

## Item 6

### git\_comments:

1. sleep until any schema migrations have finished
2. We don't wait, because we're going to actually try to work on

### git\_commits:

1. **summary:** Fix the fat client.  
**message:** Fix the fat client. Patch by Carl Yeksigian, reviewed by brandonwilliams for CASSANDRA-5378

### github\_issues:

### github\_issues\_comments:

### github\_pulls:

### github\_pulls\_comments:

### github\_pulls\_reviews:

### jira\_issues:

1. **summary:** Fat Client: No longer works in 1.2  
**description:** The current client only example doesn't compile. After doing some updates, the fat client still won't work, mainly because the schema is not being pushed to the fat client. I've made changes to the client to support CQL3 commands, to the ServiceManager to wait until a migration has completed before starting the client, and to the MigrationManager to not try to pull schemas from a fat client.

### jira\_issues\_comments:

1. Was actually developing against trunk for this patch, so the fix version should be 2.0. I'm fixing it for 1.2.4 as well, but this patch doesn't apply cleanly.
2. This patch is applied against the 1.2 branch - the unclean file wasn't needed.
3. Committed, thanks!
4. <http://buildbot.datastax.com:8020/builders/cassandra-1.2/builds/179/steps/shell/logs/stdio>  
StorageServiceClientTest is failing, can you take a look?
5. This fixes the test.
6. Committed as well, thanks.
7. This broke a dtests, namely `cql_tests.py:TestCQL.bug_5240_test`. The reason is that the patch modifies `SelectStatement.java` and call `CFMetadata.getKeyName()`, but that method should not be called from CQL3 ever. I'm not sure I understand why fixing the fat client would involve making any kind of change in `SelectStatement` tbh.
8. The change to select statement is because the fat client can't use the CFS as it doesn't have the data. So, the only things that we have instead is the metadata. Since CQL3 is the way that most clients will want to interact with the service, I thought it made sense to try to update those statements to not use the CFS; any direction on how to fix this?
9. **body:** Well looking at that code, what was the rational of adding the offending line was added in the first place: `{noformat} + indexedNames.add(cfm.getKeyName()); {noformat}` Seems to me it could just be removed.  
**label:** code-design
10. If we don't have that, we won't be able to validate a query against the row key. That is, if the schema is:  
`{code} CREATE COLUMNFAMILY standard1 ( id ascii PRIMARY KEY , name ascii , value blob ) ;`  
`{code} SELECT * FROM standard1 WHERE id='abc'; {code}` That select statement will not be validated, as no column is indexed, but the row key is. It'll throw the "No indexed columns present in by-columns clause with Equal operator" exception.
11. I'm not sure what you are talking about. The example above have always worked and does not require the row key to be added to the indexedNames (which is an addition of this patch). The row key is "primarily" indexed but it's not indexed by a secondary index. And adding a secondary index on the row key is not

something supported (largely because it would be useless). So anyway, I have removed that line in commit 69f05a704aafa90f2151db721312f3c5907abb2f if only because that restore the behavior of before that patch and let all cql dtests pass. If you still think there is a problem, please open a separate issue with a test case showing the problem you are talking about.

12. The fix for the test breaks the fat client 5378-v2.txt It can no longer get the schema from the non-fat clients and instead throws: {code} java.lang.NullPointerException at org.apache.cassandra.service.MigrationManager.maybeScheduleSchemaPull(MigrationManager.java:123) at org.apache.cassandra.service.MigrationManager.onAlive(MigrationManager.java:98) at org.apache.cassandra.gms.Gossiper.markAlive(Gossiper.java:773) at org.apache.cassandra.gms.Gossiper.handleMajorStateChange(Gossiper.java:816) at org.apache.cassandra.gms.Gossiper.applyStateLocally(Gossiper.java:901) at org.apache.cassandra.gms.GossipDigestAck2VerbHandler.doVerb(GossipDigestAck2VerbHandler.java:50) at org.apache.cassandra.net.MessageDeliveryTask.run(MessageDeliveryTask.java:56) at java.util.concurrent.ThreadPoolExecutor\$Worker.runTask(ThreadPoolExecutor.java:886) at java.util.concurrent.ThreadPoolExecutor\$Worker.run(ThreadPoolExecutor.java:908) at java.lang.Thread.run(Thread.java:662) {code} Can we put the change back in or somehow fix this NPE?
13. The point of the second patch was to prevent us from using the file system. This means that the migration manager probably needs to be able to operate exclusively in memory. I'll take a look at this issue later today.
14. I'm attaching a fix that adds back the Schema.instance.updateVersion(), but prevents writing out to disk by that call. This fixes the test, and the startup of the fat client.
15. Marking Patch Available.
16. Looks like I ninja'd this exact patch in right after committing the original, to fix the test.