An Adaptive Peer-to-Peer Network for Distributed Caching of OLAP Results

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Outline

- General Impression
- Problems Overview
- General Comment
- Future Work

General Impression

- It has interesting idea, sufficient discussion and detailed illustration
- It benefits a lot from former works
- It does not include all important issues
- It lacks for detail presentations

Problems Overview

- Authors do not provide suggestions for setting important system parameters
  - maximum # of hops (TTL)
  - maximum # of neighbors
  - peer's expiring time
  - reorganization period
- Little about 'writing' is discussed here
  - which should be and could be handled

Problems Overview (cont'd)

- Part of rearrangement is hardly talked about
  - peers' leaving and entering the system
- Publishing computational capabilities is mentioned, but not any more
- Cost of chunks' integration is ignored
- Cost Equation includes redundant information
  - T(..) and H(..) in B(c,P) <equation 3>

Problems Overview (cont'd)

- Some issues are vague
  - Comparison of EQP & LQP in experiment section
  - The manner of returning located missing chunks
- Test cases or scenarios are inadequate
  - Single DW
  - Only LQP is further test
- There are some minor errors
  - Does "$T_{reorg} = 0$" refer to static case?

General Comments

- The presentation of the paper
- The scalability of the system
- The performance of the system
  - response time
  - system throughput
- …

Future Work

- To carry out larger scale testing
- To provide suggestions for system parameters
- To take care of writing
- To compute result by further aggregation
- To optimize network rearrangement