

Eventual Consistency in Riak Key-value Store

- An older version of Riak uses **vector clocks**! (Should sound familiar to you!)
- Implements causal ordering
- Uses vector clocks to detect whether
 1. New write is strictly newer than current value, or
 2. If new write conflicts with existing value
- In case (2), a *sibling value* is created
 - Resolvable by user, or automatically by application (but not by Riak)
- To prevent vector clocks from getting too many entries
 - Size-based pruning
- To prevent vector clocks from having entries updated a long-time ago
 - Time-based pruning