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

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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

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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

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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
  – $T(\ldots)$ and $H(\ldots)$ in $B(c,P)$ <equation 3>

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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 “$T_{\text{reorg}} = 0$” refer to static case?

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General Comments

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

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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

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