Consistency dont need stinking no

Most ES systems are consistent

Item Added

Item Added

Created

Item Added

Item Added

Created

Item Added

Item Added

Item Added

Item Added

Created

Item Removed

Item Added

Item Added

Created

Item Added

Item Added

Quorum Reached

Item Added

Item Added

Created

Item Removed

Item Added

Item Added

Created

Item Removed

Item Added

Item Added

Must have quorum

"Quorum read" assures consistency!

What if ...

Server latency is ... high?

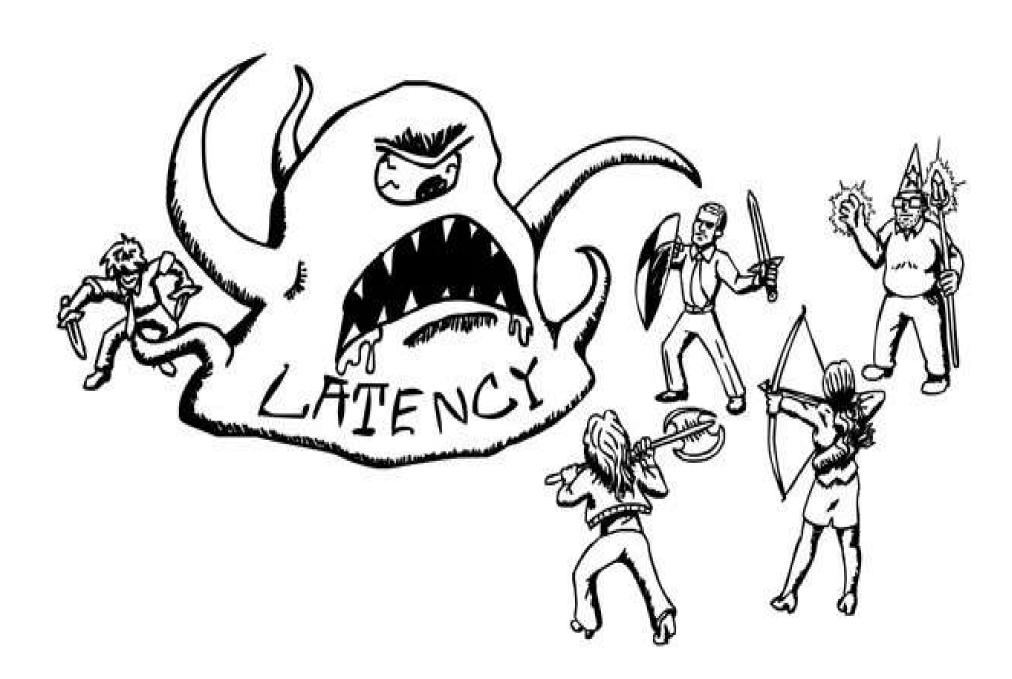
What if ...

Server 1 Netherlands Server 2 NYC Server 3 Brazil

What if ...

We are on a #\$%^ing oil rigs?!

CAP?!





Motivation++

Item Added

Item Added

Created

Item Added

Item Added

Created

Item Added

Item Added

Item Added

Item Added

Created

Item Removed

Item Added

Item Added

Created

Item Added

Item Added

What if?!

Item Added

Item Added

Created

Deleted

Item Added

Item Added

Created

Item Added

Item Added

Deleted

Item Removed

Item Added

Item Added

Created

Item Removed

Deleted

Item Added

Item Added

Created

Item Added

Item Added



Can we detect this?

4 Deleted

3 Removed

2 Item Added

1 Item Added

0 Created

4 Removed

3 Deleted

2 Item Added

1 Item Added

Keep ORIGINAL too!

4/3 Deleted

3/3 Removed

2/2 Item Added

1/1 Item Added

0/0 Created

4/3 Removed

3/3 Deleted

2/2 Item Added

1/1 Item Added

0/0 Created

4/3 Deleted

3/3 Removed

2/2 Item Added

1/1 Item Added

0/0 Created

4/3 Removed

3/3 Deleted

2/2 Item Added

1/1 Item Added

0/0 Created

\$ConflictDetected Stream 3/4 \$ConflictDetected Stream 3/4

Entire Codebase ... < 1kloc :O

Availability++

Geographic Distribution!!

When should you do this?!