

git_comments:

1. * snapshottableDirs is a list of snapshottable directory (child of rename * src) which do not have snapshots yet. If this list is not empty, that * means rename src has snapshottable descendant directories.
2. * * Test rename where src has snapshottable descendant directories and * dst is a descent of a snapshottable directory. Such case will cause * nested snapshot which HDFS currently not fully supported.

git_commits:

1. **summary:** HDFS-14925. Rename operation should check nest snapshot (#1670)
message: HDFS-14925. Rename operation should check nest snapshot (#1670) If the src directory or any of its descendant is snapshottable and the dst directory or any of its ancestors is snapshottable, we consider this as nested snapshot, which should be denied. Reviewed-by: Shashikant Banerjee
 <shashikant@apache.org> (cherry picked from commit de6b8b0c0b1933aab2af3e8adc50a2091d428238)

github_issues:**github_issues_comments:****github_pulls:**

1. **title:** HDFS-14925. Rename operation should check nest snapshot
body: When we do rename operation for directory, if the src directory or any of its descendant is snapshottable and the dst directory or its any of its ancestors is snapshottable, we consider this as nested snapshot, which should be denied. V2: 1. reduce duplicate code 2. take `directory rename overwrite` into consideration Signed-off-by: Zhao Junwang <zhjwpku@gmail.com>

github_pulls_comments:

1. @manojpec, please help to review this patch :)
2. @bshashikant could you help review this PR?
3. :broken_heart: *-1 overall** | Vote | Subsystem | Runtime | Comment | |:----:|-----:|-----:|:-----:| | 0 | reexec | 2075 | Docker mode activated. | ||| _ Prechecks _ | | +1 | dupname | 1 | No case conflicting files found. | | +1 | @author | 0 | The patch does not contain any @author tags. | | -1 | test4tests | 0 | The patch doesn't appear to include any new or modified tests. Please justify why no new tests are needed for this patch. Also please list what manual steps were performed to verify this patch. | ||| _ trunk Compile Tests _ | | +1 | mvninstall | 1271 | trunk passed | | +1 | compile | 65 | trunk passed | | +1 | checkstyle | 47 | trunk passed | | +1 | mvnsite | 71 | trunk passed | | +1 | shadedclient | 957 | branch has no errors when building and testing our client artifacts. | | +1 | javadoc | 82 | trunk passed | | 0 | spotbugs | 180 | Used deprecated FindBugs config; considering switching to SpotBugs. | | +1 | findbugs | 177 | trunk passed | ||| _ Patch Compile Tests _ | | +1 | mvninstall | 65 | the patch passed | | +1 | compile | 61 | the patch passed | | +1 | javac | 61 | the patch passed | | -0 | checkstyle | 42 | hadoop-hdfs-project/hadoop-hdfs: The patch generated 2 new + 28 unchanged - 0 fixed = 30 total (was 28) | | +1 | mvnsite | 66 | the patch passed | | +1 | whitespace | 0 | The patch has no whitespace issues. | | +1 | shadedclient | 886 | patch has no errors when building and testing our client artifacts. | | +1 | javadoc | 75 | the patch passed | | +1 | findbugs | 180 | the patch passed | ||| _ Other Tests _ | | -1 | unit | 6257 | hadoop-hdfs in the patch failed. | | +1 | asflicense | 35 | The patch does not generate ASF License warnings. | ||| 12478 ||| Reason | Tests | |-----:|:-----:| | Failed junit tests | hadoop.hdfs.server.namenode.snapshot.TestSnapshottableDirListing | | | hadoop.hdfs.server.namenode.snapshot.TestRenameWithSnapshots | | | hadoop.hdfs.server.namenode.TestNameNodeMetadataConsistency | | | hadoop.hdfs.TestReconstructStripedFile | | | hadoop.hdfs.TestReconstructStripedFileWithRandomECPolicy | | Subsystem | Report/Notes | |-----:|:-----:| | Docker | Client=19.03.4 Server=19.03.4 base: https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/1/artifact/out/Dockerfile | | GITHUB PR | https://github.com/apache/hadoop/pull/1670 | | Optional Tests | dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle | | uname | Linux f5150bcc6203 4.15.0-65-generic #74-Ubuntu SMP Tue Sep 17 17:06:04 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux | | Build tool | maven | | Personality | personality/hadoop.sh | | git revision | trunk / 1d5d7d0 | | Default Java | 1.8.0_222 | | checkstyle | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/1/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt | | unit | https://builds.apache.org/job/hadoop-

multibranch/job/PR-1670/1/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt || Test Results | <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/1/testReport/> || Max. process+thread count | 2829 (vs. ulimit of 5500) || modules | C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs || Console output | <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/1/console> || versions | git=2.7.4 maven=3.3.9 findbugs=3.1.0-RC1 || Powered by | Apache Yetus 0.10.0 <http://yetus.apache.org> | This message was automatically generated.

4. This patch misses considering dir to dir overwrite scenario, will modify and push later, thx.

5. :broken_heart: *-1 overall* | Vote | Subsystem | Runtime | Comment | :-----:|-----:|-----:|:-----:| 0 | reexec | 2112 | Docker mode activated. | ||| _ Prechecks _ | | +1 | dupname | 0 | No case conflicting files found. | | +1 | @author | 0 | The patch does not contain any @author tags. | | -1 | test4tests | 0 | The patch doesn't appear to include any new or modified tests. Please justify why no new tests are needed for this patch. Also please list what manual steps were performed to verify this patch. | ||| _ trunk Compile Tests _ | | +1 | mvninstall | 1112 | trunk passed | | +1 | compile | 66 | trunk passed | | +1 | checkstyle | 48 | trunk passed | | +1 | mvnsite | 75 | trunk passed | | +1 | shadedclient | 856 | branch has no errors when building and testing our client artifacts. | | +1 | javadoc | 85 | trunk passed | | 0 | spotbugs | 168 | Used deprecated FindBugs config; considering switching to SpotBugs. | | +1 | findbugs | 165 | trunk passed | ||| _ Patch Compile Tests _ | | +1 | mvninstall | 65 | the patch passed | | +1 | compile | 62 | the patch passed | | +1 | javac | 62 | the patch passed | | -0 | checkstyle | 40 | hadoop-hdfs-project/hadoop-hdfs: The patch generated 2 new + 28 unchanged - 0 fixed = 30 total (was 28) | | +1 | mvnsite | 66 | the patch passed | | +1 | whitespace | 0 | The patch has no whitespace issues. | | +1 | shadedclient | 794 | patch has no errors when building and testing our client artifacts. | | +1 | javadoc | 77 | the patch passed | | +1 | findbugs | 168 | the patch passed | ||| _ Other Tests _ | | -1 | unit | 8200 | hadoop-hdfs in the patch failed. | | +1 | asflicense | 42 | The patch does not generate ASF License warnings. | ||| 14114 ||| Reason | Tests | |-----:|:-----:| Failed junit tests | hadoop.hdfs.server.namenode.TestRedudantBlocks ||| hadoop.hdfs.server.namenode.snapshot.TestSnapshottableDirListing ||| hadoop.hdfs.server.namenode.snapshot.TestRandomOpsWithSnapshots ||| hadoop.hdfs.server.namenode.TestFck ||| hadoop.hdfs.server.namenode.ha.TestHAAppend ||| hadoop.hdfs.server.namenode.snapshot.TestRenameWithSnapshots ||| hadoop.hdfs.server.namenode.ha.TestPipelinesFailover || Subsystem | Report/Notes | |-----:|:-----:| | Docker | Client=19.03.4 Server=19.03.4 base: <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/2/artifact/out/Dockerfile> | | GITHUB PR | <https://github.com/apache/hadoop/pull/1670> | | Optional Tests | dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle || uname | Linux a017f944f4fe 4.15.0-65-generic #74-Ubuntu SMP Tue Sep 17 17:06:04 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux || Build tool | maven || Personality | personality/hadoop.sh || git revision | trunk / 1d5d7d0 || Default Java | 1.8.0_222 || checkstyle | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/2/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt || unit | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/2/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt || Test Results | <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/2/testReport/> || Max. process+thread count | 3910 (vs. ulimit of 5500) || modules | C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs || Console output | <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/2/console> || versions | git=2.7.4 maven=3.3.9 findbugs=3.1.0-RC1 || Powered by | Apache Yetus 0.10.0 <http://yetus.apache.org> | This message was automatically generated.

6. :broken_heart: *-1 overall* | Vote | Subsystem | Runtime | Comment | :-----:|-----:|-----:|:-----:| 0 | reexec | 66 | Docker mode activated. | ||| _ Prechecks _ | | +1 | dupname | 1 | No case conflicting files found. | | +1 | @author | 0 | The patch does not contain any @author tags. | | -1 | test4tests | 0 | The patch doesn't appear to include any new or modified tests. Please justify why no new tests are needed for this patch. Also please list what manual steps were performed to verify this patch. | ||| _ trunk Compile Tests _ | | +1 | mvninstall | 1266 | trunk passed | | +1 | compile | 64 | trunk passed | | +1 | checkstyle | 49 | trunk passed | | +1 | mvnsite | 71 | trunk passed | | +1 | shadedclient | 963 | branch has no errors when building and testing our client artifacts. | | +1 | javadoc | 79 | trunk passed | | 0 | spotbugs | 179 | Used deprecated FindBugs config; considering switching to SpotBugs. | | +1 | findbugs | 176 | trunk passed | ||| _ Patch Compile Tests _ | | +1 | mvninstall | 65 | the patch passed | | +1 | compile | 61 | the patch passed | | +1 | javac | 61 | the patch passed | | -0 | checkstyle | 40 | hadoop-hdfs-project/hadoop-hdfs: The patch generated 5 new + 38 unchanged - 0 fixed = 43 total (was 38) | | +1 | mvnsite | 66 | the patch passed | | +1 | whitespace | 0 | The patch has no whitespace issues. | | +1 | shadedclient | 873 | patch has no errors when building and testing our client artifacts. | | +1 | javadoc | 78 | the patch passed | | +1 | findbugs | 180 | the patch passed | ||| _ Other Tests _ | | -1 | unit | 6313 | hadoop-hdfs in the patch failed. | | +1 | asflicense | 36 | The patch does not generate ASF License warnings. | ||| 10518 ||| Reason | Tests | |-----:|:-----:| Failed junit tests |

- hadoop.hdfs.server.namenode.snapshot.TestRenameWithSnapshots |||
hadoop.hdfs.server.namenode.snapshot.TestRandomOpsWithSnapshots || Subsystem | Report/Notes | |-----
-----:|:-----| | Docker | Client=19.03.4 Server=19.03.4 base: https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/3/artifact/out/Dockerfile || GITHUB PR |
https://github.com/apache/hadoop/pull/1670 || Optional Tests | dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle || uname | Linux 9bccbd5c974f 4.15.0-66-generic #75-Ubuntu SMP Tue Oct 1 05:24:09 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux || Build tool | maven || Personality | personality/hadoop.sh || git revision | trunk / ac6b6a6 || Default Java | 1.8.0_222 || checkstyle | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/3/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt || unit | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/3/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt || Test Results |
https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/3/testReport/ || Max. process+thread count | 2896 (vs. ulimit of 5500) || modules | C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs || Console output | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/3/console || versions | git=2.7.4 maven=3.3.9 findbugs=3.1.0-RC1 || Powered by | Apache Yetus 0.10.0 http://yetus.apache.org | This message was automatically generated.
7. TestRenameWithSnapshots is unrelated, due to HDFS-14910, but please check TestRandomOpsWithSnapshots
8. @jojochuang can you pls tell me how can I run the unittest locally, I see the jenkins job runs ``
/usr/bin/mvn --batch-mode -Ptest-patch -Pparallel-tests -P!shelltest -Pnative -Drequire.fuse -
Drequire.openssl -Drequire.snappy -Drequire.valgrind -Drequire.test.libhadoop -Pyarn-ui clean test -fae ``
but I couldn't run this on my centos server
9. If you have editors like IntelliJ, you can run any of the tests. In console, you can run a specific test by mvn test -Dtest= TestRandomOpsWithSnapshots. Double check for the failed tests. Sometimes they are flaky tests and we are okay to +1 if they don't reproduce all the time.
10. :broken_heart: *-1 overall** | Vote | Subsystem | Runtime | Comment | |-----:|:-----:|:-----:|:-----:| | 0 | reexec | 70 | Docker mode activated. ||| _ Prechecks _ || +1 | dupname | 0 | No case conflicting files found. || +1 | @author | 0 | The patch does not contain any @author tags. || -1 | test4tests | 0 | The patch doesn't appear to include any new or modified tests. Please justify why no new tests are needed for this patch. Also please list what manual steps were performed to verify this patch. ||| _ trunk Compile Tests _ | | +1 | mvninstall | 1231 | trunk passed || +1 | compile | 64 | trunk passed || +1 | checkstyle | 45 | trunk passed || +1 | mvnsite | 72 | trunk passed || +1 | shadedclient | 938 | branch has no errors when building and testing our client artifacts. || +1 | javadoc | 80 | trunk passed || 0 | spotbugs | 175 | Used deprecated FindBugs config; considering switching to SpotBugs. || +1 | findbugs | 173 | trunk passed ||| _ Patch Compile Tests _ | | +1 | mvninstall | 66 | the patch passed || +1 | compile | 60 | the patch passed || +1 | javac | 60 | the patch passed || -0 | checkstyle | 40 | hadoop-hdfs-project/hadoop-hdfs: The patch generated 5 new + 22 unchanged - 0 fixed = 27 total (was 22) || +1 | mvnsite | 65 | the patch passed || +1 | whitespace | 0 | The patch has no whitespace issues. || +1 | shadedclient | 868 | patch has no errors when building and testing our client artifacts. || +1 | javadoc | 77 | the patch passed || +1 | findbugs | 182 | the patch passed ||| _ Other Tests _ | | -1 | unit | 6185 | hadoop-hdfs in the patch failed. || +1 | asflicense | 35 | The patch does not generate ASF License warnings. ||| 10313 ||| Reason | Tests | |-----:|:-----:| | Failed junit tests | hadoop.hdfs.TestRollingUpgrade || Subsystem | Report/Notes | |-----:|:-----:| | Docker | Client=19.03.4 Server=19.03.4 base: https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/4/artifact/out/Dockerfile || GITHUB PR | https://github.com/apache/hadoop/pull/1670 || Optional Tests | dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle || uname | Linux 7088665440e1 4.15.0-66-generic #75-Ubuntu SMP Tue Oct 1 05:24:09 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux || Build tool | maven || Personality | personality/hadoop.sh || git revision | trunk / 8625265 || Default Java | 1.8.0_222 || checkstyle | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/4/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt || unit | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/4/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt || Test Results | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/4/testReport/ || Max. process+thread count | 2634 (vs. ulimit of 5500) || modules | C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs || Console output | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/4/console || versions | git=2.7.4 maven=3.3.9 findbugs=3.1.0-RC1 || Powered by | Apache Yetus 0.10.0 http://yetus.apache.org | This message was automatically generated.
11. @jojochuang I didn't get TestRollingUpgrade failed when I run it locally. Can you pls help to check is it a flaky test? Following it error message: `` [ERROR] Tests run: 13, Failures: 1, Errors: 0, Skipped: 0, Time elapsed: 141.704 s <<< FAILURE! - in org.apache.hadoop.hdfs.TestRollingUpgrade [ERROR]

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testRollback(org.apache.hadoop.hdfs.TestRollingUpgrade) Time elapsed: 84.111 s <<< FAILURE!
java.lang.AssertionError: Test resulted in an unexpected exit at
org.apache.hadoop.hdfs.MinidFScluster.shutdown(MinidFScluster.java:2073) at
org.apache.hadoop.hdfs.MinidFScluster.shutdown(MinidFScluster.java:2060) at
org.apache.hadoop.hdfs.MinidFScluster.shutdown(MinidFScluster.java:2053) at
org.apache.hadoop.hdfs.TestRollingUpgrade.testRollback(TestRollingUpgrade.java:354) at
sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) at
sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) at
sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43) at
java.lang.reflect.Method.invoke(Method.java:498) at
org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:50) at
org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:12) at
org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:47) at
org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:17) at
org.junit.runners.ParentRunner.runLeaf(ParentRunner.java:325) at
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:78) at
org.junit.runners.BlockJUnit4ClassRunner.runChild(BlockJUnit4ClassRunner.java:57) at
org.junit.runners.ParentRunner$3.run(ParentRunner.java:290) at
org.junit.runners.ParentRunner$1.schedule(ParentRunner.java:71) at
org.junit.runners.ParentRunner.runChildren(ParentRunner.java:288) at
org.junit.runners.ParentRunner.access$000(ParentRunner.java:58) at
org.junit.runners.ParentRunner$2.evaluate(ParentRunner.java:268) at
org.junit.runners.ParentRunner.run(ParentRunner.java:363) at
org.apache.maven.surefire.junit4.JUnit4Provider.execute(JUnit4Provider.java:365) at
org.apache.maven.surefire.junit4.JUnit4Provider.executeWithRerun(JUnit4Provider.java:273) at
org.apache.maven.surefire.junit4.JUnit4Provider.executeTestSet(JUnit4Provider.java:238) at
org.apache.maven.surefire.junit4.JUnit4Provider.invoke(JUnit4Provider.java:159) at
org.apache.maven.surefire.booter.ForkedBooter.invokeProviderInSameClassLoader(ForkedBooter.java:384)
at org.apache.maven.surefire.booter.ForkedBooter.runSuitesInProcess(ForkedBooter.java:345) at
org.apache.maven.surefire.booter.ForkedBooter.execute(ForkedBooter.java:126) at
org.apache.maven.surefire.booter.ForkedBooter.main(ForkedBooter.java:418) ``

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12. :broken_heart: *-1 overall* | Vote | Subsystem | Runtime | Comment | |:----:|:-----:|:-----:|:-----:| 0
| reexec | 75 | Docker mode activated. | ||| _ Prechecks _ | | +1 | dupname | 0 | No case conflicting files
found. | | +1 | @author | 0 | The patch does not contain any @author tags. | | +1 | test4tests | 0 | The patch
appears to include 1 new or modified test files. | ||| _ trunk Compile Tests _ | | +1 | mvninstall | 1242 | trunk
passed | | +1 | compile | 68 | trunk passed | | +1 | checkstyle | 48 | trunk passed | | +1 | mvnshite | 70 | trunk
passed | | +1 | shadedclient | 958 | branch has no errors when building and testing our client artifacts. | | +1 |
javadoc | 81 | trunk passed | | 0 | spotbugs | 175 | Used deprecated FindBugs config; considering switching
to SpotBugs. | | +1 | findbugs | 173 | trunk passed | ||| _ Patch Compile Tests _ | | +1 | mvninstall | 67 | the
patch passed | | +1 | compile | 59 | the patch passed | | +1 | javac | 59 | the patch passed | | -0 | checkstyle | 44
| hadoop-hdfs-project/hadoop-hdfs: The patch generated 11 new + 150 unchanged - 0 fixed = 161 total
(was 150) | | +1 | mvnshite | 65 | the patch passed | | +1 | whitespace | 0 | The patch has no whitespace issues.
| | +1 | shadedclient | 870 | patch has no errors when building and testing our client artifacts. | | +1 | javadoc
| 80 | the patch passed | | +1 | findbugs | 180 | the patch passed | ||| _ Other Tests _ | | -1 | unit | 6181 |
hadoop-hdfs in the patch failed. | | +1 | asflicense | 35 | The patch does not generate ASF License warnings.
| ||| 10366 ||| Reason | Tests | |:-----:|:-----:| | Failed junit tests |
hadoop.hdfs.server.datanode.TestBlockRecovery | | hadoop.hdfs.TestRollingUpgrade | | |
hadoop.hdfs.server.namenode.ha.TestBootstrapAliasmap | | |
hadoop.hdfs.tools.TestDFSZKFailoverController | | Subsystem | Report/Notes | |:-----:|:-----:| |
Docker | Client=19.03.4 Server=19.03.4 base: https://builds.apache.org/job/hadoop-multibranch/job/PR-
1670/5/artifact/out/Dockerfile | | GITHUB PR | https://github.com/apache/hadoop/pull/1670 | | Optional
Tests | dupname asflicense compile javac javadoc mvninstall mvnshite unit shadedclient findbugs
checkstyle | | uname | Linux dcc817ff0aa2 4.15.0-66-generic #75-Ubuntu SMP Tue Oct 1 05:24:09 UTC
2019 x86_64 x86_64 x86_64 GNU/Linux | | Build tool | maven | | Personality | personality/hadoop.sh | | git
revision | trunk / 7be5508 | | Default Java | 1.8.0_222 | | checkstyle | https://builds.apache.org/job/hadoop-
multibranch/job/PR-1670/5/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt | | unit |
https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/5/artifact/out/patch-unit-hadoop-hdfs-
project_hadoop-hdfs.txt | | Test Results | https://builds.apache.org/job/hadoop-multibranch/job/PR-
1670/5/testReport/ | | Max. process+thread count | 2525 (vs. ulimit of 5500) | | modules | C: hadoop-hdfs-

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project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs | Console output |
<https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/5/console> | versions | git=2.7.4
maven=3.3.9 findbugs=3.1.0-RC1 | Powered by | Apache Yetus 0.10.0 <http://yetus.apache.org> | This
message was automatically generated.

13. :broken_heart: *-1 overall* | Vote | Subsystem | Runtime | Comment | |-----:|-----:|-----:|-----:| 0
| reexec | 1816 | Docker mode activated. | | | _ Prechecks _ | | +1 | dupname | 1 | No case conflicting files
found. | | +1 | @author | 0 | The patch does not contain any @author tags. | | +1 | test4tests | 0 | The patch
appears to include 1 new or modified test files. | | | _ trunk Compile Tests _ | | +1 | mvninstall | 1114 | trunk
passed | | +1 | compile | 66 | trunk passed | | +1 | checkstyle | 50 | trunk passed | | +1 | mvnsite | 70 | trunk
passed | | +1 | shadedclient | 858 | branch has no errors when building and testing our client artifacts. | | +1 |
javadoc | 84 | trunk passed | | 0 | spotbugs | 168 | Used deprecated FindBugs config; considering switching
to SpotBugs. | | +1 | findbugs | 165 | trunk passed | | | _ Patch Compile Tests _ | | +1 | mvninstall | 67 | the
patch passed | | +1 | compile | 59 | the patch passed | | +1 | javac | 59 | the patch passed | | -0 | checkstyle | 44
| hadoop-hdfs-project/hadoop-hdfs: The patch generated 2 new + 150 unchanged - 0 fixed = 152 total (was
150) | | +1 | mvnsite | 66 | the patch passed | | +1 | whitespace | 0 | The patch has no whitespace issues. | | +1
| shadedclient | 779 | patch has no errors when building and testing our client artifacts. | | +1 | javadoc | 81 |
the patch passed | | +1 | findbugs | 168 | the patch passed | | | _ Other Tests _ | | -1 | unit | 5212 | hadoop-hdfs
in the patch failed. | | +1 | asflicense | 41 | The patch does not generate ASF License warnings. | | | 10826 |
| Reason | Tests | |-----:|-----:| Failed junit tests | hadoop.hdfs.TestFileChecksumCompositeCrc | |
hadoop.hdfs.server.namenode.snapshot.TestRenameWithSnapshots | |
hadoop.hdfs.TestReconstructStripedFileWithRandomECPolicy | | hadoop.hdfs.TestErasureCodingPolicies
| | Subsystem | Report/Notes | |-----:|-----:| Docker | Client=19.03.4 Server=19.03.4 base:
<https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/6/artifact/out/Dockerfile> | | GITHUB PR |
<https://github.com/apache/hadoop/pull/1670> | | Optional Tests | dupname asflicense compile javac javadoc
mvninstall mvnsite unit shadedclient findbugs checkstyle | | uname | Linux 65978886f369 4.15.0-58-
generic #64-Ubuntu SMP Tue Aug 6 11:12:41 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux | | Build
tool | maven | | Personality | personality/hadoop.sh | | git revision | trunk / 7be5508 | | Default Java |
1.8.0_222 | | checkstyle | [https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/6/artifact/out/diff-
checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt](https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/6/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt) | | unit | [https://builds.apache.org/job/hadoop-
multibranch/job/PR-1670/6/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt](https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/6/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt) | | Test Results |
<https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/6/testReport/> | | Max. process+thread count
| 5375 (vs. ulimit of 5500) | | modules | C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-
project/hadoop-hdfs | | Console output | [https://builds.apache.org/job/hadoop-multibranch/job/PR-
1670/6/console](https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/6/console) | | versions | git=2.7.4 maven=3.3.9 findbugs=3.1.0-RC1 | | Powered by | Apache Yetus
0.10.0 <http://yetus.apache.org> | This message was automatically generated.
14. :confetti_ball: *+1 overall* | Vote | Subsystem | Runtime | Comment | |-----:|-----:|-----:|-----:| 0
| reexec | 77 | Docker mode activated. | | | _ Prechecks _ | | +1 | dupname | 0 | No case conflicting files
found. | | +1 | @author | 0 | The patch does not contain any @author tags. | | +1 | test4tests | 0 | The patch
appears to include 1 new or modified test files. | | | _ trunk Compile Tests _ | | +1 | mvninstall | 1080 | trunk
passed | | +1 | compile | 66 | trunk passed | | +1 | checkstyle | 49 | trunk passed | | +1 | mvnsite | 74 | trunk
passed | | +1 | shadedclient | 874 | branch has no errors when building and testing our client artifacts. | | +1 |
javadoc | 82 | trunk passed | | 0 | spotbugs | 168 | Used deprecated FindBugs config; considering switching
to SpotBugs. | | +1 | findbugs | 165 | trunk passed | | | _ Patch Compile Tests _ | | +1 | mvninstall | 65 | the
patch passed | | +1 | compile | 63 | the patch passed | | +1 | javac | 63 | the patch passed | | +1 | checkstyle |
44 | the patch passed | | +1 | mvnsite | 65 | the patch passed | | +1 | whitespace | 0 | The patch has no
whitespace issues. | | +1 | shadedclient | 787 | patch has no errors when building and testing our client
artifacts. | | +1 | javadoc | 78 | the patch passed | | +1 | findbugs | 167 | the patch passed | | | _ Other Tests _ |
+1 | unit | 6899 | hadoop-hdfs in the patch passed. | | +1 | asflicense | 43 | The patch does not generate ASF
License warnings. | | | 10756 | | Subsystem | Report/Notes | |-----:|-----:| Docker |
Client=19.03.4 Server=19.03.4 base: [https://builds.apache.org/job/hadoop-multibranch/job/PR-
1670/7/artifact/out/Dockerfile](https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/7/artifact/out/Dockerfile) | | GITHUB PR | <https://github.com/apache/hadoop/pull/1670> | | Optional
Tests | dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs
checkstyle | | uname | Linux 7fd0507f8d4a 4.15.0-65-generic #74-Ubuntu SMP Tue Sep 17 17:06:04 UTC
2019 x86_64 x86_64 x86_64 GNU/Linux | | Build tool | maven | | Personality | personality/hadoop.sh | | git
revision | trunk / 7be5508 | | Default Java | 1.8.0_222 | | Test Results | [https://builds.apache.org/job/hadoop-
multibranch/job/PR-1670/7/testReport/](https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/7/testReport/) | | Max. process+thread count | 3697 (vs. ulimit of 5500) | |
modules | C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs | | Console output |
<https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/7/console> | | versions | git=2.7.4

maven=3.3.9 findbugs=3.1.0-RC1 || Powered by | Apache Yetus 0.10.0 <http://yetus.apache.org> | This message was automatically generated.

15. @jojochuang @dineshchitlangia finally hadoop-yetus report `+1 overall`, can you please review and merge this PR.
16. :broken_heart: *-1 overall* | Vote | Subsystem | Runtime | Comment | |:----:|:-----:|:-----:|:-----:| 0 | reexec | 2120 | Docker mode activated. | ||| _ Prechecks _ | | +1 | dupname | 0 | No case conflicting files found. | | +1 | @author | 0 | The patch does not contain any @author tags. | | +1 | test4tests | 0 | The patch appears to include 1 new or modified test files. | ||| _ trunk Compile Tests _ | | +1 | mvninstall | 1095 | trunk passed | | +1 | compile | 67 | trunk passed | | +1 | checkstyle | 51 | trunk passed | | +1 | mvnsize | 76 | trunk passed | | +1 | shadedclient | 879 | branch has no errors when building and testing our client artifacts. | | +1 | javadoc | 82 | trunk passed | | 0 | spotbugs | 167 | Used deprecated FindBugs config; considering switching to SpotBugs. | | +1 | findbugs | 165 | trunk passed | ||| _ Patch Compile Tests _ | | +1 | mvninstall | 64 | the patch passed | | +1 | compile | 56 | the patch passed | | +1 | javac | 56 | the patch passed | | +1 | checkstyle | 43 | the patch passed | | +1 | mvnsize | 65 | the patch passed | | +1 | whitespace | 0 | The patch has no whitespace issues. | | +1 | shadedclient | 778 | patch has no errors when building and testing our client artifacts. | | +1 | javadoc | 78 | the patch passed | | +1 | findbugs | 170 | the patch passed | ||| _ Other Tests _ | | -1 | unit | 6835 | hadoop-hdfs in the patch failed. | | +1 | asflicense | 42 | The patch does not generate ASF License warnings. | ||| 12746 ||| Reason | Tests | |:-----:|:-----:| Failed junit tests | hadoop.hdfs.server.namenode.ha.TestFailureToReadEdits | | Subsystem | Report/Notes | |:-----:|:-----:| ---| | Docker | Client=19.03.4 Server=19.03.4 base: <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/8/artifact/out/Dockerfile> | | GITHUB PR | <https://github.com/apache/hadoop/pull/1670> | | Optional Tests | dupname asflicense compile javac javadoc mvninstall mvnsize unit shadedclient findbugs checkstyle | | uname | Linux ad28146b21b9 4.15.0-65-generic #74-Ubuntu SMP Tue Sep 17 17:06:04 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux | | Build tool | maven | | Personality | personality/hadoop.sh | | git revision | trunk / 30ed24a | | Default Java | 1.8.0_222 | | unit | https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/8/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt | | Test Results | <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/8/testReport/> | | Max. process+thread count | 3866 (vs. ulimit of 5500) | | modules | C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs | | Console output | <https://builds.apache.org/job/hadoop-multibranch/job/PR-1670/8/console> | | versions | git=2.7.4 maven=3.3.9 findbugs=3.1.0-RC1 || Powered by | Apache Yetus 0.10.0 <http://yetus.apache.org> | This message was automatically generated.
17. The changes look good to me as well. +1
18. Thanks @bshashikant for review and @zhjwpku for the patch!

github_pulls_reviews:

1. This code snippet is written twice in same class, in different methods. Can we instead carve it into a method to avoid code duplication?
2. if the list is not empty, it implies the rename src have snapshottable descendant directories that do not have snapshots. What if there are descendant dirs with snapshots? Would it be allows to rename?
3. use `INode#isAncestorDirectory()` instead?
4. this error message is a little cryptic. We want to make sure an average user understand what the problem is without looking at the source code. Can you print something like "Unable to rename because " + fullPath + " is a snapshottable directory and the destination is a descent of a snapshottable directory, and HDFS does not support nested snapshottable directory"
5. If any of the descendants dirs got some snapshot, ``FSDirRenameOp#validateRenameSource`` will finally call ``FSDirSnapshotOp#checkSnapshot`` and throw ``SnapshotException``. And that happens before `validateNestSnapshot`.
6. I see ``SnapshotManager#getSnapshottableAncestorDir`` uses `INode#isAncestorDirectory()`, as ``SnapshotManager#snapshottables`` is a map, say it has M elements, and the dir path got N elements, my solution is $O(\log(M) * N)$ compare to your $O(M*N)$. I think ``SnapshotManager#getSnapshottableAncestorDir`` can be optimized, but not in this patch. What do you think?
7. I will polish this exception msg, and add a unit test, thx.
8. it should have a ``fail()`` after the `rename()` to make sure it doesn't succeed. Other than that the patch is +1 to me.
9. I was concerned about the case where the source already has a snapshot. But turns out that case is already handled before this patch with the following exception ``The directory /dir1/foo cannot be deleted since`

/dir1/foo is snapshottable and already has snapshots at
org.apache.hadoop.hdfs.server.namenode.FSDirSnapshotOp.checkSnapshot(FSDirSnapshotOp.java:297)`
10. Yes, that's it ;)
11. fixed, pls check

jira_issues:

jira_issues_comments: