



Hadoop HDFS / HDFS-9229

## Expose size of NameNode directory as a metric

Details

Type:	Improvement	Status:	RESOLVED
Priority:	Minor	Resolution:	Fixed
Affects Version/s:	2.7.1	Fix Version/s:	2.8.0, 3.0.0-alpha1
Component/s:	namenode		
Labels:	None		
Hadoop Flags:	Reviewed		

Description

Useful for admins in reserving / managing NN local file system space. Also useful when transferring NN backups.

Attachments

HDFS-9229.001.patch	7 kB	17/Oct/15 12:46
HDFS-9229.002.patch	7 kB	18/Oct/15 15:30
HDFS-9229.003.patch	7 kB	21/Oct/15 11:39
HDFS-9229.004.patch	12 kB	25/Oct/15 19:11
HDFS-9229.005.patch	13 kB	26/Oct/15 06:30
HDFS-9229.006.patch	12 kB	29/Oct/15 04:54

Activity

- ▼

Surendra Singh Lilhore

added a comment - 12/Oct/15 17:06

Please feel free to reassign if you started working on this 😊
- ▼

Zhe Zhang

added a comment - 12/Oct/15 17:08

[surendrasingh](#) Thanks for the interest in this issue! I haven't started any work.
- ▼

Surendra Singh Lilhore

added a comment - 17/Oct/15 12:46

Attached Patch.  
Please review...
- ▼

Hadoop QA

added a comment - 17/Oct/15 15:04

✖

-1 overall

Vote	Subsystem	Runtime	Comment
-1	pre-patch	27m 8s	Pre-patch trunk has 1 extant Findbugs (version 3.0.0) warnings.
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	tests included	0m 0s	The patch appears to include 1 new or modified test files.
+1	javac	8m 44s	There were no new javac warning messages.
+1	findbugs	11m 2s	There were no new findbugs warning messages.

+1	javadoc	11m 35s	There were no new javadoc warning messages.
+1	release audit	0m 25s	The applied patch does not increase the total number of release audit warnings.
+1	site	3m 17s	Site still builds.
-1	checkstyle	2m 51s	The applied patch generated 4 new checkstyle issues (total was 421, now 424).
+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 37s	The patch built with eclipse:eclipse.
+1	findbugs	4m 43s	The patch does not introduce any new Findbugs (version 3.0.0) warnings.
+1	common tests	8m 28s	Tests passed in hadoop-common.
-1	hdfs tests	65m 31s	Tests failed in hadoop-hdfs.
		134m 26s	

Reason	Tests
Failed unit tests	hadoop.hdfs.TestRecoverStripedFile
	hadoop.hdfs.TestRollingUpgrade
	hadoop.hdfs.server.blockmanagement.TestUnderReplicatedBlocks
	hadoop.hdfs.server.namenode.TestRecoverStripedBlocks
Timed out tests	org.apache.hadoop.hdfs.tools.TestDFSAdminWithHA

Subsystem	Report/Notes
Patch URL	<a href="http://issues.apache.org/jira/secure/attachment/12767211/HDFS-9229.001.patch">http://issues.apache.org/jira/secure/attachment/12767211/HDFS-9229.001.patch</a>
Optional Tests	site javadoc javac unit findbugs checkstyle
git revision	trunk / 58590fe
Pre-patch Findbugs warnings	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html">https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html</a>
checkstyle	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt</a>
hadoop-common test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/testrun_hadoop-common.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/testrun_hadoop-common.txt</a>
hadoop-hdfs test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/testrun_hadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13038/artifact/patchprocess/testrun_hadoop-hdfs.txt</a>
Test Results	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13038/testReport/">https://builds.apache.org/job/PreCommit-HDFS-Build/13038/testReport/</a>
Java	1.7.0_55
uname	Linux asf909.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	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13038/console">https://builds.apache.org/job/PreCommit-HDFS-Build/13038/console</a>

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  **Rakesh Radhakrishnan** added a comment - 18/Oct/15 08:47

Thank you [surendrasingh](#) for the contribution, patch looks almost good. Just few comments, please take a look at it.

- 1. Unit is missing, please add it. (for example, in bytes)

```
+| `NameDirSize` | NameNode name directories size|
```

- 2. In tests, it would be good to assert the the size of the `nnDirMap.size()`. Presently it will miss the assertion and won't fail the test if the map wrongly returns the content with zero length, right?

```
+ Map<String, Long> nnDirMap =
+ (Map<String, Long>) JSON.parse(
```


```
+ (String) mbs.getAttribute(mxbeanName, "NameDirSize");
```

3. Also, there are couple of checkstyle warnings related to the patch, please take care. Thanks!

▼  Surendra Singh Lilhore added a comment - 18/Oct/15 15:30

Thanks [rakeshr](#) for review.

Attached updated patch. Please review...

▼  Hadoop QA added a comment - 18/Oct/15 17:55

 -1 overall


Vote	Subsystem	Runtime	Comment
-1	pre-patch	26m 6s	Pre-patch trunk has 1 extant Findbugs (version 3.0.0) warnings.
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	tests included	0m 0s	The patch appears to include 1 new or modified test files.
+1	javac	9m 26s	There were no new javac warning messages.
+1	javadoc	11m 40s	There were no new javadoc warning messages.
+1	release audit	0m 24s	The applied patch does not increase the total number of release audit warnings.
+1	site	3m 26s	Site still builds.
-1	checkstyle	2m 55s	The applied patch generated 1 new checkstyle issues (total was 421, now 421).
+1	whitespace	0m 0s	The patch has no lines that end in whitespace.
+1	install	1m 41s	mvn install still works.
+1	eclipse:eclipse	0m 36s	The patch built with eclipse:eclipse.
+1	findbugs	5m 7s	The patch does not introduce any new Findbugs (version 3.0.0) warnings.
+1	common tests	8m 39s	Tests passed in hadoop-common.
-1	hdfs tests	65m 48s	Tests failed in hadoop-hdfs.
		135m 53s	

Reason	Tests
Failed unit tests	hadoop.hdfs.TestRecoverStripedFile
	hadoop.hdfs.server.datanode.TestDataNodeMetrics
	hadoop.hdfs.util.TestByteArrayManager

Subsystem	Report/Notes
Patch URL	<a href="http://issues.apache.org/jira/secure/attachment/12767257/HDFS-9229.002.patch">http://issues.apache.org/jira/secure/attachment/12767257/HDFS-9229.002.patch</a>
Optional Tests	site javadoc javac unit findbugs checkstyle
git revision	trunk / 0ab3f9d
Pre-patch Findbugs warnings	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html">https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html</a>
checkstyle	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt</a>
hadoop-common test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/testrun_hadoop-common.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/testrun_hadoop-common.txt</a>

hadoop-hdfs test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/testrun_hadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13042/artifact/patchprocess/testrun_hadoop-hdfs.txt</a>
Test Results	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13042/testReport/">https://builds.apache.org/job/PreCommit-HDFS-Build/13042/testReport/</a>
Java	1.7.0_55
uname	Linux asf909.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	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13042/console">https://builds.apache.org/job/PreCommit-HDFS-Build/13042/console</a>

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▼  Zhe Zhang added a comment - 20/Oct/15 23:24

Thanks for the work Surendra! A few quick comments:

```
+ public String getNNDirectorySize() {
+     Map<String, Long> storageTypeMap = new HashMap<String, Long>();
```

With Java 7 we don't need to specify type here.


```
+ public long getDirecorySize() {
+     if (!isShared && root != null) {
+         return org.apache.commons.io.FileUtils.sizeOfDirectory(root);
```

Maybe we should import `org.apache.commons.io.FileUtils`?

Another suggestion is to enhance the unit test to actually verify the size matches, instead of just verifying it's positive.

▼  Surendra Singh Lilhore added a comment - 21/Oct/15 11:39

Thanks [zhz](#) for review...  
Attached updated patch, please review..

▼  Hadoop QA added a comment - 21/Oct/15 14:01

 -1 overall

Vote	Subsystem	Runtime	Comment
-1	pre-patch	26m 43s	Pre-patch trunk has 1 extant Findbugs (version 3.0.0) warnings.
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	tests included	0m 0s	The patch appears to include 1 new or modified test files.
+1	javac	8m 43s	There were no new javac warning messages.
+1	javadoc	11m 1s	There were no new javadoc warning messages.
+1	release audit	0m 25s	The applied patch does not increase the total number of release audit warnings.
+1	site	3m 14s	Site still builds.
-1	checkstyle	2m 56s	The applied patch generated 1 new checkstyle issues (total was 421, now 421).
+1	whitespace	0m 0s	The patch has no lines that end in whitespace.
+1	install	1m 45s	mvn install still works.
+1	eclipse:eclipse	0m 35s	The patch built with eclipse:eclipse.
+1	findbugs	4m 52s	The patch does not introduce any new Findbugs (version 3.0.0) warnings.
+1	common tests	8m 33s	Tests passed in hadoop-common.
-1	hdfs tests	63m 17s	Tests failed in hadoop-hdfs.
		132m 8s	


Reason	Tests
Failed unit tests	hadoop.hdfs.server.datanode.TestDataNodeHotSwapVolumes
	hadoop.hdfs.server.blockmanagement.TestNodeCount

Subsystem	Report/Notes
Patch URL	<a href="http://issues.apache.org/jira/secure/attachment/12767769/HDFS-9229.003.patch">http://issues.apache.org/jira/secure/attachment/12767769/HDFS-9229.003.patch</a>
Optional Tests	site javadoc javac unit findbugs checkstyle
git revision	trunk / 0c4af0f
Pre-patch Findbugs warnings	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html">https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html</a>
checkstyle	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt</a>
hadoop-common test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/testrun_hadoop-common.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/testrun_hadoop-common.txt</a>
hadoop-hdfs test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/testrun_hadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13105/artifact/patchprocess/testrun_hadoop-hdfs.txt</a>
Test Results	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13105/testReport/">https://builds.apache.org/job/PreCommit-HDFS-Build/13105/testReport/</a>
Java	1.7.0_55
uname	Linux asf909.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	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13105/console">https://builds.apache.org/job/PreCommit-HDFS-Build/13105/console</a>

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▼  [Rakesh Radhakrishnan](#) added a comment - 21/Oct/15 17:52

Thanks [surendrasingh](#), latest patch looks good to me.

▼  [Haohui Mai](#) added a comment - 21/Oct/15 18:09


The metric needs to live in a different place instead of NameNodeMXBean. All other metrics in the interface do not involve I/O and are polled frequently.

This metric requires an unbound I/O time which can break many monitoring applications.

▼  [Surendra Singh Lilhore](#) added a comment - 23/Oct/15 17:08

Thanks [wheat9](#) for suggestion..

Can I move this metric in NameNodeStatusMXBean ??

▼  [Zhe Zhang](#) added a comment - 23/Oct/15 19:15

Thanks Haohui for the suggestion.

[surendrasingh](#) I agree NameNodeStatusMXBean does get pulled less frequently. But intuitively the directory size is a metric instead of NN status.

My alternative suggestion is to limit the frequency of checking the directory size to e.g. every 10 mins. If a request for the metric is made within the 10 mins window, the result from the last measurement is returned.


▼  [Jing Zhao](#) added a comment - 23/Oct/15 19:36

How about updating the number only when a checkpoint is done or edits are rolled?

▼  [Surendra Singh Lilhore](#) added a comment - 23/Oct/15 20:26

How about updating the number only when a checkpoint is done or edits are rolled?

I think its good idea. We can update metric when edits are rolled.

▼  Zhe Zhang added a comment - 23/Oct/15 20:30

Good idea! Thanks Jing and Surendra.

▼  Surendra Singh Lilhore added a comment - 25/Oct/15 19:11


Thanks zhz and jingzhao

Attached updated patch..

Changes in 004 :

- 1. After NN start metric count will update in NNStorage constructor.
- 2. ANN will update count after edit log roll.
- 3. SNN will update metric count after tailing edit from ANN.
- 4. Added new test based on new changes.

Please review...

▼  Hadoop QA added a comment - 25/Oct/15 21:33

 -1 overall


Vote	Subsystem	Runtime	Comment
-1	pre-patch	24m 50s	Pre-patch trunk has 1 extant Findbugs (version 3.0.0) warnings.
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	tests included	0m 0s	The patch appears to include 1 new or modified test files.
-1	javac	8m 34s	The applied patch generated 1 additional warning messages.
+1	javadoc	11m 5s	There were no new javadoc warning messages.
+1	release audit	0m 23s	The applied patch does not increase the total number of release audit warnings.
+1	site	3m 36s	Site still builds.
-1	checkstyle	2m 44s	The applied patch generated 2 new checkstyle issues (total was 490, now 491).
+1	whitespace	0m 1s	The patch has no lines that end in whitespace.
+1	install	1m 36s	mvn install still works.
+1	eclipse:eclipse	0m 34s	The patch built with eclipse:eclipse.
+1	findbugs	4m 44s	The patch does not introduce any new Findbugs (version 3.0.0) warnings.
+1	common tests	12m 54s	Tests passed in hadoop-common.
-1	hdfs tests	62m 53s	Tests failed in hadoop-hdfs.
		133m 57s	

Reason	Tests
Failed unit tests	hadoop.hdfs.util.TestByteArrayManager

Subsystem	Report/Notes
Patch URL	<a href="http://issues.apache.org/jira/secure/attachment/12768621/HDFS-9229.004.patch">http://issues.apache.org/jira/secure/attachment/12768621/HDFS-9229.004.patch</a>
Optional Tests	site javadoc javac unit findbugs checkstyle

git revision	trunk / ab8eb87
Pre-patch Findbugs warnings	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html">https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/trunkFindbugsWarningshadoop-hdfs.html</a>
javac	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/diffJavacWarnings.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/diffJavacWarnings.txt</a>
checkstyle	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/diffcheckstylehadoop-hdfs.txt</a>
hadoop-common test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/testrun_hadoop-common.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/testrun_hadoop-common.txt</a>
hadoop-hdfs test log	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/testrun_hadoop-hdfs.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13186/artifact/patchprocess/testrun_hadoop-hdfs.txt</a>
Test Results	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13186/testReport/">https://builds.apache.org/job/PreCommit-HDFS-Build/13186/testReport/</a>
Java	1.7.0_55
uname	Linux asf909.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	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13186/console">https://builds.apache.org/job/PreCommit-HDFS-Build/13186/console</a>

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▼  [Rakesh Radhakrishnan](#) added a comment - 26/Oct/15 04:26

Thank you [wheat9](#), [jingzhao](#), [zhz](#) for the useful discussions.

Thank you [surendrasingh](#) for taking care this. I've few comments:

1. Do we need to update size inside lock, how about moving it outside?

```
+ //Update NameDirSize Metric
+ namesystem.getFSImage().getStorage().updateNameDirSize();
```

2. I could see name dir will be updated during FSImage#saveNamespace call [FSImage.java#L1061](#), probably we could cover this logic also, right?
3. In tests, can we try avoids constant sleeping. One alternate approach I can think is to call `#rollEditLog()` function explicitly. For example, `HATestUtil#waitForStandbyToCatchUp()`

```
+ Thread.sleep(3*1000);
+ checkNNDirSize(cluster.getNameDirs(0), nn0.getNameDirSize());
+ checkNNDirSize(cluster.getNameDirs(1), nn1.getNameDirSize());
```

4. There is one minor checkstyle warning, please fix it.


```
NNStorage.java:1090:23: 'nnDirSizeMap' hides a field.
```

▼  [Surendra Singh Lilhore](#) added a comment - 26/Oct/15 06:30

Thanks [rakeshr](#) for review and suggestions.

Attached updated patch. Addressed above review comments and accordingly changed test code..

Please review ...

▼  [Zhe Zhang](#) added a comment - 27/Oct/15 19:17

Great work Surendra! The patch looks good overall. A few comments:

1. We should add Javadoc for `nameDirSizeMap`
2. The behavior of shared directories is worth more discussions. The current patch returns 0 if the directory is shared. Since the purpose of this new metric is for local storage planning / provisioning, shall we report size of shared dirs as well?

Nits:

1. Instead of directly using `isShared` variable, we should call `isShared()`
2. The temporary `nnDirSizeMap` is not necessary. I think we can directly clear and add to `nameDirSizeMap`.

▼  [Surendra Singh Lilhore](#) added a comment - 28/Oct/15 11:54

Thanks [zhz](#) for review..

The behavior of shared directories is worth more discussions. The current patch returns 0 if the directory is shared. Since the purpose of this new metric is for local storage planning / provisioning, shall we report size of shared dirs as well?

Do we have any interface to get size of shared dirs in namenode ?.

The temporary nnDirSizeMap is not necessary. I think we can directly clear and add to nameDirSizeMap.

This I did purposefully. Getting size for all the dir and updating in map will take some time because it is I/O call. Suppose we updated size for one dir and in-between some one read that map then he will get incomplete info.

[Zhe Zhang](#) added a comment - 28/Oct/15 22:58

Thanks Surendra! I agree with you on both points above. I understood shared dir wrong, thought it meant shared among different block pools.

So +1 pending a Javadoc on nameDirSizeMap and changing isShared to isShared( ) (assuming you agree).

To be extra safe I will file a follow-on JIRA to bound the time of sizeOfDirectory call (if timeout, just don't update the value).

[Surendra Singh Lilhore](#) added a comment - 29/Oct/15 04:54

Thanks [zhz](#)! Fixed remaining two comments.

Attached updated patch. Please review..

[Hadoop QA](#) added a comment - 29/Oct/15 08:28

**-1 overall**

Vote	Subsystem	Runtime	Comment
0	reexec	0m 5s	<a href="#">docker + precommit patch detected.</a>
+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.
+1	mvninstall	3m 4s	trunk passed
+1	compile	4m 19s	trunk passed with JDK v1.8.0_60
+1	compile	4m 8s	trunk passed with JDK v1.7.0_79
+1	checkstyle	0m 56s	trunk passed
+1	mvnsite	1m 35s	trunk passed
+1	mvneclipse	0m 28s	trunk passed
-1	findbugs	1m 48s	<a href="#">hadoop-hdfs-project/hadoop-hdfs in trunk cannot run convertXmlToText from findbugs</a>
+1	javadoc	2m 0s	trunk passed with JDK v1.8.0_60
+1	javadoc	2m 47s	trunk passed with JDK v1.7.0_79
+1	mvninstall	2m 11s	the patch passed
+1	compile	4m 19s	the patch passed with JDK v1.8.0_60
+1	javac	4m 19s	the patch passed
+1	compile	4m 8s	the patch passed with JDK v1.7.0_79
+1	javac	4m 8s	the patch passed
-1	checkstyle	0m 57s	<a href="#">Patch generated 1 new checkstyle issues in root (total was 491, now 491).</a>
+1	mvnsite	1m 33s	the patch passed
+1	mvneclipse	0m 28s	the patch passed
+1	whitespace	0m 0s	Patch has no whitespace issues.
+1	findbugs	3m 45s	the patch passed
+1	javadoc	1m 56s	the patch passed with JDK v1.8.0_60



+1	javadoc	2m 50s	the patch passed with JDK v1.7.0_79
-1	unit	6m 13s	hadoop-common in the patch failed with JDK v1.8.0_60.
-1	unit	61m 18s	hadoop-hdfs in the patch failed with JDK v1.8.0_60.
+1	unit	7m 53s	hadoop-common in the patch passed with JDK v1.7.0_79.
-1	unit	53m 31s	hadoop-hdfs in the patch failed with JDK v1.7.0_79.
-1	asflicense	0m 23s	Patch generated 58 ASF License warnings.
		175m 39s	

Reason	Tests
JDK v1.7.0_79 Failed junit tests	hadoop.ipc.TestIPC
	hadoop.hdfs.server.datanode.TestDataNodeMetrics
	hadoop.hdfs.server.namenode.ha.TestEditLogTailer
	hadoop.hdfs.server.namenode.ha.TestSeveralNameNodes
	hadoop.hdfs.server.datanode.TestBlockScanner
	hadoop.hdfs.server.datanode.TestDataNodeHotSwapVolumes


Subsystem	Report/Notes
Docker	Client=1.7.1 Server=1.7.1 Image:test-patch-base-hadoop-date2015-10-29
JIRA Patch URL	<a href="https://issues.apache.org/jira/secure/attachment/12769473/HDFS-9229.006.patch">https://issues.apache.org/jira/secure/attachment/12769473/HDFS-9229.006.patch</a>
JIRA Issue	<a href="#">HDFS-9229</a>
Optional Tests	asflicense site mvnsite javac javadoc mvninstall unit findbugs checkstyle compile
uname	Linux 94b3d6c64bab 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	/home/jenkins/jenkins-slave/workspace/PreCommit-HDFS-Build/patchprocess/apache-yetus-67f42f1/precommit/personality/hadoop.sh
git revision	trunk / b0c818b
Default Java	1.7.0_79
Multi-JDK versions	/usr/lib/jvm/java-8-oracle:1.8.0_60 /usr/lib/jvm/java-7-openjdk-amd64:1.7.0_79
findbugs	v3.0.0
findbugs	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/branch-findbugs-hadoop-hdfs-project_hadoop-hdfs.html">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/branch-findbugs-hadoop-hdfs-project_hadoop-hdfs.html</a>
checkstyle	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/diff-checkstyle-root.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/diff-checkstyle-root.txt</a>
unit	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-common-project_hadoop-common-jdk1.8.0_60.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-common-project_hadoop-common-jdk1.8.0_60.txt</a>
unit	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_60.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_60.txt</a>
unit	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_79.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_79.txt</a>
unit test logs	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-common-project_hadoop-common-jdk1.8.0_60.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-common-project_hadoop-common-jdk1.8.0_60.txt</a> <a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_60.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.8.0_60.txt</a> <a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_79.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-unit-hadoop-hdfs-project_hadoop-hdfs-jdk1.7.0_79.txt</a>

JDK v1.7.0_79 Test Results	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/testReport/">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/testReport/</a>
asflicense	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-asflicense-problems.txt">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/artifact/patchprocess/patch-asflicense-problems.txt</a>
modules	C: \hadoop-common-project\hadoop-common \hadoop-hdfs-project\hadoop-hdfs U: .
Max memory used	226MB
Powered by	Apache Yetus <a href="http://yetus.apache.org">http://yetus.apache.org</a>
Console output	<a href="https://builds.apache.org/job/PreCommit-HDFS-Build/13270/console">https://builds.apache.org/job/PreCommit-HDFS-Build/13270/console</a>

This message was automatically generated.

▼  Surendra Singh Lilhore added a comment - 29/Oct/15 09:26

Findbug and checkstyle warnings unrelated to this patch.  
Failed tests are passing locally...

▼  Zhe Zhang added a comment - 29/Oct/15 18:24

Thanks Surendra! +1 on the latest patch. I just committed it to trunk and branch-2. Also thanks Rakesh, Haohui, and Jing for the helpful reviews.

▼  Hudson added a comment - 29/Oct/15 19:29

FAILURE: Integrated in Hadoop-trunk-Commit #8725 (See <https://builds.apache.org/job/Hadoop-trunk-Commit/8725/>)  
[HDFS-9229](#). Expose size of NameNode directory as a metric. Contributed by (zhz: rev 8def51a708e5de8a57689b8c9b3fd034cfd2cd78)

- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NameNodeMBean.java
- hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/common/Storage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NNStorage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSImage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSNamesystem.java
- hadoop-common-project/hadoop-common/src/site/markdown/Metrics.md
- hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestNameNodeMBean.java

▼  Hudson added a comment - 29/Oct/15 20:00

FAILURE: Integrated in Hadoop-Mapreduce-trunk-Java8 #602 (See <https://builds.apache.org/job/Hadoop-Mapreduce-trunk-Java8/602/>)  
[HDFS-9229](#). Expose size of NameNode directory as a metric. Contributed by (zhz: rev 8def51a708e5de8a57689b8c9b3fd034cfd2cd78)

- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NameNodeMBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NNStorage.java
- hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt
- hadoop-common-project/hadoop-common/src/site/markdown/Metrics.md
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/common/Storage.java
- hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestNameNodeMBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSImage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSNamesystem.java

▼  Hudson added a comment - 29/Oct/15 20:53

FAILURE: Integrated in Hadoop-Mapreduce-trunk #2544 (See <https://builds.apache.org/job/Hadoop-Mapreduce-trunk/2544/>)  
[HDFS-9229](#). Expose size of NameNode directory as a metric. Contributed by (zhz: rev 8def51a708e5de8a57689b8c9b3fd034cfd2cd78)

- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSImage.java

- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/common/Storage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NNStorage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestNameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSNamesystem.java
- hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt
- hadoop-common-project/hadoop-common/src/site/markdown/Metrics.md
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java

▼  Hudson added a comment - 29/Oct/15 21:53

FAILURE: Integrated in Hadoop-Yarn-trunk #1337 (See <https://builds.apache.org/job/Hadoop-Yarn-trunk/1337/>)

[HDFS-9229](#). Expose size of NameNode directory as a metric. Contributed by (zhz: rev

8def51a708e5de8a57689b8c9b3fd034cfd2cd78)

- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt
- hadoop-common-project/hadoop-common/src/site/markdown/Metrics.md
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSImage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/common/Storage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSNamesystem.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java
- hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestNameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NNStorage.java

▼  Hudson added a comment - 29/Oct/15 22:08

FAILURE: Integrated in Hadoop-Yarn-trunk-Java8 #614 (See <https://builds.apache.org/job/Hadoop-Yarn-trunk-Java8/614/>)

[HDFS-9229](#). Expose size of NameNode directory as a metric. Contributed by (zhz: rev

8def51a708e5de8a57689b8c9b3fd034cfd2cd78)

- hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestNameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/common/Storage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NNStorage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSNamesystem.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSImage.java
- hadoop-common-project/hadoop-common/src/site/markdown/Metrics.md

▼  Hudson added a comment - 30/Oct/15 01:46

FAILURE: Integrated in Hadoop-Hdfs-trunk-Java8 #552 (See <https://builds.apache.org/job/Hadoop-Hdfs-trunk-Java8/552/>)

[HDFS-9229](#). Expose size of NameNode directory as a metric. Contributed by (zhz: rev

8def51a708e5de8a57689b8c9b3fd034cfd2cd78)

- hadoop-common-project/hadoop-common/src/site/markdown/Metrics.md
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSNamesystem.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSImage.java
- hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestNameNodeMXBean.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NNStorage.java
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/common/Storage.java
- hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt

▼  Hudson added a comment - 30/Oct/15 02:45


FAILURE: Integrated in Hadoop-Hdfs-trunk #2490 (See <https://builds.apache.org/job/Hadoop-Hdfs-trunk/2490/>)

[HDFS-9229](#). Expose size of NameNode directory as a metric. Contributed by (zhz: rev

8def51a708e5de8a57689b8c9b3fd034cfd2cd78)

- hadoop-hdfs-project/hadoop-hdfs/CHANGES.txt
- hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSImage.java

- `hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/FSTNamesystem.java`
- `hadoop-common-project/hadoop-common/src/site/markdown/Metrics.md`
- `hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/namenode/TestNameNodeMXBean.java`
- `hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NNStorage.java`
- `hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/ha/EditLogTailer.java`
- `hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/common/Storage.java`
- `hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/namenode/NameNodeMXBean.java`

▼  Surendra Singh Lilhore added a comment - 30/Oct/15 06:32


Thanks [zhz](#) for reviews and commit.

#### ▼ People

Assignee:

 Surendra Singh Lilhore

Reporter:

 Zhe Zhang

Votes:

 0 Vote for this issue

Watchers:

 6 Start watching this issue

#### ▼ Dates

Created:

12/Oct/15 16:32

Updated:

30/Aug/16 01:25

Resolved:

29/Oct/15 18:24