

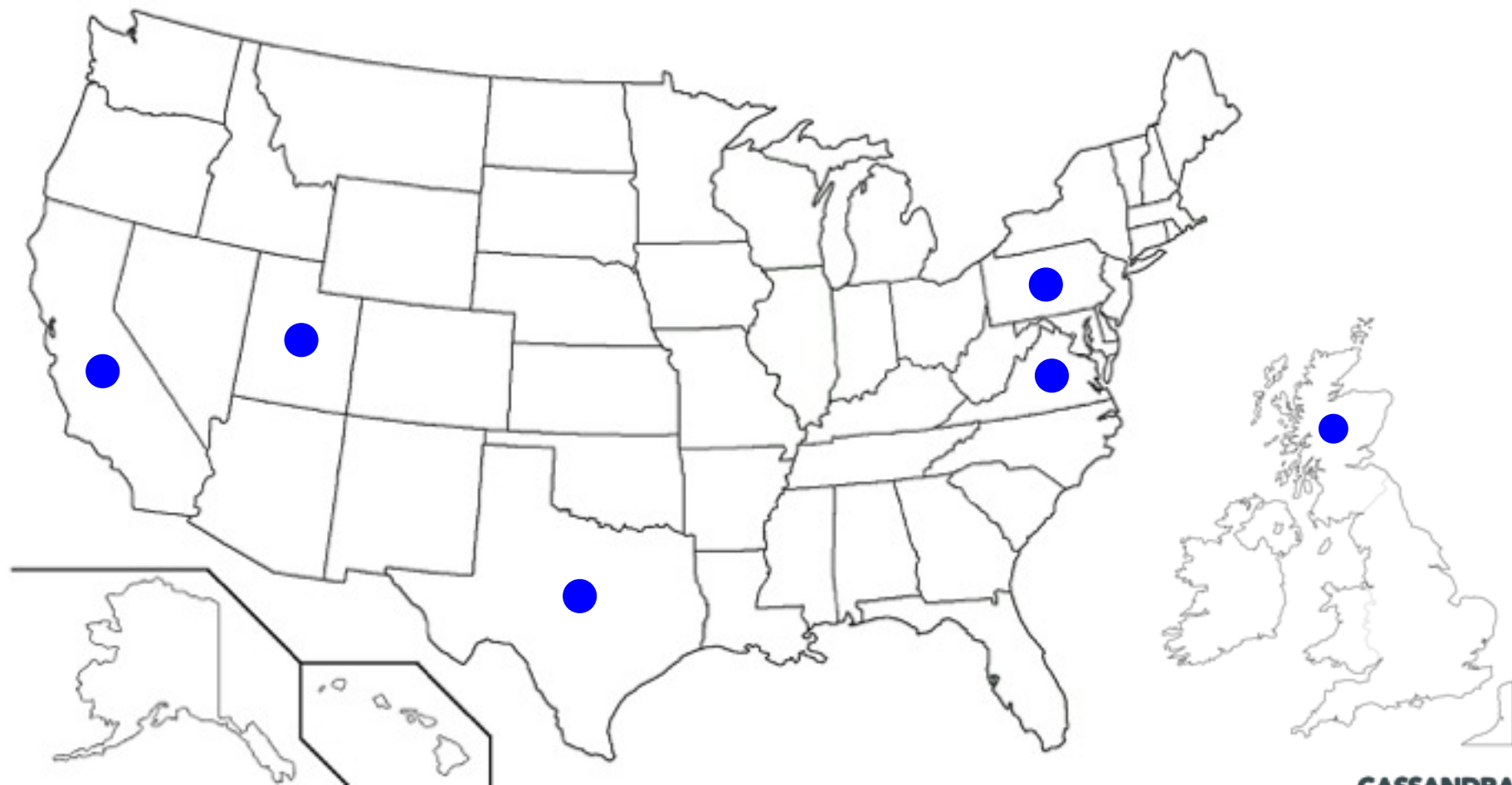


The State of Testing in Apache Cassandra

Philip Thompson, Software Engineer in Test, DataStax
Jim Witschey, Software Engineer in Test, DataStax

DataStax C* Test Engineering

- Distributed team of test engineers



DataStax C* Test Engineering

- Reproduce C* bugs
 - e.g. CASSANDRA-11906
- Test new features
 - e.g. CASSANDRA-7019
 - (see our other talk 😊)
 - e.g. CASSANDRA-8844

DataStax C* Test Engineering



- Administer, maintain, & improve CassCI
- Prepare pre-vote reports for tagged release candidates
 - see dev@cassandra.apache.org

How Do We Test C*?

- Unit tests
 - in tree
- Integration tests
 - github.com/riptano/cassandra-dtest
- Jepsen tests
 - github.com/riptano/jepsen

Changes in Testing in C* Dev Process

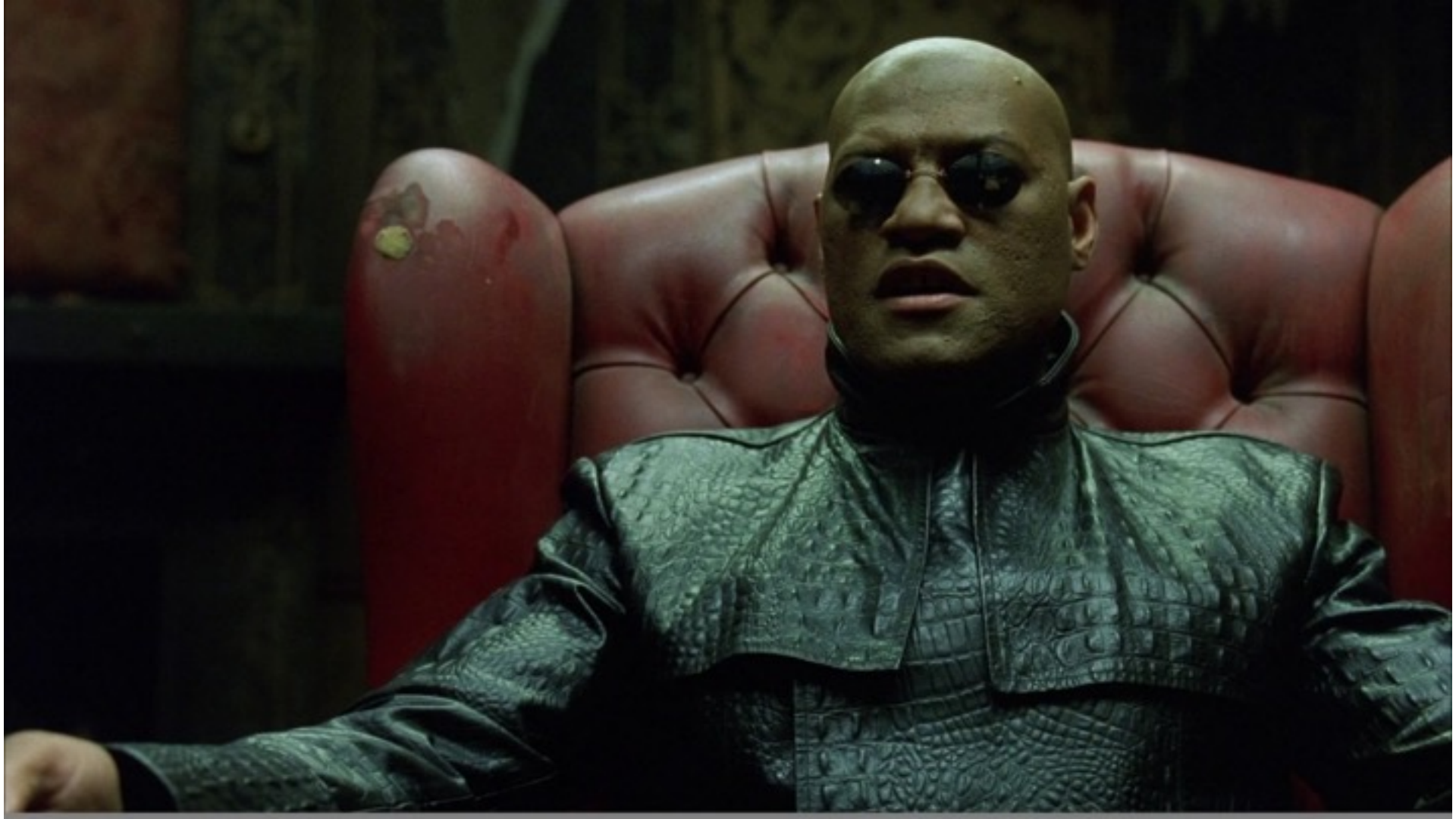
- Pre-vote test reports
- Push to green test board
 - CASSANDRA-12323
 - CASSANDRA-12249

Vetting Changes

- Committers ask for dtest run on CassCI
- Devs add integration tests to dtest
- Devs use cstar_perf to demonstrate no perf regressions
 - cstar.datastax.com

Onward

- Observability



Onward

- Tests as Design Feedback

Testing Cassandra

- Unit tests, cassandra-dtest, jepsen
- CassCI and cstar_perf for review
- Pre-vote test reports, push to green test board
- Onward: observability, more real-world failure, tests as design feedback