NDB performance tuning

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Bottlenecks, where?

- Storage nodes CPU?

- Storage nodes disks?

- MySQL?

- Network?

NDBD CPU too high

- ## Missing index

  2009-04-16 15:42:51 [MgmSrvr] INFO   -- Node 2: Trans. Count = 4, Commit Count = 0, Read Count = 4, Simple Read Count = 4, Write Count = 0, AttrInfo Count = 4, Concurrent Operations = 0, Abort Count = 0 **Scans = 4** Range scans = 0
  2009-04-16 15:42:51 [MgmSrvr] INFO   -- Node 2: Operations=5

- ## Partitioning inefficient

- ## Realtime options

Using CPU efficiently

- How many NDBD per server
- Assigning threads to CPU
- Managing interrupts load

Disk is full!!!!

- What's on disk?
- Reducing the disk footprint

Temporary tables

- If persistence is not critical
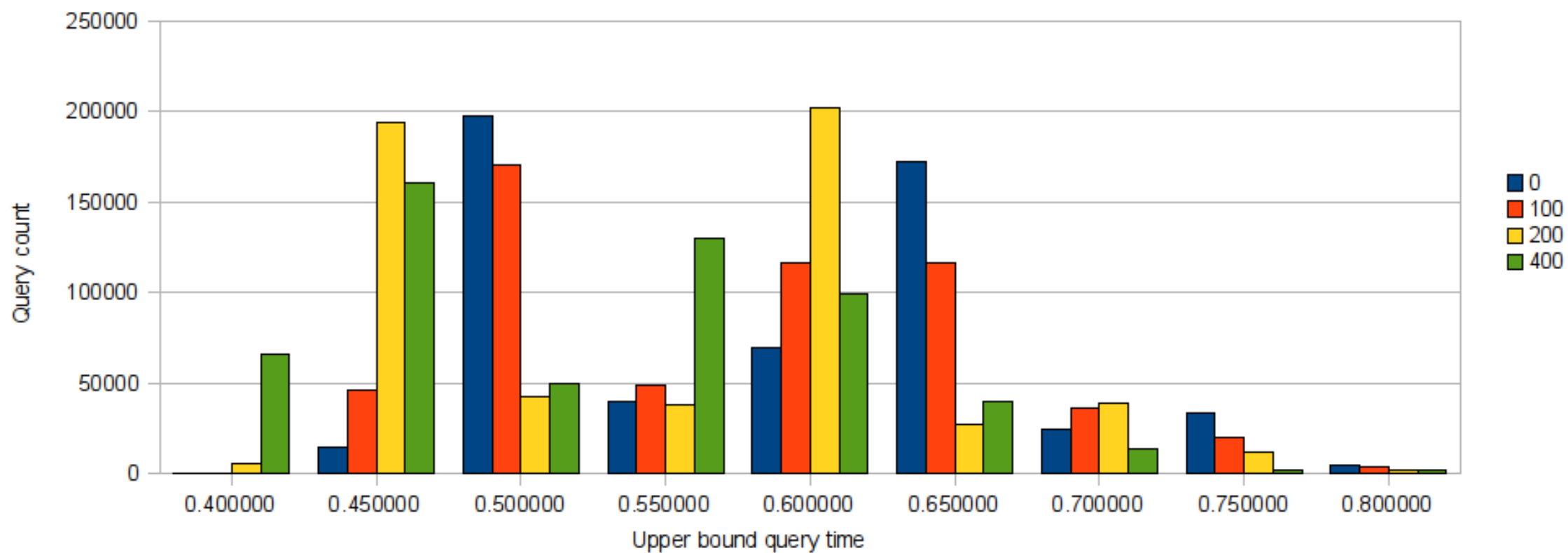- Good for high write load
- Not so volatile

Controlling query latency

Variation of Scheduler SpinTimer

Histogram of queries by time

About MySQL

- How many SQL nodes?

- How many connections per nodes?

- Number of NDB connections?

- Engine push condition?

Why custom partitioning?

- Basically... to scale queries
- Use case

Optimizing joins

- Nested loop is slow with NDB
- "IN" clause behave better
- NDB API is flexible
- BKA is comint

e1000 nics...

- What's the problem?

- Symptoms

- How to solve