Stream system survey

Zhihao Wang

February 14, 2019

1 Problem

The following questions serve as criteria to verify the proposal architecture.
[1]

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] Michel Goossens, Frank Mittelbach, and Alexander Samarin. The \(\mathbb{D}T_EX \) Companion. Addison-Wesley, Reading, Massachusetts, 1993.

- [2] Albert Einstein. Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]. Annalen der Physik, 322(10):891â921, 1905.
- [3] Knuth: Computers and Typesetting, http://www-cs-faculty.stanford.edu/~uno/abcde.html