

Stream system survey

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February 14, 2019

1 Challenges

The following questions serve as criteria to verify the proposal architecture.

1.1 Do independent fields delay each other?

Inventory Health team has a fat table which contains about 30 fields of data. Some fields are pair-wise independent like Inventory Age and Glance view. But one field delays will also block the other one.

1.2 Is it human fault-tolerant?

Suppose the whole system crash down, How to recover to a consistent state?
How to be human fault-tolerant?

Yet there's a form of fault-tolerance that's much more important than machine fault-tolerance: human fault-tolerance. If there's any certainty in software development, it's that developers aren't perfect and bugs will inevitably reach production. Our data systems must be resilient to buggy programs that write bad data [1]

References

- [1] Marz, Nathan, How to beat the CAP theorem
<http://nathanmarz.com/blog/how-to-beat-the-cap-theorem.html>.