



Migrations under Production Load

How to Switch Your Database without Disrupting Service

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SREcon EMEA 2018



What is a migration?

A CHANGE IN ARCHITECTURE
without a change in behavior



0 Justify

1. Write

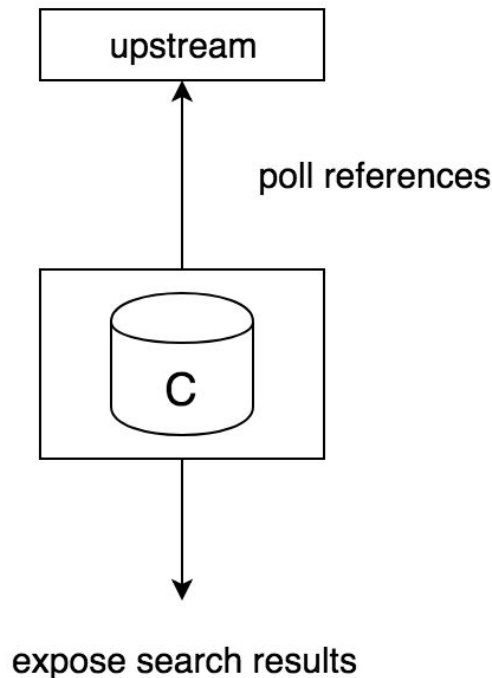
2. Compare

3. Optimize

4. Wait & clean up

Feed Migration

- Goal: migrate feed to new dataset
 - new feed delivered via new write path
- Opportunity: clean up stale data
 - data model does not support deletions
 - system that emits references handles deletions
- Opportunity: upgrade hardware



Database Migration

- Problem: mySQL approaching maximum QPS
 - without sharding
- Problem: mySQL writes are too slow
 - queues build up, delaying updates
- Data model bad fit for relational database

