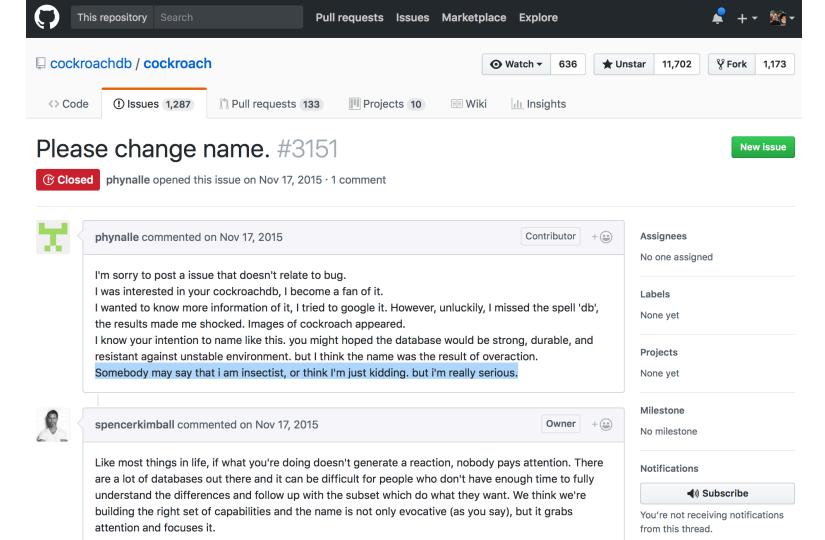




Zombie Apocalypse

stress-free cockroachdb DBA



CockroachDB Intro

- SQL (postgresql dialect)
- ACID
- Distributed (serializable isolation level guaranteed)
- Synchronous replication
- Auto sharding (ranges)
- No dependencies on special hardware (read: works with just NTP)
- Correct First.
- •CP in CAP

CockroachDB current use cases

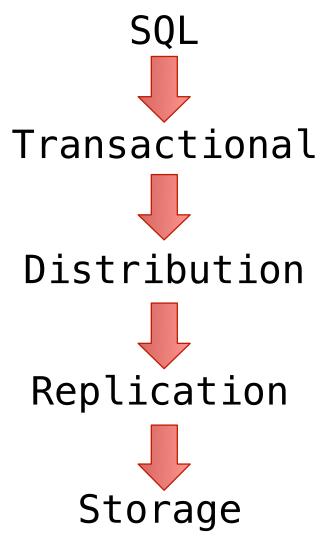
Good for:

- Distributed or replicated OLTP
- Multi-datacenter deployments
- Cloud-native infrastructure

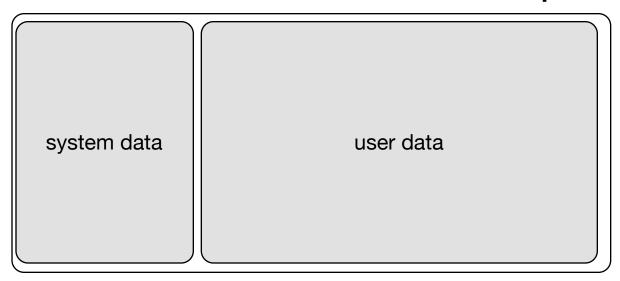
Bad for:

- Complex Joins (being improved)
- OLAP

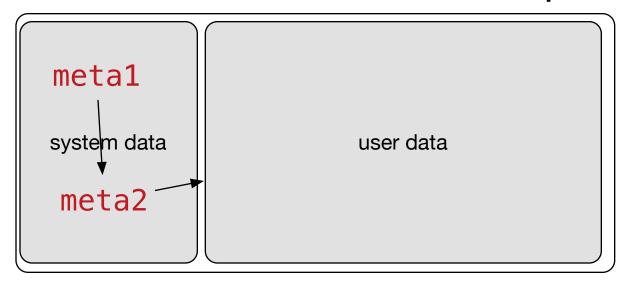
CockroachDB Layers



Monolithic Sorted Map



Monolithic Sorted Map



Example for alphabetically sorted column, meta1 (taken from manual)

Points to meta2 range for keys [A-M)

meta1/M -> node1:26257, node2:26257, node3:26257

Points to meta2 range for keys [M-Z]

meta1/maxKey -> node4:26257, node5:26257, node6:26257

```
    Example for alphabetically sorted column, meta2 (taken from manual)

# Contains [A-G)
meta2/G -> node1:26257, node2:26257, node3:26257
# Contains [G-M)
meta2/M -> node1:26257, node2:26257, node3:26257
# Contains [M-Z)
meta2/Z -> node4:26257, node5:26257, node6:26257
# Contains [Z-maxKey)
meta2/maxKey -> node4:26257, node5:26257, node6:26257
```

