Filtering Algorithms and Implementation for Very Fast Publish/Subscribe Systems
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Agenda

- New Ideas
- Limitation
- Comments and Remarks
- Directions of Further Research
New Ideas

- Main-memory algorithm is cache conscious
- Subscription clustering
  - The access predicate is a conjunction of simple predicates

Limitation

- The subscription language is limited
- Tradeoff between the expressiveness of the subscription language and the cost of the matching algorithm
- Requirements for an expressive subscription language
  - Changes and degrees of change in value
    - Increase by x%
  - Points in time
    - Events between 4 and 6 p.m.
  - Approximate relation
    - Cheap products
Quality of presentation

- Sufficient background information
- Definitions used are not highlighted
- Examples before definitions

Cluster-matching algorithm

- Restrictive example
  - Subscriptions with only 3 predicates
- Cache-conscious
  - LOOKAHEAD
Access Predicates

- Conjunction of equality predicates
  - Argument?
- Subscriptions without equality predicates

Other Comments...

- Subscription deletions
- Threshold values for maintenance algorithm
Directions of Further Research

- Analysis for access predicate that contains inequality predicates
- Subscription Language Expressiveness vs. Matching Algorithm Time Cost

Your comments...