



Hadoop HDFS / HDFS-8674

Improve performance of postponed block scans

Details

Type:	Improvement	Status:	RESOLVED
Priority:	Critical	Resolution:	Fixed
Affects Version/s:	2.6.0	Fix Version/s:	2.8.0, 3.0.0-alpha2
Component/s:	namenode		
Labels:	None		
Target Version/s:	2.8.0, 3.0.0-alpha2		
Hadoop Flags:	Reviewed		

Description

When a standby goes active, it marks all nodes as "stale" which will cause block invalidations for over-replicated blocks to be queued until full block reports are received from the nodes with the block. The replication monitor scans the queue with O(N) runtime. It picks a random offset and iterates through the set to randomize blocks scanned.

The result is devastating when a cluster loses multiple nodes during a rolling upgrade. Re-replication occurs, the nodes come back, the excess block invalidations are postponed. Rescanning just 2k blocks out of millions of postponed blocks may take multiple seconds. During the scan, the write lock is held which stalls all other processing.

Attachments

HDFS-8674.2.patch	7 kB	29/Nov/16 21:33
HDFS-8674.branch-2.patch	7 kB	01/Dec/16 15:38
HDFS-8674.patch	6 kB	16/Dec/15 20:48
HDFS-8674.patch	6 kB	26/Jun/15 17:39
HDFS-8674.trunk.2.patch	8 kB	01/Dec/16 15:38
HDFS-8674.trunk.patch	8 kB	30/Nov/16 21:03
HDFS-8674-branch-2.7.patch	7 kB	27/May/17 02:05

Issue Links

relates to

<input checked="" type="checkbox"/> HDFS-11868 Backport HDFS-8674 to branch 2.7	RESOLVED
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Activity

- ▼

[Daryn Sharp](#) added a comment - 26/Jun/15 17:39

No additional tests due to simple performance optimization that existing tests cover.
- ▼

[Hadoop QA](#) added a comment - 26/Jun/15 22:36

-1 overall

Vote	Subsystem	Runtime	Comment
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-1	pre-patch	15m 16s	Findbugs (version) appears to be broken on trunk.
+1	@author	0m 0s	The patch does not contain any @author tags.
-1	tests included	0m 0s	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.
+1	javac	7m 30s	There were no new javac warning messages.
+1	javadoc	9m 38s	There were no new javadoc warning messages.
+1	release audit	0m 22s	The applied patch does not increase the total number of release audit warnings.
+1	checkstyle	0m 50s	There were no new checkstyle issues.
+1	whitespace	0m 0s	The patch has no lines that end in whitespace.
+1	install	1m 35s	mvn install still works.
+1	eclipse:eclipse	0m 34s	The patch built with eclipse:eclipse.
-1	findbugs	3m 24s	The patch appears to introduce 1 new Findbugs (version 3.0.0) warnings.
+1	native	3m 14s	Pre-build of native portion
+1	hdfs tests	162m 31s	Tests passed in hadoop-hdfs.
		204m 57s	

Reason	Tests
FindBugs	module:hadoop-hdfs

Subsystem	Report/Notes
Patch URL	http://issues.apache.org/jira/secure/attachment/12742164/HDFS-8674.patch
Optional Tests	javadoc javac unit findbugs checkstyle
git revision	trunk / 60b858b
Findbugs warnings	https://builds.apache.org/job/PreCommit-HDFS-Build/11502/artifact/patchprocess/newPatchFindbugsWarningshadoop-hdfs.html
hadoop-hdfs test log	https://builds.apache.org/job/PreCommit-HDFS-Build/11502/artifact/patchprocess/testrun_hadoop-hdfs.txt
Test Results	https://builds.apache.org/job/PreCommit-HDFS-Build/11502/testReport/
Java	1.7.0_55
uname	Linux asf902.gq1.ygridcore.net 3.13.0-36-lowlatency #63-Ubuntu SMP PREEMPT Wed Sep 3 21:56:12 UTC 2014 x86_64 x86_64 x86_64 GNU/Linux
Console output	https://builds.apache.org/job/PreCommit-HDFS-Build/11502/console

This message was automatically generated.

▼ Ming Ma added a comment - 27/Jun/15 01:18

Thanks daryn!

- The motivation of randomization is to make sure we don't end up scanning the same blocks if there isn't much update to postponedMisreplicatedBlocks. But maybe that doesn't matter much as it will eventually be drained; also HashSet doesn't make order guarantee.
- Does the latency of couple seconds come from HashSet iteration? Some quick test indicates iterating through 5M entries of a HashSet take around 50ms.
- What is the reason to change from HashSet to LinkedHashSet, to have some order guarantee? HashSet is faster than LinkedHashSet.
- During the scan, if a block is marked as POSTPONE, it will be removed from postponedMisreplicatedBlocks first and add it back later via rescannedMisreplicatedBlocks. Can it just remove those blocks from postponedMisreplicatedBlocks that aren't marked as POSTPONE without using rescannedMisreplicatedBlocks?

▼ Vinod Kumar Vavilapalli added a comment - 27/Oct/15 00:04

daryn / mingma, any update on this? Considering this for a 2.7.2 RC this weekend. Thanks.

▼ Hadoop QA added a comment - 27/Oct/15 04:20

✖ -1 overall

Vote	Subsystem	Runtime	Comment
-1	patch	0m 0s	The patch command could not apply the patch during dryrun.

Subsystem	Report/Notes
Patch URL	http://issues.apache.org/jira/secure/attachment/12742164/HDFS-8674.patch
Optional Tests	javadoc javac unit findbugs checkstyle
git revision	trunk / 96677be
Console output	https://builds.apache.org/job/PreCommit-HDFS-Build/13211/console

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▼ Vinod Kumar Vavilapalli added a comment - 02/Nov/15 21:17

Moving this out of 2.7.2 as there's been no update in a while.

▼ Daryn Sharp added a comment - 02/Nov/15 23:32

mingma It's a LinkedHashSet to cover the cases you state.

The motivation of randomization is to make sure we don't end up scanning the same blocks if there isn't much update to postponedMisreplicatedBlocks. <...> What is the reason to change from HashSet to LinkedHashSet, to have some order guarantee? HashSet is faster than LinkedHashSet. <...> During the scan, if a block is marked as POSTPONE, it will be removed from postponedMisreplicatedBlocks first and add it back later via rescannedMisreplicatedBlocks. Can it just remove those blocks from postponedMisreplicatedBlocks that aren't marked as POSTPONE without using rescannedMisreplicatedBlocks?

The LHS iterator is effectively functioning as a cheap circular array with acceptable insert/remove performance. Yes, the order guarantee ensures all blocks are visited w/o "skipping" to a random location. The block always has to be removed and re-inserted for the ordering to work. Otherwise the same blocks will be scanned over and over again.

Does the latency of couple seconds come from HashSet iteration? Some quick test indicates iterating through 5M entries of a HashSet take around 50ms.

Yes, the cycles wasted to skip the through the set were the killer. A micro-benchmark doesn't capture the same chaotic runtime environment of over a 100 threads competing for resources. Kihwal says (ironically) the performance "improved" under 5M.


In multiple production incidents, the postponed queue backed up with 10-20M+ blocks. Scans determined the blocks are all still postponed. Pre-patch, the cycles took up to a few seconds and averaged in the many hundreds of ms. Performance was obviously atrocious. Post-patch, same scans took no more than a few ms.

▼ Daryn Sharp added a comment - 15/Dec/15 15:30


mingma, comments?

▼ Ming Ma added a comment - 16/Dec/15 16:58

Thanks daryn. Your explanation makes sense. It is good to know the perf difference between "the # of items < 5M" and "larger number of items". +1 on the patch.

▼  **Daryn Sharp** added a comment - 16/Dec/15 20:48

Updated patch since a data structure change prevented it from applying cleanly.

▼  **Hadoop QA** added a comment - 16/Dec/15 23:26

 **-1 overall**

Vote	Subsystem	Runtime	Comment
0	reexec	0m 0s	Docker mode activated.
+1	@author	0m 0s	The patch does not contain any @author tags.
-1	test4tests	0m 0s	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.
+1	mvninstall	7m 30s	trunk passed
+1	compile	0m 40s	trunk passed with JDK v1.8.0_66
+1	compile	0m 41s	trunk passed with JDK v1.7.0_91
+1	checkstyle	0m 15s	trunk passed
+1	mvnsite	0m 51s	trunk passed
+1	mvnecclipse	0m 14s	trunk passed
+1	findbugs	1m 52s	trunk passed
+1	javadoc	1m 5s	trunk passed with JDK v1.8.0_66
+1	javadoc	1m 52s	trunk passed with JDK v1.7.0_91
+1	mvninstall	0m 48s	the patch passed
+1	compile	0m 38s	the patch passed with JDK v1.8.0_66
-1	javac	6m 16s	hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_66 with JDK v1.8.0_66 generated 1 new issues (was 32, now 32).
+1	javac	0m 38s	the patch passed
+1	compile	0m 40s	the patch passed with JDK v1.7.0_91
-1	javac	6m 57s	hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_91 with JDK v1.7.0_91 generated 1 new issues (was 34, now 34).
+1	javac	0m 40s	the patch passed
-1	checkstyle	0m 14s	Patch generated 1 new checkstyle issues in hadoop-hdfs-project/hadoop-hdfs (total was 161, now 160).
+1	mvnsite	0m 50s	the patch passed
+1	mvnecclipse	0m 14s	the patch passed
+1	whitespace	0m 0s	Patch has no whitespace issues.
+1	findbugs	2m 2s	the patch passed
+1	javadoc	1m 4s	the patch passed with JDK v1.8.0_66
+1	javadoc	1m 46s	the patch passed with JDK v1.7.0_91
-1	unit	52m 16s	hadoop-hdfs in the patch failed with JDK v1.8.0_66.
-1	unit	50m 8s	hadoop-hdfs in the patch failed with JDK v1.7.0_91.
-1	asflicense	0m 25s	Patch generated 58 ASF License warnings.
		128m 44s	

Reason	Tests
JDK v1.8.0_66 Failed junit tests	hadoop.hdfs.TestDFSClientRetries

	hadoop.hdfs.server.namenode.ha.TestDNFencingWithReplication
	hadoop.hdfs.server.namenode.TestDecommissioningStatus
	hadoop.hdfs.server.balancer.TestBalancerWithHNameNodes
	hadoop.hdfs.server.namenode.ha.TestDNFencing
	hadoop.hdfs.TestDFSStripedOutputStreamWithFailure050
	hadoop.hdfs.TestDFSUpgradeFromImage
	hadoop.hdfs.TestSetrepDecreasing
	hadoop.hdfs.server.blockmanagement.TestNodeCount
	hadoop.hdfs.TestDFSStripedOutputStreamWithFailure
	hadoop.hdfs.server.blockmanagement.TestBlocksWithNotEnoughRacks
JDK v1.7.0_91 Failed junit tests	hadoop.hdfs.server.namenode.ha.TestDNFencingWithReplication
	hadoop.hdfs.TestLeaseRecovery2
	hadoop.hdfs.server.balancer.TestBalancerWithHNameNodes
	hadoop.hdfs.server.namenode.ha.TestDNFencing
	hadoop.hdfs.TestSetrepDecreasing
	hadoop.hdfs.server.blockmanagement.TestNodeCount
	hadoop.hdfs.server.blockmanagement.TestBlocksWithNotEnoughRacks


Subsystem	Report/Notes
Docker	Image:yetus/hadoop:0ca8df7
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12778098/HDFS-8674.patch
JIRA Issue	HDFS-8674
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle
uname	Linux 4f4d2df9b67c 3.13.0-36-lowlatency #63-Ubuntu SMP PREEMPT Wed Sep 3 21:56:12 UTC 2014 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 0f708d4
findbugs	v3.0.0
javac	hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_66: https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/diff-compile-javac-hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_66.txt
javac	hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_91: https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/diff-compile-javac-hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_91.txt
checkstyle	https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/diff-checkstyle-hadoop-hdfs-project_hadoop-hdfs.txt
unit	https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_66.txt
unit	https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_91.txt
unit test logs	https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_66.txt https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_91.txt
JDK v1.7.0_91 Test Results	https://builds.apache.org/job/PreCommit-HDFS-Build/13903/testReport/
asflicense	https://builds.apache.org/job/PreCommit-HDFS-Build/13903/artifact/patchprocess/patch-asflicense-problems.txt
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs

Max memory used	75MB
Powered by	Apache Yetus 0.2.0-SNAPSHOT http://yetus.apache.org
Console output	https://builds.apache.org/job/PreCommit-HDFS-Build/13903/console

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▼  [Ming Ma](#) added a comment - 31/Dec/15 00:54


Daryn, from failed tests's logs, the latest patch uses LightweightLinkedSet whose iterator doesn't support remove.

▼  [Daryn Sharp](#) added a comment - 01/Mar/16 19:58


I'll try to rebase again.

▼  [Vinod Kumar Vavilapalli](#) added a comment - 31/Mar/16 00:29


[daryn](#) / [mingma](#), is it possible to get this in 2.7.3 in a week? Tx?

▼  [Vinod Kumar Vavilapalli](#) added a comment - 10/Apr/16 16:22

Haven't gotten any update, dropping this off into 2.7.4..

▼  [Andrew Wang](#) added a comment - 18/Oct/16 00:08

Added some more target versions for tracking. Seems like this would still be good to get in.


▼  [Hadoop QA](#) added a comment - 18/Oct/16 00:18

 **-1 overall**


Vote	Subsystem	Runtime	Comment
0	reexec	0m 0s	Docker mode activated.
-1	patch	0m 6s	HDFS-8674 does not apply to trunk. Rebase required? Wrong Branch? See https://wiki.apache.org/hadoop/HowToContribute for help.

Subsystem	Report/Notes
JIRA Issue	HDFS-8674
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12778098/HDFS-8674.patch
Console output	https://builds.apache.org/job/PreCommit-HDFS-Build/17194/console
Powered by	Apache Yetus 0.4.0-SNAPSHOT http://yetus.apache.org


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▼  [Daryn Sharp](#) added a comment - 28/Nov/16 16:41

I'll update this patch.

▼  [Daryn Sharp](#) added a comment - 29/Nov/16 21:33

Resolved minor conflicts.


▼  [Hadoop QA](#) added a comment - 29/Nov/16 21:52

 **-1 overall**


Vote	Subsystem	Runtime	Comment
0	reexec	0m 0s	Docker mode activated.
-1	patch	0m 9s	HDFS-8674 does not apply to trunk. Rebase required? Wrong Branch? See https://wiki.apache.org/hadoop/HowToContribute for help.

Subsystem	Report/Notes
JIRA Issue	HDFS-8674
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12840925/HDFS-8674.2.patch
Console output	https://builds.apache.org/job/PreCommit-HDFS-Build/17702/console
Powered by	Apache Yetus 0.4.0-SNAPSHOT http://yetus.apache.org


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▼  Kihwal Lee added a comment - 30/Nov/16 20:51

Looks like ~~HDFS-8674~~.2.patch is for branch-2. Can you post a trunk version?

▼  Daryn Sharp added a comment - 30/Nov/16 21:03

fix conflicts on trunk stemming from under replicated now being low redundancy.

▼  Hadoop QA added a comment - 30/Nov/16 22:54

 -1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 12s	Docker mode activated.
+1	@author	0m 0s	The patch does not contain any @author tags.
-1	test4tests	0m 0s	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.
+1	mvninstall	15m 46s	trunk passed
+1	compile	2m 5s	trunk passed
+1	checkstyle	1m 23s	trunk passed
+1	mvnsite	1m 21s	trunk passed
+1	mvnecclipse	0m 13s	trunk passed
-1	findbugs	1m 49s	hadoop-hdfs-project/hadoop-hdfs in trunk has 1 extant Findbugs warnings.
+1	javadoc	0m 41s	trunk passed
+1	mvninstall	0m 49s	the patch passed
+1	compile	0m 49s	the patch passed
+1	javac	0m 49s	the patch passed
+1	checkstyle	0m 30s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 0 new + 119 unchanged - 2 fixed = 119 total (was 121)
+1	mvnsite	0m 54s	the patch passed
+1	mvnecclipse	0m 10s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	findbugs	1m 56s	the patch passed
+1	javadoc	0m 39s	the patch passed
-1	unit	74m 34s	hadoop-hdfs in the patch failed.

+1	asflicense	0m 21s	The patch does not generate ASF License warnings.
		105m 37s	

Reason	Tests
Failed junit tests	hadoop.hdfs.server.blockmanagement.TestNodeCount
	hadoop.hdfs.server.blockmanagement.TestBlocksWithNotEnoughRacks
	hadoop.hdfs.server.datanode.TestDataNodeUUID
	hadoop.hdfs.server.datanode.TestDataNodeMultipleRegistrations
	hadoop.hdfs.server.blockmanagement.TestReconstructStripedBlocksWithRackAwareness
	hadoop.hdfs.server.blockmanagement.TestRBWBlockInvalidation
	hadoop.hdfs.server.datanode.checker.TestThrottledAsyncChecker
	hadoop.hdfs.server.balancer.TestBalancerWithHNameNodes
	hadoop.hdfs.server.datanode.TestDataNodeMXBean
	hadoop.hdfs.server.namenode.TestAddStripedBlockInFBR
	hadoop.hdfs.TestLeaseRecoveryStriped
	hadoop.hdfs.server.datanode.TestDirectoryScanner
	hadoop.hdfs.server.namenode.snapshot.TestSnapshot
	hadoop.hdfs.server.namenode.ha.TestDNFencingWithReplication
	hadoop.hdfs.server.namenode.ha.TestDNFencing

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:a9ad5d6
JIRA Issue	HDFS-8674
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12841132/HDFS-8674.trunk.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle
uname	Linux 9ceb14463035 3.13.0-95-generic #142-Ubuntu SMP Fri Aug 12 17:00:09 UTC 2016 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 3fd844b
Default Java	1.8.0_111
findbugs	v3.0.0
findbugs	https://builds.apache.org/job/PreCommit-HDFS-Build/17715/artifact/patchprocess/branch-findbugs-hadoop-hdfs-project_hadoop-hdfs-warnings.html
unit	https://builds.apache.org/job/PreCommit-HDFS-Build/17715/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs.txt
Test Results	https://builds.apache.org/job/PreCommit-HDFS-Build/17715/testReport/
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HDFS-Build/17715/console
Powered by	Apache Yetus 0.4.0-SNAPSHOT http://yetus.apache.org

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▼

Kihwal Lee

 added a comment - 01/Dec/16 14:31

LightWeightLinkedSet does not support remove().

▼

Daryn Sharp

 added a comment - 01/Dec/16 15:38

Posted wrong patches. Changed the set from the lightweight back to standard one due to iterator issues.

▼

Hadoop QA

 added a comment - 01/Dec/16 17:08

✖


-1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 10s	Docker mode activated.
+1	@author	0m 0s	The patch does not contain any @author tags.
-1	test4tests	0m 0s	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.
+1	mvninstall	6m 45s	trunk passed
+1	compile	0m 44s	trunk passed
+1	checkstyle	0m 26s	trunk passed
+1	mvnsite	0m 51s	trunk passed
+1	mvneclipse	0m 12s	trunk passed
-1	findbugs	1m 41s	hadoop-hdfs-project/hadoop-hdfs in trunk has 1 extant Findbugs warnings.
+1	javadoc	0m 39s	trunk passed
+1	mvninstall	0m 45s	the patch passed
+1	compile	0m 43s	the patch passed
+1	javac	0m 43s	the patch passed
+1	checkstyle	0m 24s	hadoop-hdfs-project/hadoop-hdfs: The patch generated 0 new + 119 unchanged - 2 fixed = 119 total (was 121)
+1	mvnsite	0m 48s	the patch passed
+1	mvneclipse	0m 10s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	findbugs	1m 45s	the patch passed
+1	javadoc	0m 36s	the patch passed
+1	unit	61m 9s	hadoop-hdfs in the patch passed.
+1	asflicense	0m 18s	The patch does not generate ASF License warnings.
		79m 16s	


Subsystem	Report/Notes
Docker	Image:yetus/hadoop:a9ad5d6
JIRA Issue	HDFS-8674
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12841300/HDFS-8674.trunk.2.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle
uname	Linux 06df29fbcd5a 3.13.0-93-generic #140-Ubuntu SMP Mon Jul 18 21:21:05 UTC 2016 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh

git revision	trunk / e0fa492
Default Java	1.8.0_111
findbugs	v3.0.0
findbugs	https://builds.apache.org/job/PreCommit-HDFS-Build/17731/artifact/patchprocess/branch-findbugs-hadoop-hdfs-project_hadoop-hdfs-warnings.html
Test Results	https://builds.apache.org/job/PreCommit-HDFS-Build/17731/testReport/
modules	C: hadoop-hdfs-project/hadoop-hdfs U: hadoop-hdfs-project/hadoop-hdfs
Console output	https://builds.apache.org/job/PreCommit-HDFS-Build/17731/console
Powered by	Apache Yetus 0.4.0-SNAPSHOT http://yetus.apache.org

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▼  Kihwal Lee added a comment - 01/Dec/16 18:09

+1 The patch looks good.


▼  Kihwal Lee added a comment - 01/Dec/16 18:22

Committed to trunk, branch-2 and branch-2.8. Thanks for working on this, Daryn.

▼  Hudson added a comment - 01/Dec/16 18:41

SUCCESS: Integrated in Jenkins build Hadoop-trunk-Commit #10924 (See <https://builds.apache.org/job/Hadoop-trunk-Commit/10924/>)
[HDFS-8674](#). Improve performance of postponed block scans. Contributed by (kihwal: rev 96c574927a600d15fab919df1fdc9e07887af6c5)


- (edit) hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/blockmanagement/BlockManager.java

▼  Konstantin Shvachko added a comment - 27/May/17 02:05


Attaching backport patch from [HDFS-11868](#).
Committed this to branch-2.7. Thank you [elgoiri](#).

▼ People

Assignee:

 Daryn Sharp

Reporter:

 Daryn Sharp

Votes:

 0 Vote for this issue

Watchers:

 18 Start watching this issue

▼ Dates

Created:

26/Jun/15 16:22

Updated:

27/May/17 02:05

Resolved:

01/Dec/16 18:22