



Hadoop Common / HADOOP-15684

triggerActiveLogRoll stuck on dead name node, when ConnectTimeoutException happens.

Details

Type:	Bug	Status:	RESOLVED
Priority:	Critical	Resolution:	Fixed
Affects Version/s:	3.0.0-alpha1	Fix Version/s:	3.2.0, 3.0.4, 3.1.2
Component/s:	ha		
Labels:	multi-sbnn		
Target Version/s:	3.2.0, 3.0.4, 3.1.2		
Hadoop Flags:	Reviewed		
Release Note:	When a namenode A sends request RollEditLog to a remote NN, either the remote NN is standby or IO Exception happens, A should continue to try next NN, instead of getting stuck on the problematic one. This Patch is based on trunk.		
Flags:	Patch		

Description

When name node call triggerActiveLogRoll, and the cachedActiveProxy is a dead name node, it will throws a ConnectTimeoutException, expected behavior is to try next NN, but current logic doesn't do so, instead, it keeps trying the dead, mistakenly take it as active.

2018-08-17 10:02:12,001 WARN [Edit log tailer] org.apache.hadoop.hdfs.server.namenode.ha.EditLogTailer: Unable to trigger a roll of the active NN

org.apache.hadoop.net.ConnectTimeoutException: Call From SourceMachine001/SourceIP to001 TargetMachine001.ap.gbl:8020 failed on socket timeout exception: org.apache.hadoop.net.ConnectTimeoutException: 20000 millis timeout
org.apache.hadoop.hdfs.server.namenode.ha.EditLogTailer\$2.doWork(EditLogTailer.java:298)

C:\Users\rotang>ping TargetMachine001

Pinging TargetMachine001[TargetIP001] with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Attachment is a log file saying how it repeatedly retries a dead name node, and a fix patch.
I replaced the actual machine name/ip as SourceMachine001/SourceIP001 and TargetMachine001/TargetIP001.

How to Repro:

In a good running NNs, take down the active NN (don't let it come back during test), and then the stand by NNs will keep trying dead (old active) NN, because it is the cached one.

Attachments

0001-RollEditLog-try-next-NN-when-exception-happens.patch	6 kB	20/Aug/18 21:56
HADOOP-15684.000.patch	6 kB	21/Aug/18 22:43
HADOOP-15684.001.patch	7 kB	22/Aug/18 22:05
HADOOP-15684.002.patch	11 kB	23/Aug/18 00:25
HADOOP-15684.003.patch	11 kB	31/Aug/18 20:32
HADOOP-15684.004.patch	11 kB	06/Sep/18 00:01

 [HADOOP-15684.005.patch](#)

10 kB

19/Sep/18 19:55

 [hadoop--rollingUpgrade-SourceMachine001.log](#)

15 kB

20/Aug/18 23:16

▼ Issue Links

duplicates

 [HDFS-13900](#) NameNode: Unable to trigger a roll of the active NN **RESOLVED**


is caused by

 [HDFS-6440](#) Support more than 2 NameNodes **RESOLVED**

relates to

 [HDFS-14397](#) Backport HADOOP-15684 to branch-2 **RESOLVED**


▼ Activity

▼  [Wei-Chiu Chuang](#) added a comment - 18/Aug/18 00:17Does it actually affect Hadoop 2.7.5. and 2.9.1? The MultipleNameNode was added in [HDFS-6440](#) and is not in Hadoop 2.x▼  [Rong Tang](#) added a comment - 18/Aug/18 01:11 - edited[weichiu](#) No, it is not 2.7.X and 2.9.X, thanks for pointing it out. our private branches manually merged these MultipleNameNode related changes.

I also checked the truck, it still has this issue. Please help confirm it. thanks.

BTW, the warning log is strange when remote nn is standby.

// it is a standby exception, so we try the other NN

LOG.warn("Failed to reach remote node: " + currentNN
+ ", retrying with remaining remote NNs");▼  [Lukas Majercak](#) added a comment - 20/Aug/18 18:05Thanks for the patch [trjjanjianjiao](#). Instead of adding another catch statement for ConnectTimeoutException, could we just change RemoteException to Exception? And get rid of the check for whether the exception is Standby. We should just move to the next NN no matter what the exception is.▼  [Rong Tang](#) added a comment - 20/Aug/18 18:34 - edited[lukmajercak](#) I agree with you.

The current logic is:

1. Try to RollEditLog for cachedActiveProxy.
2. If it returns StandBy exception, it knows that the cached is a standby and try next NN.
3. For other exceptions, it just re-throws, interesting is that the outer method triggerActiveLogRoll just **swallow** the exceptions.
4. That means, next time, it will continue to try the same NN.

The issue I report here is that if a name node is dead(ConnectTimeoutException), it will go to step 3 and 4, and indefinitely takes the dead NN and active.

A better solution, I think, is like you said.

1. Try to RollEditLog for cachedActiveProxy.
2. If it is StandBy exception, we should log it as INFO, and try next NN.

3. For other exceptions, we should log it as Warning, and try next NN.

It makes no sense to stuck trying the same NN, if it returns exception.

I will provide the patch for it. Please let me know if you have more suggestions.
weichiu for knowing.

genericcq added a comment - 21/Aug/18 00:24

-1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 24s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			trunk Compile Tests
+1	mvninstall	23m 0s	trunk passed
+1	compile	1m 12s	trunk passed
+1	checkstyle	0m 58s	trunk passed
+1	mvnsite	1m 16s	trunk passed
+1	shadedclient	14m 1s	branch has no errors when building and testing our client artifacts.
+1	findbugs	1m 58s	trunk passed
+1	javadoc	0m 53s	trunk passed
			Patch Compile Tests
+1	mvninstall	1m 8s	the patch passed
+1	compile	0m 54s	the patch passed
+1	javac	0m 54s	the patch passed
+1	checkstyle	0m 47s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 0 new + 30 unchanged - 1 fixed = 30 total (was 31)
+1	mvnsite	0m 59s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	shadedclient	12m 38s	patch has no errors when building and testing our client artifacts.
+1	findbugs	1m 59s	the patch passed
+1	javadoc	0m 45s	the patch passed
			Other Tests
-1	unit	80m 58s	hadoop-hdfs in the patch failed.
+1	asflicense	0m 37s	The patch does not generate ASF License warnings.
		144m 9s	

Reason	Tests
Failed junit tests	hadoop.hdfs.server.datanode.TestDataNodeErasureCodingMetrics
	hadoop.hdfs.server.namenode.TestPersistentStoragePolicySatisfier
	hadoop.hdfs.client.impl.TestBlockReaderLocal
	hadoop.hdfs.TestLeaseRecovery2

Subsystem	Report/Notes
-----------	--------------


Docker	Client=17.05.0-ce Server=17.05.0-ce Image:yetus/hadoop:ba1ab08
JIRA Issue	HADOOP-15684
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12936335/0001-RollEditLog-try-next-NN-when-exception-happens.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle
uname	Linux 220b503f8c4a 3.13.0-153-generic #203-Ubuntu SMP Thu Jun 14 08:52:28 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/patchprocess/precommit/personality/provided.sh
git revision	trunk / e0f6ffd
maven	version: Apache Maven 3.3.9
Default Java	1.8.0_171
findbugs	v3.1.0-RC1
unit	https://builds.apache.org/job/PreCommit-HADOOP-Build/15062/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt
Test Results	https://builds.apache.org/job/PreCommit-HADOOP-Build/15062/testReport/
Max. process+thread count	3322 (vs. ulimit of 10000)
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HADOOP-Build/15062/console
Powered by	Apache Yetus 0.8.0-SNAPSHOT http://yetus.apache.org

This message was automatically generated.


▼  **Rong Tang** added a comment - 21/Aug/18 21:33 - edited

[lukmajercak](#), [weichiu](#), [elgoiri](#)


Found a way to constantly re-pro this issue, which is added in the "Description", and I verified the fix in our Hadoop cluster.
Any suggestion on what I should do now to push it forward?

▼  **Lukas Majercak** added a comment - 21/Aug/18 21:35


Thanks [trjianjianjiao](#). Could we add a unit test for this scenario?

▼  **Rong Tang** added a comment - 21/Aug/18 21:44

[lukmajercak](#) added, the patch contains one.

▼  **Íñigo Goiri** added a comment - 21/Aug/18 22:11

[trjianjianjiao](#), add the patch with names like [HADOOP-15684.000.patch](#).
Don't remove the old ones, just add new files; this is good to keep track of the evolution of the path.

▼  **genericqa** added a comment - 22/Aug/18 01:23

 **-1 overall**

Vote	Subsystem	Runtime	Comment
0	reexec	0m 17s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.

			trunk Compile Tests
+1	mvninstall	19m 59s	trunk passed
+1	compile	1m 11s	trunk passed
+1	checkstyle	1m 2s	trunk passed
+1	mvnsite	1m 26s	trunk passed
+1	shadedclient	14m 27s	branch has no errors when building and testing our client artifacts.
+1	findbugs	2m 17s	trunk passed
+1	javadoc	0m 56s	trunk passed
			Patch Compile Tests
+1	mvninstall	1m 12s	the patch passed
+1	compile	0m 58s	the patch passed
+1	javac	0m 58s	the patch passed
+1	checkstyle	0m 54s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 0 new + 30 unchanged - 1 fixed = 30 total (was 31)
+1	mvnsite	1m 15s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	shadedclient	13m 4s	patch has no errors when building and testing our client artifacts.
+1	findbugs	2m 17s	the patch passed
+1	javadoc	0m 52s	the patch passed
			Other Tests
-1	unit	90m 28s	hadoop-hdfs in the patch failed.
+1	asflicense	0m 36s	The patch does not generate ASF License warnings.
		152m 47s	

Reason	Tests
Failed junit tests	hadoop.hdfs.server.datanode.TestDataNodeUUID
	hadoop.hdfs.server.datanode.TestDirectoryScanner
	hadoop.hdfs.client.impl.TestBlockReaderLocal
	hadoop.hdfs.TestDFSStripedOutputStreamWithFailureWithRandomECPolicy
	hadoop.hdfs.TestLeaseRecovery2

Subsystem	Report/Notes
Docker	Client=17.05.0-ce Server=17.05.0-ce Image:yetus/hadoop:ba1ab08
JIRA Issue	HADOOP-15684
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12936536/HADOOP-15684.000.patch
Optional Tests	dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle
uname	Linux 2217e03e13e1 3.13.0-153-generic #203-Ubuntu SMP Thu Jun 14 08:52:28 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/patchprocess/precommit/personality/provided.sh
git revision	trunk / 9c3fc3e
maven	version: Apache Maven 3.3.9
Default Java	1.8.0_171
findbugs	v3.1.0-RC1
unit	https://builds.apache.org/job/PreCommit-HADOOP-Build/15070/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt

Test Results	https://builds.apache.org/job/PreCommit-HADOOP-Build/15070/testReport/
Max. process+thread count	3320 (vs. ulimit of 10000)
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HADOOP-Build/15070/console
Powered by	Apache Yetus 0.8.0-SNAPSHOT http://yetus.apache.org

This message was automatically generated.

Íñigo Goiri added a comment - 22/Aug/18 14:45

Thanks [trjianjianjiao](#) for [HADOOP-15684.000.patch](#).
A couple comments:

- Why do we need to fix the ports? Not a big fan of the retry approach.
- Add a couple high level comments on the invokedtimes approach.
- You should wrap the whole thing in a try finally shutdown with a null check.

Rong Tang added a comment - 22/Aug/18 22:04 - edited

[elgoiri](#) , thanks for your comments.

- Why do we need to fix the ports? Not a big fan of the retry approach.
 - *IPC ports are used to determine whether enabling roll log or not.*
 - *Removed the retry.*
- Add a couple high level comments on the invokedtimes approach.
 - *Added*
- You should wrap the whole thing in a try finally shutdown with a null check.
 - *Moved the "cluster" related code into try-finally.*

Uploaded a new patch.

Do you know if there is more convenient way for code review instead of using plain text?

Íñigo Goiri added a comment - 22/Aug/18 22:51

[jesse_yates](#), are you available to take a look here?

Rong Tang added a comment - 23/Aug/18 00:27

Refactor TestEditLogTailer.java to avoid duplication code of creating MiniDFSCluster with IPC ports. patch: [HADOOP-15684.002.patch](#)

genericqa added a comment - 23/Aug/18 01:50

 -1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 23s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 2 new or modified test files.
			trunk Compile Tests
+1	mvninstall	22m 42s	trunk passed
+1	compile	0m 57s	trunk passed
+1	checkstyle	0m 51s	trunk passed
+1	mvnsite	1m 6s	trunk passed
+1	shadedclient	13m 6s	branch has no errors when building and testing our client artifacts.


+1	findbugs	2m 2s	trunk passed
+1	javadoc	0m 50s	trunk passed
			Patch Compile Tests
+1	mvninstall	1m 6s	the patch passed
+1	compile	0m 58s	the patch passed
+1	javac	0m 58s	the patch passed
-0	checkstyle	0m 46s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 9 new + 44 unchanged - 1 fixed = 53 total (was 45)
+1	mvnsite	1m 2s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	shadedclient	12m 29s	patch has no errors when building and testing our client artifacts.
+1	findbugs	2m 10s	the patch passed
+1	javadoc	0m 46s	the patch passed
			Other Tests
-1	unit	99m 33s	hadoop-hdfs in the patch failed.
+1	asflicense	0m 33s	The patch does not generate ASF License warnings.
		161m 7s	

Reason	Tests
Failed junit tests	hadoop.hdfs.TestDFSInotifyEventInputStreamKerberized
	hadoop.hdfs.TestLeaseRecovery2
	hadoop.hdfs.client.impl.TestBlockReaderLocal

Subsystem	Report/Notes
Docker	Client=17.05.0-ce Server=17.05.0-ce Image:yetus/hadoop:ba1ab08
JIRA Issue	HADOOP-15684
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12936709/HADOOP-15684.001.patch
Optional Tests	dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle
uname	Linux ee4f3a53495c 3.13.0-153-generic #203-Ubuntu SMP Thu Jun 14 08:52:28 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/patchprocess/precommit/personality/provided.sh
git revision	trunk / af4b705
maven	version: Apache Maven 3.3.9
Default Java	1.8.0_181
findbugs	v3.1.0-RC1
checkstyle	https://builds.apache.org/job/PreCommit-HADOOP-Build/15080/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt
unit	https://builds.apache.org/job/PreCommit-HADOOP-Build/15080/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt
Test Results	https://builds.apache.org/job/PreCommit-HADOOP-Build/15080/testReport/
Max. process+thread count	3041 (vs. ulimit of 10000)
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HADOOP-Build/15080/console
Powered by	Apache Yetus 0.8.0-SNAPSHOT http://yetus.apache.org

This message was automatically generated.

▼

 genericqa added a comment - 23/Aug/18 03:53

 -1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	17m 24s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 2 new or modified test files.
			trunk Compile Tests
+1	mvninstall	20m 49s	trunk passed
+1	compile	0m 50s	trunk passed
+1	checkstyle	0m 44s	trunk passed
+1	mvnsite	0m 56s	trunk passed
+1	shadedclient	11m 11s	branch has no errors when building and testing our client artifacts.
+1	findbugs	1m 57s	trunk passed
+1	javadoc	0m 45s	trunk passed
			Patch Compile Tests
+1	mvninstall	0m 55s	the patch passed
+1	compile	0m 48s	the patch passed
+1	javac	0m 48s	the patch passed
-0	checkstyle	0m 39s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 16 new + 44 unchanged - 1 fixed = 60 total (was 45)
+1	mvnsite	0m 55s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	shadedclient	10m 12s	patch has no errors when building and testing our client artifacts.
+1	findbugs	1m 56s	the patch passed
+1	javadoc	0m 40s	the patch passed
			Other Tests
-1	unit	107m 23s	hadoop-hdfs in the patch failed.
+1	asflicense	0m 27s	The patch does not generate ASF License warnings.
		178m 19s	

Reason	Tests
Failed junit tests	hadoop.hdfs.server.datanode.TestDataNodeVolumeFailure
	hadoop.hdfs.qjournal.server.TestJournalNodeSync
	hadoop.hdfs.web.TestWebHdfsTimeouts

Subsystem	Report/Notes
Docker	Client=17.05.0-ce Server=17.05.0-ce Image:yetus/hadoop:ba1ab08
JIRA Issue	HADOOP-15684
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12936721/HADOOP-15684.002.patch
Optional Tests	dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle


uname	Linux f0398b48782a 4.4.0-133-generic #159-Ubuntu SMP Fri Aug 10 07:31:43 UTC 2018 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/patchprocess/precommit/personality/provided.sh
git revision	trunk / af4b705
maven	version: Apache Maven 3.3.9
Default Java	1.8.0_181
findbugs	v3.1.0-RC1
checkstyle	https://builds.apache.org/job/PreCommit-HADOOP-Build/15081/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt
unit	https://builds.apache.org/job/PreCommit-HADOOP-Build/15081/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt
Test Results	https://builds.apache.org/job/PreCommit-HADOOP-Build/15081/testReport/
Max. process+thread count	3921 (vs. ulimit of 10000)
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HADOOP-Build/15081/console
Powered by	Apache Yetus 0.8.0-SNAPSHOT http://yetus.apache.org

This message was automatically generated.

▼  **Sunil G** added a comment - 29/Aug/18 04:27


Hi [trjianjianjiao elgoiri](#)

As this jira is marked for 3.2 as a critical and close to finish, cud u pls help to take this forward. 3.2 code freeze date is nearby in a weeks. Kindly help to check the same.

▼  **Íñigo Goiri** added a comment - 29/Aug/18 16:09

We would need a review from somebody familiar with HA and the 2+ NNs code.
Anyone available for review?


[trjianjianjiao](#), meanwhile do you mind checking the checkstyle warning and take a look at TestJournalNodeSync?
The other unit tests seem the typical ones.

▼  **Rong Tang** added a comment - 29/Aug/18 18:29

[elgoiri](#) For test case TestJournalNodeSync, it also fails without my change. and it may be introduced in by this [commit](#) , add committer [surendrasingh](#) to verify.

[sunilg](#) What should I do to commit?

Add [vinayrpet](#) who seems to have the privilege to commit changes.


▼  **Íñigo Goiri** added a comment - 29/Aug/18 18:36

I'll follow up in [HDFS-13805](#) for the TestJournalNodeSync, it didn't seem to break there, not sure why.

For the review, we should ask people involved in the review of [HDFS-6440](#).

▼  **Surendra Singh Lilhore** added a comment - 30/Aug/18 03:53

[trjianjianjiao](#) : I didn't see any failure in TestJournalNodeSysnc for [HDFS-13805](#). Test Result link for [HDFS-13805](#) : Test report
Still I will check the failure, currently not able to open the test result for this jira, may be builds.apache.org is down.

▼  **Rong Tang** added a comment - 31/Aug/18 20:33

Upload [HADOOP-15684.003.patch](#) to fix the "checkstyle" warnings, and to trigger a new build to see if TestJournalNodeSysnc fails again.

▼  **genericqa** added a comment - 31/Aug/18 23:59


 -1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 28s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 2 new or modified test files.
			trunk Compile Tests
+1	mvninstall	27m 35s	trunk passed
+1	compile	1m 5s	trunk passed
+1	checkstyle	0m 44s	trunk passed
+1	mvnsite	1m 2s	trunk passed
+1	shadedclient	12m 12s	branch has no errors when building and testing our client artifacts.
+1	findbugs	2m 17s	trunk passed
+1	javadoc	0m 59s	trunk passed
			Patch Compile Tests
+1	mvninstall	1m 14s	the patch passed
+1	compile	1m 0s	the patch passed
+1	javac	1m 0s	the patch passed
-0	checkstyle	0m 40s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 1 new + 44 unchanged - 1 fixed = 45 total (was 45)
+1	mvnsite	1m 0s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	shadedclient	10m 32s	patch has no errors when building and testing our client artifacts.
+1	findbugs	2m 1s	the patch passed
+1	javadoc	0m 45s	the patch passed
			Other Tests
-1	unit	134m 14s	hadoop-hdfs in the patch failed.
+1	asflicense	0m 25s	The patch does not generate ASF License warnings.
		198m 7s	

Reason	Tests
Failed junit tests	hadoop.hdfs.qjournal.server.TestJournalNode
	hadoop.hdfs.server.datanode.fsdataset.impl.TestFsDatasetImpl
	hadoop.hdfs.client.impl.TestBlockReaderLocal
	hadoop.hdfs.server.datanode.TestDataNodeMultipleRegistrations
	hadoop.hdfs.server.namenode.TestReconstructStripedBlocks
	hadoop.hdfs.qjournal.client.TestQJMWithFaults
	hadoop.hdfs.TestErasureCodingPoliciesWithRandomECPolicy
	hadoop.hdfs.server.datanode.TestDataNodeVolumeFailureReporting
	hadoop.hdfs.TestSafeMode
	hadoop.hdfs.server.namenode.TestCheckpoint
	hadoop.hdfs.web.TestWebHdfsTimeouts

Subsystem	Report/Notes
Docker	Client=17.05.0-ce Server=17.05.0-ce Image:yetus/hadoop:ba1ab08
JIRA Issue	HADOOP-15684
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12937954/HADOOP-15684.003.patch
Optional Tests	dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle
uname	Linux a3133ada9f40 4.4.0-133-generic #159-Ubuntu SMP Fri Aug 10 07:31:43 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/patchprocess/precommit/personality/provided.sh
git revision	trunk / 8aa6c4f
maven	version: Apache Maven 3.3.9
Default Java	1.8.0_181
findbugs	v3.1.0-RC1
checkstyle	https://builds.apache.org/job/PreCommit-HADOOP-Build/15116/artifact/out/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt
unit	https://builds.apache.org/job/PreCommit-HADOOP-Build/15116/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt
Test Results	https://builds.apache.org/job/PreCommit-HADOOP-Build/15116/testReport/
Max. process+thread count	4500 (vs. ulimit of 10000)
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HADOOP-Build/15116/console
Powered by	Apache Yetus 0.9.0-SNAPSHOT http://yetus.apache.org

This message was automatically generated.

▼  Hadoop QA added a comment - 06/Sep/18 03:39

 -1 overall


Vote	Subsystem	Runtime	Comment
0	reexec	16m 48s	Docker mode activated.
Prechecks			
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 2 new or modified test files.
trunk Compile Tests			
+1	mvninstall	19m 19s	trunk passed
+1	compile	1m 17s	trunk passed
+1	checkstyle	1m 4s	trunk passed
+1	mvnsite	1m 26s	trunk passed
+1	shadedclient	15m 5s	branch has no errors when building and testing our client artifacts.
+1	findbugs	2m 10s	trunk passed
+1	javadoc	1m 0s	trunk passed
Patch Compile Tests			
+1	mvninstall	1m 24s	the patch passed
+1	compile	1m 12s	the patch passed
+1	javac	1m 12s	the patch passed
+1	checkstyle	0m 54s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 0 new + 44 unchanged - 1 fixed = 44 total (was 45)
+1	mvnsite	1m 21s	the patch passed

+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	shadedclient	13m 52s	patch has no errors when building and testing our client artifacts.
+1	findbugs	2m 16s	the patch passed
+1	javadoc	0m 56s	the patch passed
Other Tests			
-1	unit	128m 16s	hadoop-hdfs in the patch failed.
+1	asflicense	0m 43s	The patch does not generate ASF License warnings.
		208m 45s	

Reason	Tests
Failed junit tests	hadoop.hdfs.TestDFSStripedOutputStreamWithFailureWithRandomECPolicy
	hadoop.hdfs.server.datanode.TestDataNodeMultipleRegistrations
	hadoop.hdfs.qjournal.server.TestJournalNodeSync
	hadoop.hdfs.server.datanode.TestDataNodeVolumeFailure
	hadoop.hdfs.TestDFSClientRetries
	hadoop.hdfs.server.namenode.TestFSImage
	hadoop.hdfs.server.datanode.TestDataNodeUUID

Subsystem	Report/Notes
Docker	Client=17.05.0-ce Server=17.05.0-ce Image:yetus/hadoop:ba1ab08
JIRA Issue	HADOOP-15684
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12938558/HADOOP-15684.004.patch
Optional Tests	dupname asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle
uname	Linux 431ebc928306 3.13.0-144-generic #193-Ubuntu SMP Thu Mar 15 17:03:53 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/patchprocess/precommit/personality/provided.sh
git revision	trunk / 8286bf2
maven	version: Apache Maven 3.3.9
Default Java	1.8.0_181
findbugs	v3.1.0-RC1
unit	https://builds.apache.org/job/PreCommit-HADOOP-Build/15146/artifact/out/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt
Test Results	https://builds.apache.org/job/PreCommit-HADOOP-Build/15146/testReport/
Max. process+thread count	2640 (vs. ulimit of 10000)
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HADOOP-Build/15146/console
Powered by	Apache Yetus 0.8.0 http://yetus.apache.org


This message was automatically generated.

▼  Rong Tang added a comment - 06/Sep/18 23:37


Test cases fail randomly, and my change doesn't touch them.

Other people are complaining same issue. [HDFS-13990](#)

[sunilg](#) Can I commit it?


▼  [Íñigo Goiri](#) added a comment - 06/Sep/18 23:42

The only repeating failed unit test between [HADOOP-15684.004.patch](#) and [HADOOP-15684.003.patch](#) is `TestDataNodeMultipleRegistrations`.
Can we double check locally it passes consistently?
(Kind of depressing that we get 10+ spurious tests...)

▼  [Rong Tang](#) added a comment - 07/Sep/18 00:26

[elgoiri](#) `TestDataNodeMultipleRegistrations` succeeds locally. is it possible that build is not stable recently?

```
[INFO] Running org.apache.hadoop.hdfs.server.datanode.TestDataNodeMultipleRegistrations
[INFO] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 66.715 s - in
org.apache.hadoop.hdfs.server.datanode.TestDataNodeMultipleRegistrations
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO]
```

▼  [Íñigo Goiri](#) added a comment - 07/Sep/18 01:21

is it possible that build is not stable recently?


Yes, there are a lot of flaky tests.
There are a bunch of reports on `TestDataNodeMultipleRegistrations` being flaky actually.

▼  [Sunil G](#) added a comment - 10/Sep/18 04:34


Hi [elgoiri](#) [trjianjianjiao](#)

If we are sure that `TestDataNodeMultipleRegistrations` is flaky not due to this patch, could we open a Jira for same to track it so that this can go in.


[elgoiri](#) could u pls help to take a look

▼  [Íñigo Goiri](#) added a comment - 10/Sep/18 17:47


We had [HDFS-13569](#) open but we didn't proceed.
From the log in:
<https://builds.apache.org/job/PreCommit-HADOOP-Build/15146/testReport/org.apache.hadoop.hdfs.server.datanode/TestDataNodeMultipleRegistrations/testClusterIdMismatchAtStartupWithHA/>
It looks like it times out but I think it's because it gets to some weird state.
I'll open a JIRA.

▼  [Íñigo Goiri](#) added a comment - 10/Sep/18 17:49

Opened [HDFS-13998](#) to track `TestDataNodeMultipleRegistrations`.

▼  [Lukas Majercak](#) added a comment - 11/Sep/18 18:30

patch004 LGTM. Thanks [trjianjianjiao](#)

▼  [Rong Tang](#) added a comment - 11/Sep/18 18:34

Summary of what this patch does.

The purpose of that `call()` function is to use a round robin to find the active NN. if it has trouble in communicating with a remote NN, or confirmed that remote NN is standby, then it should try next. the old logic is not, if it has trouble in communication, it keeps trying the same one, thus, get stuck. From code perspective, it throw all exceptions exception standby, and the outer method calls it, will swallow them. That is how it finally tries the same one. This `call()` method only throws `IOException`. so my change catches the `IOException`, and try next NN. [lukmajercak](#) and I had discussion before, we think the later is the right behavior.

the test case covers the behavior change I want to make. that is to try next NN on exception, instead of trying the same one.

👤

Íñigo Goiri

added a comment - 11/Sep/18 18:47

Thanks [trjianjianjiao](#) for the description.

Can you describe why you are changing the way the IPC ports are assigned in the unit test? It used to rely on `ServerSocketUtil` and now you assign them serially.

👤

Rong Tang

added a comment - 11/Sep/18 18:57

[elgoiri](#) This is a more common and simpler way to build `MiniDFSCluster`, many test classes use the later way.

see (search basePort) : <https://github.com/apache/hadoop/blob/c5bf43a8e8aec595d1a8133cb0656778b252de89/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/ha/TestFailureToReadEdits.java>

<https://github.com/apache/hadoop/blob/a55d6bba71c81c1c4e9d8cd11f55c78f10a548b0/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestEditLogAutoroll.java>

<https://github.com/apache/hadoop/blob/c5bf43a8e8aec595d1a8133cb0656778b252de89/hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/metrics/TestNameNodeMetrics.java>

It doesn't matter to use assigned ports ore serial ports, but the code with latter can be simpler.

👤

Íñigo Goiri

added a comment - 11/Sep/18 20:23

Thanks [trjianjianjiao](#) for the examples. It makes sense.

+1 on [HADOOP-15684.004.patch](#)👍.

I would love to get a review from somebody with more knowledge on this.

Otherwise, we have been running this in production for a few weeks already so it should be a decent test.

👤

Sunil G

added a comment - 17/Sep/18 09:01

Hi [elgoiri](#) [trjianjianjiao](#)

This patch is closer for merge. Could u pls help to get this in if no issues. I saw you mentioned additional review here. Could you please ping folks whom you need to take a review from. As we crossed code freeze, its really appreciable if we can get this in soon.

👤

Íñigo Goiri

added a comment - 17/Sep/18 16:53

The best candidate for review is [jesse_yates](#) but I'm not sure he is available.

[atm](#) was the one reviewing so he would also be a good candidate.

Anyway, if they are not available, I've gone through the solution in [HADOOP-15684.004.patch](#)👍 and I feel confident.

I'll give it a couple more days but [HADOOP-15684.004.patch](#)👍 has my +1.

👤

Rong Tang

added a comment - 17/Sep/18 17:27

Thanks, [elgoiri](#)

👤

Hadoop QA

added a comment - 19/Sep/18 20:00

🚫

-1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 13s	Docker mode activated.
-1	patch	0m 5s	HADOOP-15684 does not apply to trunk. Rebase required? Wrong Branch? See https://wiki.apache.org/hadoop/HowToContribute for help.

Subsystem	Report/Notes
Docker	Client=17.05.0-ce Server=17.05.0-ce Image:yetus/hadoop:4b8c2b1
JIRA Issue	HADOOP-15684

JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12940487/HADOOP-15684.005.patch
Console output	https://builds.apache.org/job/PreCommit-HADOOP-Build/15231/console
Powered by	Apache Yetus 0.8.0 http://yetus.apache.org

This message was automatically generated.

Íñigo Goiri added a comment - 19/Sep/18 20:01


Thanks [trjianjianjiao](#) for the fix and [lukmajercak](#) for the review.
trunk has changed so I rebased [HADOOP-15684.004.patch](#) and committed [HADOOP-15684.005.patch](#).
Committed it to trunk, branch-3.1, and branch-3.0.


Hudson added a comment - 19/Sep/18 20:41


SUCCESS: Integrated in Jenkins build Hadoop-trunk-Commit #15021 (See <https://builds.apache.org/job/Hadoop-trunk-Commit/15021/>)
~~HADOOP-15684~~. triggerActiveLogRoll stuck on dead name node, when (inigoiri: rev 090272d7de7cb5f1133359d66780aef7c5cce5c9)


- (edit) `hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/MiniDFSNNTopology.java`
- (edit) `hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/ha/TestEditLogTailer.java`
- (edit) `hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java`

People

Assignee:
 Rong Tang

Reporter:
 Rong Tang

Votes:
 0 Vote for this issue

Watchers:
 10 Start watching this issue

Dates

Created:
18/Aug/18 00:06

Updated:
02/Oct/19 17:13

Resolved:
19/Sep/18 20:01