

CASSANDRA-6969

thobbs

2014-04-01

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Chapter 1

Root issue CASSANDRA-6969

1.1 Summary

Use Unsafe Mutations Where Possible in Unit Tests

1.2 Description

Since the test config uses the "batch" mode for the commitlog, safe writes are quite slow. In tests that don't rely on safe writes, we should use unsafe writes. This mostly consists of converting `{{RowMutation.apply()}}` calls into `{{RowMutation.applyUnsafe()}}` calls.

1.3 Commits

No related commits

1.4 Comments

1. **benedict:** If this is the plan, why not just convert to periodic CL? I thought the reason we used Batch CL in unit tests was to give it a bit of a run in case it happens to catch something? (Admittedly not the most scientific of reasons, but if we're planning on disabling it everywhere, it does seem like using Batch doesn't buy us much)
2. **thobbs:** I'm not sure why we use batch CL for the tests. If you're correct and the purpose is to exercise batch CL, we should just make sure it's properly tested elsewhere. I'd argue that having slow unit tests is hurting our stability more than not using batch CL for unit tests would.
3. **jbellis:** That was the idea -- not many people run Batch in the wild, so let's make sure it at least gets tested in the lab.

Could we make a dtest profile using batch instead?

4. **jbellis:** We should look at it after CASSANDRA-6968, but for now batch CL doesn't look like a big contributor to the slowness. On my machine it's 12:25 with batch and 12:02 with periodic.
5. **lyubent:** Attaching a patch to use unsafe mutations. To sum it up unsafe mutations were applied to all unit tests except the 4 below (due to causing errors):
ReadMessageTest

```
# RecoveryManagerTest
# RecoveryManager2Test
# RecoveryManager3Test
```

6. **jbellis:** What improvement do you see on your box from this?
7. **lyubent:** [~jbellis] {{20 sec}} improvement when running without extra runners:
pre: BUILD SUCCESSFUL Total time: 8 minutes 2 seconds
post: BUILD SUCCESSFUL Total time: 7 minutes 43 seconds
{{8 sec}} when running with 8 runners:
pre: BUILD SUCCESSFUL Total time: 3 minutes 27 seconds
post: BUILD SUCCESSFUL Total time: 3 minutes 19 seconds
8. **thobbs:** +1 and committed to trunk. Thanks!

1.5 Pull requests

No pull requests