

Item 147

git_comments:

1. 1 min timeout

git_commits:

1. **summary:** svn merge -c 1503971 merging to branch-2 fix HDFS-4998.
message: svn merge -c 1503971 merging to branch-2 fix HDFS-4998. git-svn-id:
<https://svn.apache.org/repos/asf/hadoop/common/branches/branch-2@1503972> 13f79535-47bb-0310-9956-ffa450edef68

github_issues:

github_issues_comments:

github_pulls:

github_pulls_comments:

github_pulls_reviews:

jira_issues:

1. **summary:** TestUnderReplicatedBlocks fails intermittently
description: Looking at branch-2.1-beta jenkins build, this test case seems flaky. First, addToInvalidates() is called against a block on a datanode. This removes the dn from the BlockInfo in blocksMap. At this point, raising the replication factor can cause the same node to be picked. If the node has already deleted the block, it will work. If not, the replication fails. When it fails, it will take at least the pending replication timeout to reschedule, which is 5 minutes. But the test will timeout before this and fail. We could make it wait for the completion of actual block deletion. Or the test timeout can be made a lot longer, but past jiras against this test case indicate people want this to run faster.

jira_issues_comments:

1. In the log from the build, the deletion happened 3 seconds after setReplication was done. The log shows that triggerHeartbeat() didn't work, because it raced with block report and lost. As a result lastHeartbeat was reset to the block report time and heartbeat wasn't sent right away. The 3 second delay can be explained by this. It seems that increasing the existing sleep to 3 seconds + slack will prevent this race.
2. **body:** HDFS-4067 made it better but 1 second sleep isn't enough in some cases. HDFS-342 was fixed by HDFS-4067 in most cases. In the latest build of 0.23 without HDFS-4067, this test took 641 seconds. After inserting 5 second delay, it finished in 18 seconds.
label: code-design
3. The test timeout has been decreased to 1 minute from 5 minutes. If it loses the race, it fails even with 5 minute timeout.
4. {color:green}+1 overall{color}. Here are the results of testing the latest attachment <http://issues.apache.org/jira/secure/attachment/12592585/HDFS-4998.trunk.patch> against trunk revision . {color:green}+1 @author{color}. The patch does not contain any @author tags. {color:green}+1 tests included{color}. The patch appears to include 1 new or modified test files. {color:green}+1 javac{color}. The applied patch does not increase the total number of javac compiler warnings. {color:green}+1 javadoc{color}. The javadoc tool did not generate any warning messages. {color:green}+1 eclipse:eclipse{color}. The patch built with eclipse:eclipse. {color:green}+1 findbugs{color}. The patch does not introduce any new Findbugs (version 1.3.9) warnings. {color:green}+1 release audit{color}. The applied patch does not increase the total number of release audit warnings. {color:green}+1 core tests{color}. The patch passed unit tests in hadoop-hdfs-project/hadoop-hdfs. {color:green}+1 contrib tests{color}. The patch passed contrib unit tests. Test results: <https://builds.apache.org/job/PreCommit-HDFS-Build/4662//testReport/> Console output: <https://builds.apache.org/job/PreCommit-HDFS-Build/4662//console> This message is automatically generated.
5. [~jingzhao], probably you are the best person to review this, since you understand the original issue.
6. Sure, I will review this.

7. bq. The log shows that triggerHeartbeat() didn't work, because it raced with block report and lost. As a result lastHeartbeat was reset to the block report time and heartbeat wasn't sent right away. I think you're right. When triggerHeartbeat() is called, the main loop of offerService may not be at the stage of waiting for the next heartbeat. In that case the next heartbeat will still need 3 seconds to happen. +1 for the patch.
8. SUCCESS: Integrated in Hadoop-trunk-Commit #4100 (See [<https://builds.apache.org/job/Hadoop-trunk-Commit/4100/>]) HDFS-4998. TestUnderReplicatedBlocks fails intermittently. Contributed by Kihwal Lee. (kihwal: <http://svn.apache.org/viewcvcs.cgi/?root=Apache-SVN&view=rev&rev=1503971>) *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/blockmanagement/TestUnderReplicatedBlocks.java
9. Thanks for the review, Jing. I've committed to trunk, branch-2, branch-2.1 and branch-0.23.
10. SUCCESS: Integrated in Hadoop-Yarn-trunk #273 (See [<https://builds.apache.org/job/Hadoop-Yarn-trunk/273/>]) HDFS-4998. TestUnderReplicatedBlocks fails intermittently. Contributed by Kihwal Lee. (kihwal: <http://svn.apache.org/viewcvcs.cgi/?root=Apache-SVN&view=rev&rev=1503971>) *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/blockmanagement/TestUnderReplicatedBlocks.java
11. SUCCESS: Integrated in Hadoop-Hdfs-0.23-Build #671 (See [<https://builds.apache.org/job/Hadoop-Hdfs-0.23-Build/671/>]) HDFS-4998. TestUnderReplicatedBlocks fails intermittently. Contributed by Kihwal Lee. (kihwal: <http://svn.apache.org/viewcvcs.cgi/?root=Apache-SVN&view=rev&rev=1503975>) *
/hadoop/common/branches/branch-0.23/hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt *
/hadoop/common/branches/branch-0.23/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/blockmanagement/TestUnderReplicatedBlocks.java
12. FAILURE: Integrated in Hadoop-Hdfs-trunk #1463 (See [<https://builds.apache.org/job/Hadoop-Hdfs-trunk/1463/>]) HDFS-4998. TestUnderReplicatedBlocks fails intermittently. Contributed by Kihwal Lee. (kihwal: <http://svn.apache.org/viewcvcs.cgi/?root=Apache-SVN&view=rev&rev=1503971>) *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/blockmanagement/TestUnderReplicatedBlocks.java
13. SUCCESS: Integrated in Hadoop-Mapreduce-trunk #1490 (See [<https://builds.apache.org/job/Hadoop-Mapreduce-trunk/1490/>]) HDFS-4998. TestUnderReplicatedBlocks fails intermittently. Contributed by Kihwal Lee. (kihwal: <http://svn.apache.org/viewcvcs.cgi/?root=Apache-SVN&view=rev&rev=1503971>) *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt *
/hadoop/common/trunk/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/blockmanagement/TestUnderReplicatedBlocks.java