

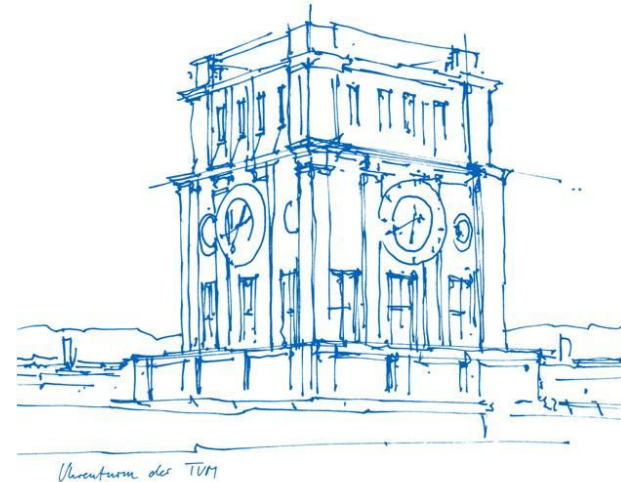
Lab course: Cloud Databases

Group 10 :

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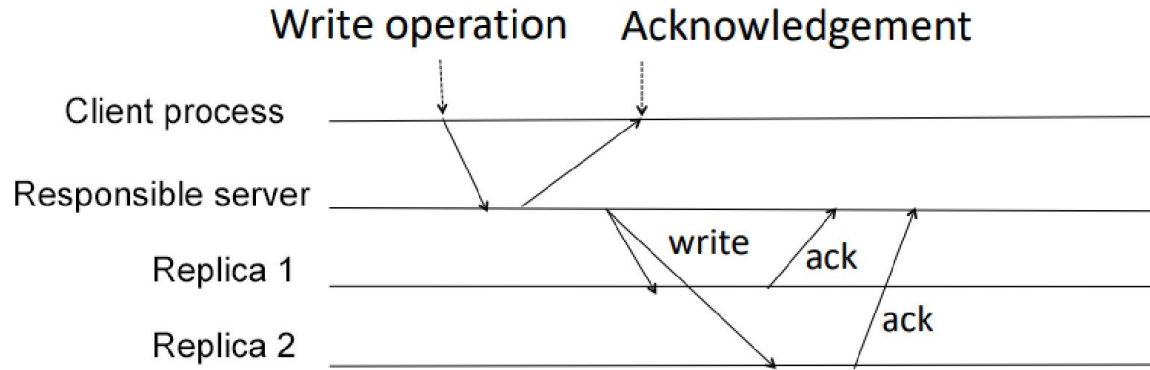
Sanskar Gupta

Emir Chalghaf



The old milestones implementation

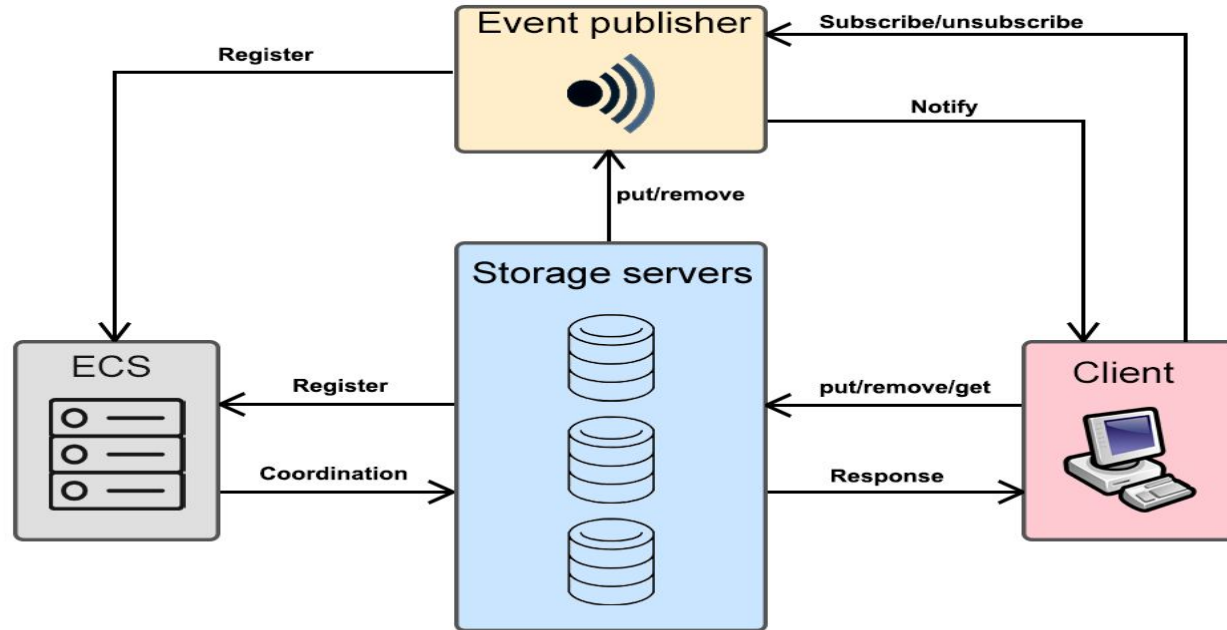
- Storage server ring with Consistent hashing.
- Lazy replication system.



Our extension

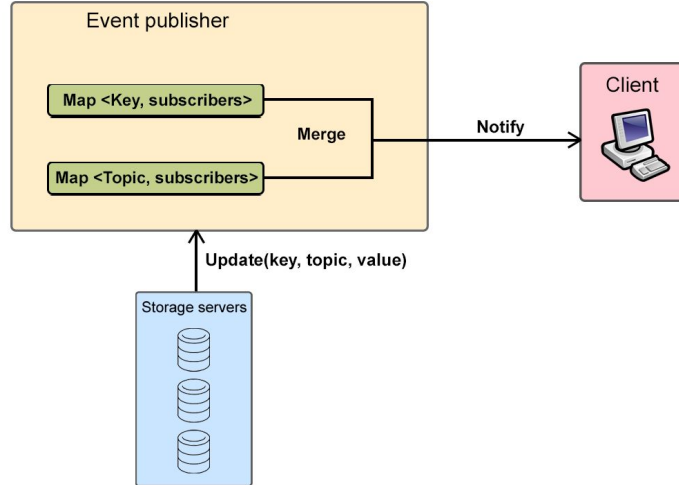
- Notification mechanism (Subscribe / unsubscribe)
- Topic-based matching

Notification system approach



Topic-based matching approach

- An optional topic can be assigned by clients and stored
- Clients have the option to subscribe to either keys or topics

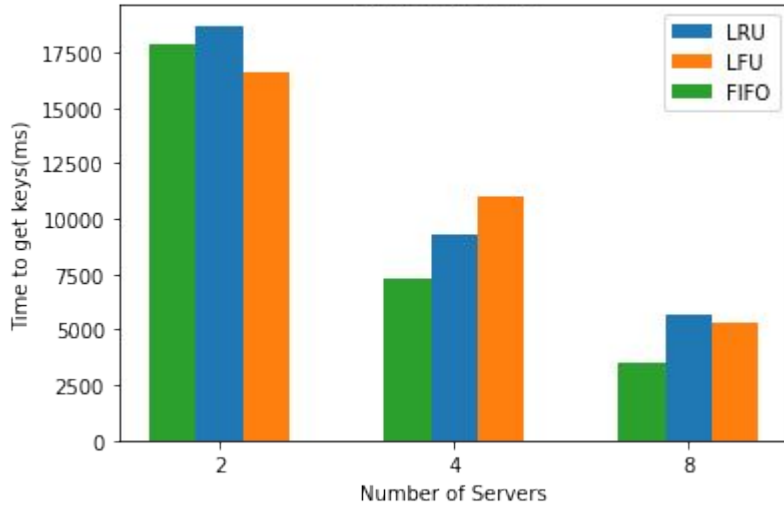


Demo

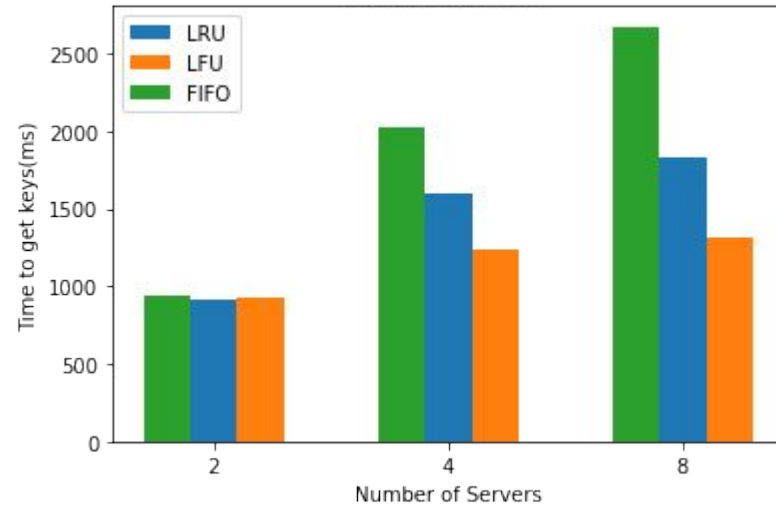
Performance

- 1600 keys

Cache Size 100

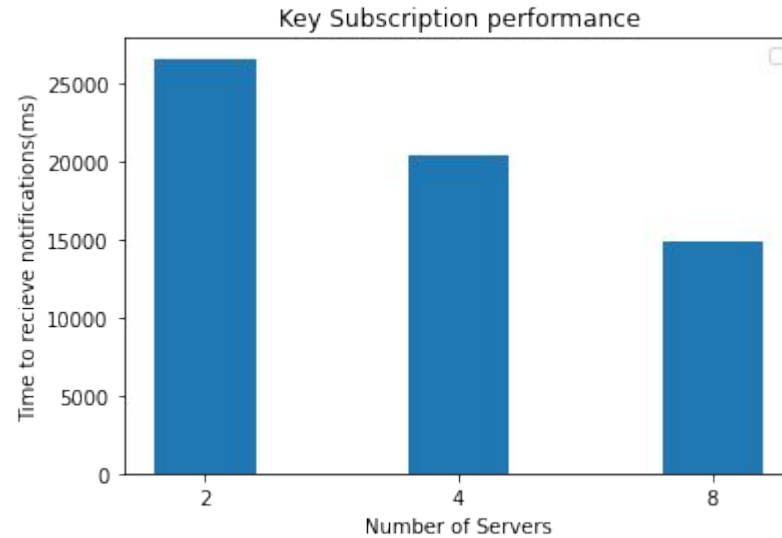


Cache Size 1000



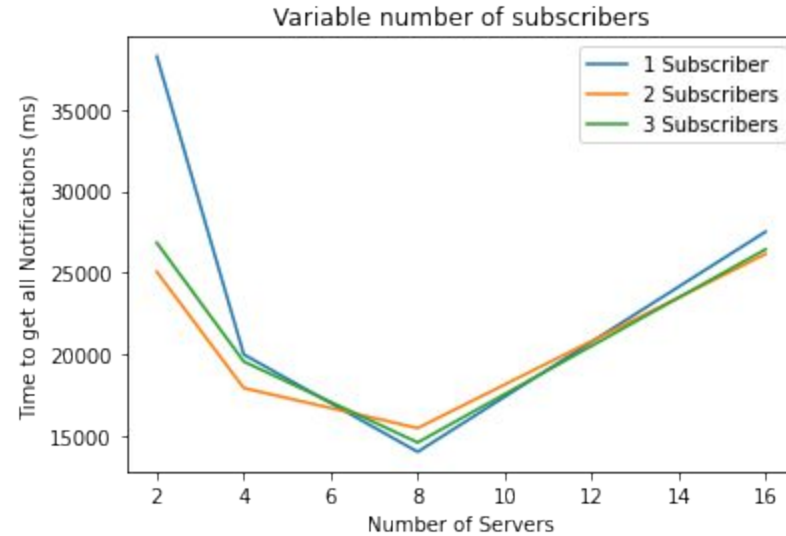
Performance

- 1600 keys



Performance

- 1600 keys



Possible improvements

- Event publisher is single point of failure for the feature.
- Notify clients when they come back online

What we learned from this course

- Reminded well of how java sockets and threads worked.
- Documentation and coordination are really important.
- Sometimes the biggest problem is caused by the smallest mistakes.

Thank you
for
your attention