

**git\_comments:**

**git\_commits:**

1. **summary:** [HBASE-5199] Follow up: Replace the System.currentTimeMillis as  
**message:** [HBASE-5199] Follow up: Replace the System.currentTimeMillis as EnvironmentEdgeManager.currentTimeMillis Summary: In HBASE-5199, It used System.currentTimeMillis() to calculate the expired time stamp. However, I just found out that it is supposed to replace this System runtime as EnvironmentEdgeManager. I will update the patch for open source trunk as well. Test Plan: running all the unit tests Reviewers: kannan, kranganathan Reviewed By: kannan CC: hbase-eng@lists Differential Revision: <https://phabricator.fb.com/D395783> git-svn-id: <https://svn.apache.org/repos/asf/hbase/branches/0.89-fb@1239787> 13f79535-47bb-0310-9956-ffa450edef68

**github\_issues:**

**github\_issues\_comments:**

**github\_pulls:**

**github\_pulls\_comments:**

**github\_pulls\_reviews:**

**jira\_issues:**

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**label:** code-design
7. **summary:** Delete out of TTL store files before compaction selection



- [illegible]



2. I think Lars is referring to HBASE-4721 by Prakash. Yes, worth making sure it plays well with that -- though I suspect it should work out just fine.
3. Thanks Lars and Kannan. I will double check this.
4. Liyin requested code review of "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Reviewers: Kannan, JIRA Currently, HBase deletes the out of TTL store files after compaction. We can change the sequence to delete the out of TTL store files before selecting store files for compactions. In this way, HBase can keep deleting the old invalid store files without compaction, and also prevent from unnecessary compactions since the out of TTL store files will be deleted before the compaction selection. TEST PLAN TestStore REVISION DETAIL <https://reviews.facebook.net/D1311>  
AFFECTED FILES src/main/java/org/apache/hadoop/hbase/regionserver/Store.java  
src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
5. Kannan has added reviewers to the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Added Reviewers: khemani, aaiyer, Karthik adding a few more reviewers in case someone else can get to this earlier. REVISION DETAIL <https://reviews.facebook.net/D1311>
6. **body:** tedyu has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". INLINE COMMENTS  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1053 Should this check be moved to line 1016 ? src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1024 Changing 'because' to 'where' would make the sentence more readable REVISION DETAIL <https://reviews.facebook.net/D1311>  
**label:** code-design
7. Karthik has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Havent reviewed the test code yet... INLINE COMMENTS  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1039 Do we need this assignment? Can we make the condition: if (nonExpiredFiles.size() < currentStoreFiles.size()) { //... }  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1017 Should we exclude files contained in filesCompacting? Otherwise we could end up deleting a file which is currently being compacted... REVISION DETAIL <https://reviews.facebook.net/D1311>
8. Liyin updated the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Reviewers: Kannan, JIRA, khemani, aaiyer, Karthik Address Karthik's comments. REVISION DETAIL <https://reviews.facebook.net/D1311> AFFECTED FILES  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java  
src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
9. Liyin updated the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Reviewers: Kannan, JIRA, khemani, aaiyer, Karthik Fix a typo. REVISION DETAIL <https://reviews.facebook.net/D1311> AFFECTED FILES  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java  
src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
10. Karthik has accepted the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". LGTM! REVISION DETAIL <https://reviews.facebook.net/D1311>
11. khemani has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". INLINE COMMENTS  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1040 should Readers be notified via notifyChangeReadersObservers()? src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1016 Can this be done inside a readLock() (for most of the compactions no storefiles will actually get removed) REVISION DETAIL <https://reviews.facebook.net/D1311>
12. Liyin has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". INLINE COMMENTS  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1016 Since this function is to change <this.storeFiles> by deleting the expired storeFiles, writeLock is needed here.  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1040 Good Point ! I will update this. REVISION DETAIL <https://reviews.facebook.net/D1311>
13. tedyu has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". INLINE COMMENTS  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1040 Currently notifyChangedReadersObservers() is called outside lock.writeLock(). Please add the call after line 1044. REVISION DETAIL <https://reviews.facebook.net/D1311>
14. khemani has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". INLINE COMMENTS  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1016 find out the set of files to be deleted

- in a read lock. If that set is non-empty, then acquire the write lock and remove the to-be-deleted set of files (if they still exist) from the storefiles set. REVISION DETAIL <https://reviews.facebook.net/D1311>
15. Liyin has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". @khemani: I see your point, which inspire me to a new idea: When holding a read lock for selection compaction candidates, it should also select the expired deletion store file candidates. After when processing completeCompaction logic within the write lock, it will delete the expired store files. So this approach should NOT introduce any potential dead lock risk since there is no read or write lock introduced by this feature at all. @tedyu: Thanks for pointing it out. And no additional notifyChangedReadersObservers() is needed if implementing in this way. REVISION DETAIL <https://reviews.facebook.net/D1311>
  16. This becomes interesting, Liyin. Currently we have: {code} override =  
region.getCoprocessorHost().preCompactSelection( this, candidates); {code} If I understand your idea correctly, a sub-list of candidates would be extracted for deletion. Do you think that we should expose selection of expired store files through coprocessor ?
  17. Liyin updated the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Reviewers: Kannan, JIRA, khemani, aaiyer, Karthik During the minor compaction selection time, if there is any expired store files, these expired store files will be selected to compact directly. Since these files have already expired, there would be no-ops during the compaction time and these files will be deleted after the compaction. REVISION DETAIL <https://reviews.facebook.net/D1311> AFFECTED FILES  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java  
src/main/java/org/apache/hadoop/hbase/regionserver/StoreFile.java  
src/main/java/org/apache/hadoop/hbase/regionserver/compactions/CompactSelection.java  
src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
  18. Liyin has requested a review of the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Hi @Karthik, The new diff have changed the logic a little bit. There is no need to get the write lock to do the deletion job for these expired store files. It would be much easier to put these expired store files directly to the compaction, which will do the deletion job for free. Would you mind reviewing it again? Thanks REVISION DETAIL <https://reviews.facebook.net/D1311>
  19. Karthik has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". INLINE COMMENTS  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java:1118 Could we return a new CompactSelection object instead of modifying the existing one and returning a boolean? We can return null or an empty compact selection if there are no such files... CompactSelection expiredFiles = compactSelection.selectExpiredStoreFiles(...) REVISION DETAIL <https://reviews.facebook.net/D1311>
  20. Liyin updated the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Reviewers: Kannan, JIRA, khemani, aaiyer, Karthik Address @Karthik's comments. REVISION DETAIL <https://reviews.facebook.net/D1311> AFFECTED FILES  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java  
src/main/java/org/apache/hadoop/hbase/regionserver/StoreFile.java  
src/main/java/org/apache/hadoop/hbase/regionserver/compactions/CompactSelection.java  
src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
  21. Karthik has accepted the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Looks good! REVISION DETAIL <https://reviews.facebook.net/D1311>
  22. @Liyin: Can you try adding JIRA to the CCs ? I have to deal with 6 copies of each review email in my InBox. Thanks
  23. Liyin added you to the CC list for the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". Reviewers: Kannan, JIRA, khemani, aaiyer, Karthik Currently, HBase deletes the out of TTL store files after compaction. We can change the sequence to delete the out of TTL store files before selecting store files for compactions. In this way, HBase can keep deleting the old invalid store files without compaction, and also prevent from unnecessary compactions since the out of TTL store files will be deleted before the compaction selection. TEST PLAN TestStore REVISION DETAIL <https://reviews.facebook.net/D1311> AFFECTED FILES  
src/main/java/org/apache/hadoop/hbase/regionserver/Store.java  
src/main/java/org/apache/hadoop/hbase/regionserver/StoreFile.java  
src/main/java/org/apache/hadoop/hbase/regionserver/compactions/CompactSelection.java  
src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
  24. -1 overall. Here are the results of testing the latest attachment  
<http://issues.apache.org/jira/secure/attachment/12512236/HBASE-5199.patch> against trunk revision . +1  
@author. The patch does not contain any @author tags. +1 tests included. The patch appears to include 8

- new or modified tests. -1 patch. The patch command could not apply the patch. Console output:  
<https://builds.apache.org/job/PreCommit-HBASE-Build/860//console> This message is automatically generated.
25. Ping committers !
26. HBASE-5199.patch doesn't apply cleanly: {code} 3 out of 6 hunks FAILED -- saving rejects to file src/main/java/org/apache/hadoop/hbase/regionserver/StoreScanner.java.rej patching file src/test/java/org/apache/hadoop/hbase/client/TestFromClientSide.java Reversed (or previously applied) patch detected! Assume -R? [n] Apply anyway? [n] Skipping patch. 3 out of 3 hunks ignored -- saving rejects to file src/test/java/org/apache/hadoop/hbase/client/TestFromClientSide.java.rej {code} Can you rebase patch ?
27. The new patch is rebased on the latest trunk and all the unit tests are passed.
28. -1 overall. Here are the results of testing the latest attachment  
<http://issues.apache.org/jira/secure/attachment/12514057/hbase-5199.patch> against trunk revision . +1 @author. The patch does not contain any @author tags. +1 tests included. The patch appears to include 8 new or modified tests. -1 javadoc. The javadoc tool appears to have generated -136 warning messages. +1 javac. The applied patch does not increase the total number of javac compiler warnings. -1 findbugs. The patch appears to introduce 156 new Findbugs (version 1.3.9) warnings. +1 release audit. The applied patch does not increase the total number of release audit warnings. -1 core tests. The patch failed these unit tests: org.apache.hadoop.hbase.replication.TestReplicationPeer  
org.apache.hadoop.hbase.io.hfile.TestHFileBlock org.apache.hadoop.hbase.TestDrainingServer  
org.apache.hadoop.hbase.mapreduce.TestImportTsv  
org.apache.hadoop.hbase.mapred.TestTableMapReduce  
org.apache.hadoop.hbase.mapreduce.TestHFileOutputFormat Test results:  
<https://builds.apache.org/job/PreCommit-HBASE-Build/934//testReport/> Findbugs warnings:  
<https://builds.apache.org/job/PreCommit-HBASE-Build/934//artifact/trunk/patchprocess/newPatchFindbugsWarnings.html> Console output:  
<https://builds.apache.org/job/PreCommit-HBASE-Build/934//console> This message is automatically generated.
29. mbautin has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". @Liyin: could you please post the rebased version of the patch so I can commit? REVISION DETAIL <https://reviews.facebook.net/D1311>
30. mbautin has commented on the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". @Liyin: could you please post the rebased version of the patch so I can commit? REVISION DETAIL <https://reviews.facebook.net/D1311>
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33. The test failures were not related to this patch. Integrated to TRUNK. Thanks for the patch Liyin. Thanks for the review Karthick, Prakash and Mikhail.
34. Integrated in HBase-TRUNK #2659 (See [<https://builds.apache.org/job/HBase-TRUNK/2659/>]) HBASE-5199 Differential revision 1311 Delete out of TTL store files before compaction selection (Liyin) tedyu :  
Files : \* /hbase/trunk/src/main/java/org/apache/hadoop/hbase/regionserver/Store.java \*  
/hbase/trunk/src/main/java/org/apache/hadoop/hbase/regionserver/StoreFile.java \*  
/hbase/trunk/src/main/java/org/apache/hadoop/hbase/regionserver/compactions/CompactSelection.java \*  
/hbase/trunk/src/test/java/org/apache/hadoop/hbase/client/TestFromClientSide.java \*  
/hbase/trunk/src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
35. Integrated in HBase-TRUNK-security #109 (See [<https://builds.apache.org/job/HBase-TRUNK-security/109/>]) HBASE-5199 Differential revision 1311 Delete out of TTL store files before compaction selection (Liyin) (Revision 1243086) Result = FAILURE tedyu :  
Files : \*  
/hbase/trunk/src/main/java/org/apache/hadoop/hbase/regionserver/Store.java \*  
/hbase/trunk/src/main/java/org/apache/hadoop/hbase/regionserver/StoreFile.java \*  
/hbase/trunk/src/main/java/org/apache/hadoop/hbase/regionserver/compactions/CompactSelection.java \*  
/hbase/trunk/src/test/java/org/apache/hadoop/hbase/client/TestFromClientSide.java \*  
/hbase/trunk/src/test/java/org/apache/hadoop/hbase/regionserver/TestStore.java
36. mbautin has committed the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". REVISION DETAIL <https://reviews.facebook.net/D1311> COMMIT

<https://reviews.facebook.net/rHBASEEIGHTNINEFBBRANCH1239786>

37. mbautin has committed the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". REVISION DETAIL <https://reviews.facebook.net/D1311> COMMIT <https://reviews.facebook.net/rHBASEEIGHTNINEFBBRANCH1239786>
38. mbautin has committed the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". REVISION DETAIL <https://reviews.facebook.net/D1311> COMMIT <https://reviews.facebook.net/rHBASEEIGHTNINEFBBRANCH1239786>
39. mbautin has committed the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". REVISION DETAIL <https://reviews.facebook.net/D1311> COMMIT <https://reviews.facebook.net/rHBASEEIGHTNINEFBBRANCH1239786>
40. mbautin has committed the revision "[jira][HBASE-5199] Delete out of TTL store files before compaction selection ". REVISION DETAIL <https://reviews.facebook.net/D1311> COMMIT <https://reviews.facebook.net/rHBASEEIGHTNINEFBBRANCH1239786>