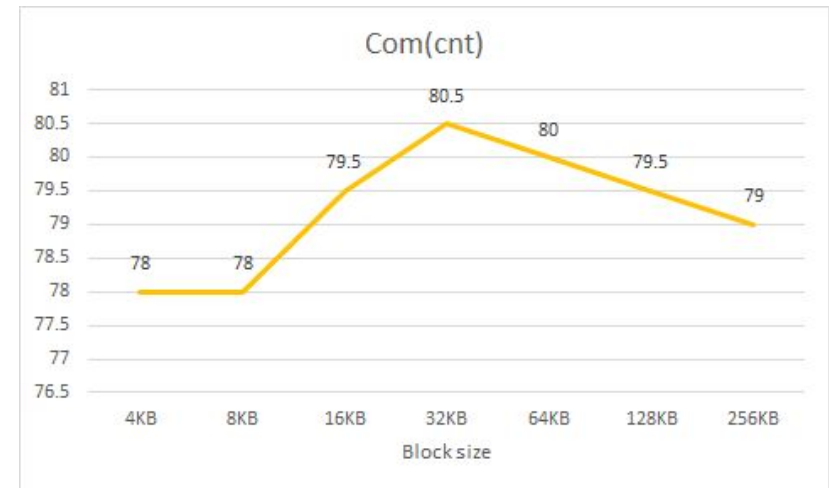
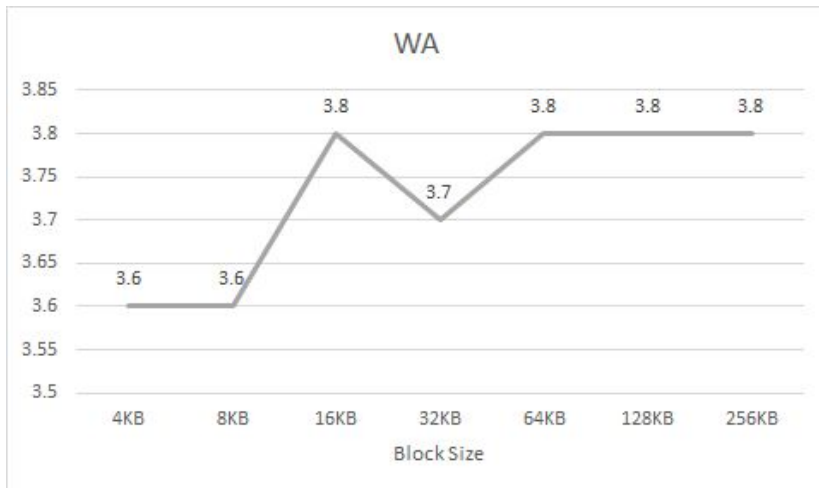
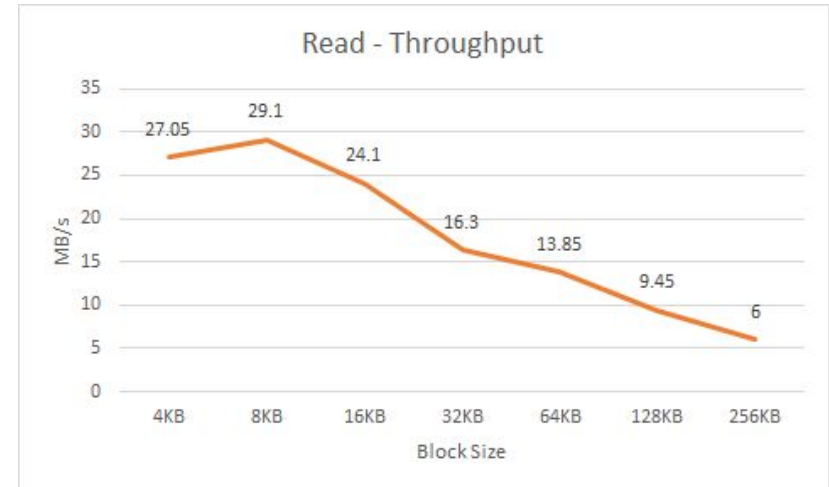
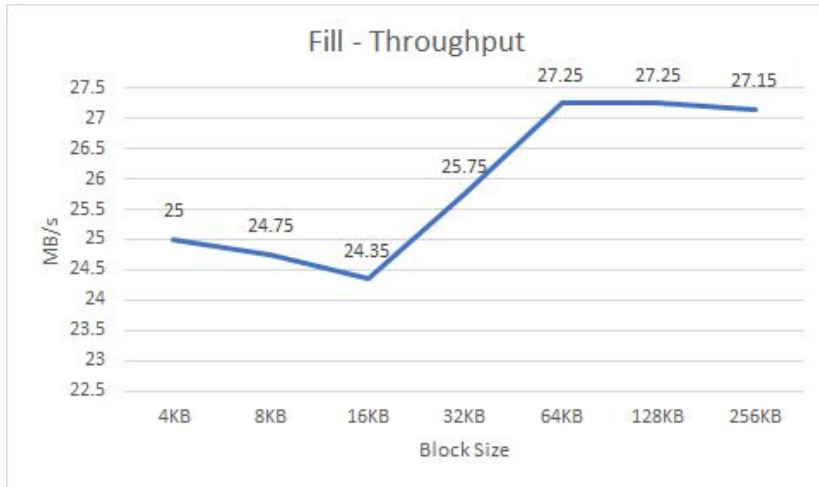
- ✓ block size (value=256, entries=4,000,000)



# RocksDB Festival

## • Experiment 2

- ✓ block size (value=256, entries=4,000,000)

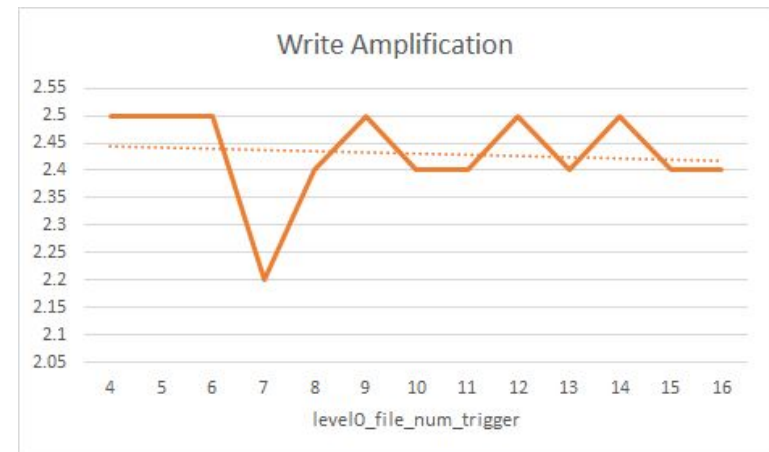
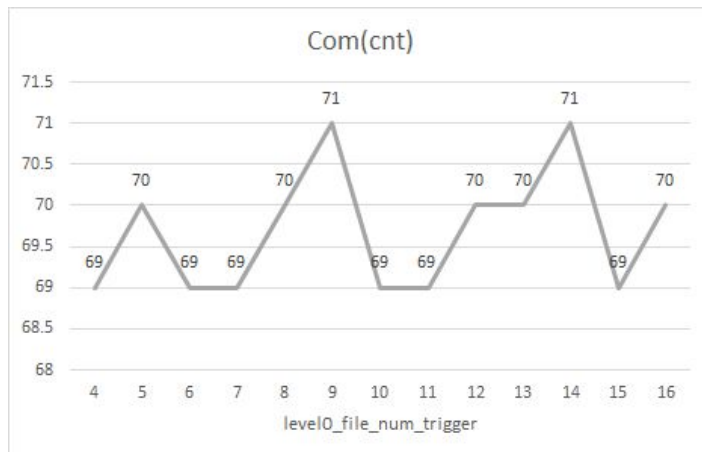
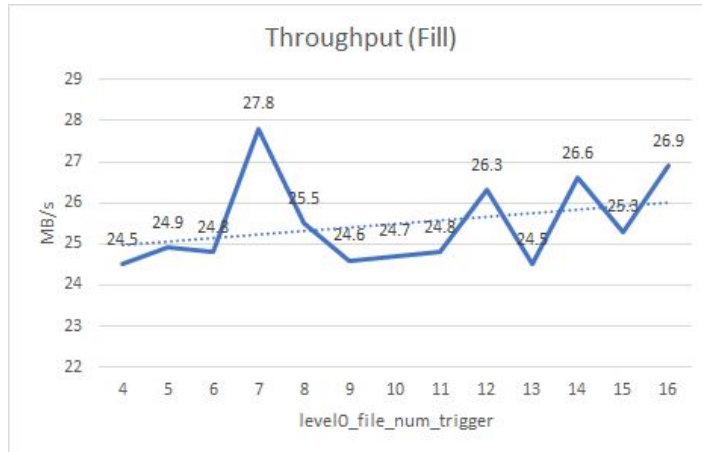




# RocksDB Festival

- Experiment 3

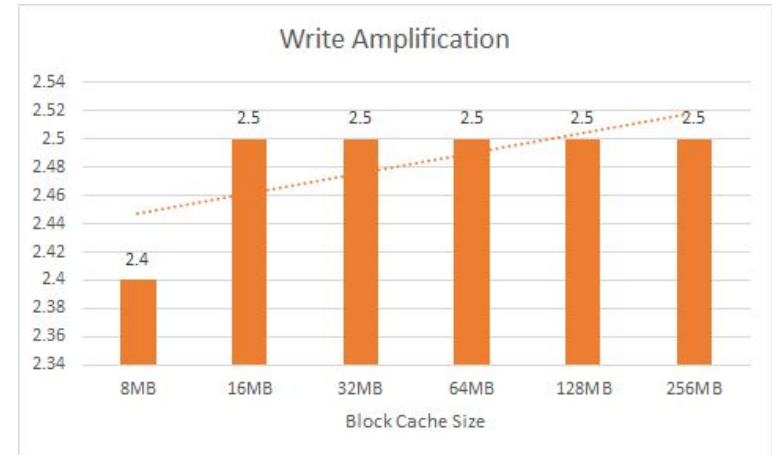
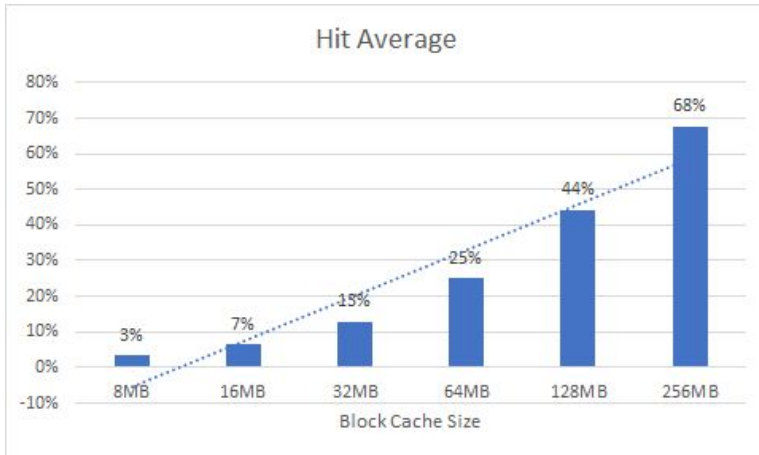
✓ level0 file num compaction trigger (value=1024, entries=4,000,000)



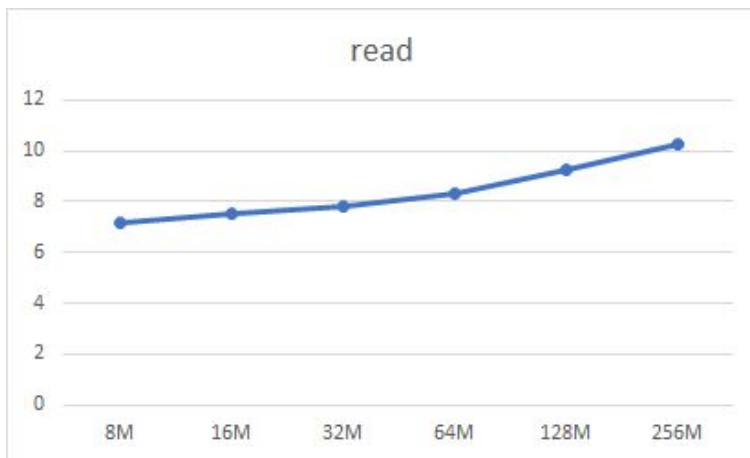
# RocksDB Festival

- Experiment 4 - Bonus

✓ block cache size (value=256, num=5,000,000)



Not related to WA ?



# RocksDB Festival

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- Next week
  - ✓ **Other ways to reduce Write Amplification !**
  - ✓ `level_compaction_dynamic_level_bytes`, `target_file_size_multiplier...`

# Discussion

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