



Hadoop YARN / [YARN-5990 \[Umbrella\] Follow-up \(phase-2\) FairScheduler preemption improvements](#) / [YARN-6432](#)

FairScheduler: Reserve preempted resources for corresponding applications

Details

Type:	Sub-task	Status:	RESOLVED
Priority:	Major	Resolution:	Fixed
Affects Version/s:	None	Fix Version/s:	2.9.0 , 3.0.0-alpha4
Component/s:	None		
Labels:	None		
Hadoop Flags:	Reviewed		

Attachments

YARN-6432.000.patch	38 kB	04/Apr/17 02:39
YARN-6432.001.patch	38 kB	04/Apr/17 17:43
YARN-6432.002.patch	38 kB	05/Apr/17 00:17
YARN-6432.branch-2.addendum.patch	1 kB	20/Apr/17 03:55
YARN-6432.branch-2.patch	38 kB	14/Apr/17 21:32

Issue Links

breaks

YARN-6895 [FairScheduler] Preemption reservation may cause regular reservation leaks	RESOLVED
YARN-6501 FSSchedulerNode.java fails to compile with JDK7	RESOLVED

duplicates

YARN-5829 FS preemption should reserve a node before considering containers on it for preemption	RESOLVED
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Activity

↑

▼

Miklos Szegedi added a comment - 04/Apr/17 02:37

[YARN-5829](#) keeps pulling a previous version of the pull request for Jenkins, so we decided to create this Jira to finish the code review.

▼

Miklos Szegedi added a comment - 04/Apr/17 02:39

kasha, please review.

▼

Hadoop QA added a comment - 04/Apr/17 03:57

-1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 22s	Docker mode activated.
+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.


+1	mvninstall	16m 13s	trunk passed
+1	compile	0m 45s	trunk passed
+1	checkstyle	0m 32s	trunk passed
+1	mvnsite	0m 42s	trunk passed
+1	mvnecclipse	0m 17s	trunk passed
+1	findbugs	1m 14s	trunk passed
+1	javadoc	0m 27s	trunk passed
+1	mvninstall	0m 44s	the patch passed
+1	compile	0m 44s	the patch passed
+1	javac	0m 44s	the patch passed
-0	checkstyle	0m 28s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager: The patch generated 8 new + 94 unchanged - 3 fixed = 102 total (was 97)
+1	mvnsite	0m 40s	the patch passed
+1	mvnecclipse	0m 15s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	findbugs	1m 21s	the patch passed
+1	javadoc	0m 25s	the patch passed
-1	unit	41m 41s	hadoop-yarn-server-resourcemanager in the patch failed.
-1	asflicense	0m 17s	The patch generated 1 ASF License warnings.
		68m 39s	

Reason	Tests
Failed junit tests	hadoop.yarn.server.resourcemanager.TestRMRestart

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:a9ad5d6
JIRA Issue	YARN-6432
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12861800/YARN-6432.000.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle
uname	Linux f96b236c9058 3.13.0-106-generic #153-Ubuntu SMP Tue Dec 6 15:44:32 UTC 2016 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 5faa949
Default Java	1.8.0_121
findbugs	v3.0.0
checkstyle	https://builds.apache.org/job/PreCommit-YARN-Build/15497/artifact/patchprocess/diff-checkstyle-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-resourcemanager.txt
unit	https://builds.apache.org/job/PreCommit-YARN-Build/15497/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-resourcemanager.txt
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/15497/testReport/
asflicense	https://builds.apache.org/job/PreCommit-YARN-Build/15497/artifact/patchprocess/patch-asflicense-problems.txt

modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager U: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/15497/console
Powered by	Apache Yetus 0.5.0-SNAPSHOT http://yetus.apache.org

This message was automatically generated.

▼  **Hadoop QA** added a comment - 04/Apr/17 18:55

 **-1 overall**


Vote	Subsystem	Runtime	Comment
0	reexec	0m 21s	Docker mode activated.
+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.
+1	mvninstall	16m 20s	trunk passed
+1	compile	0m 43s	trunk passed
+1	checkstyle	0m 27s	trunk passed
+1	mvnsite	0m 38s	trunk passed
+1	mvneclipse	0m 17s	trunk passed
+1	findbugs	1m 10s	trunk passed
+1	javadoc	0m 23s	trunk passed
+1	mvninstall	0m 35s	the patch passed
+1	compile	0m 35s	the patch passed
+1	javac	0m 35s	the patch passed
-0	checkstyle	0m 26s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager: The patch generated 1 new + 94 unchanged - 3 fixed = 95 total (was 97)
+1	mvnsite	0m 37s	the patch passed
+1	mvneclipse	0m 14s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	findbugs	1m 14s	the patch passed
+1	javadoc	0m 21s	the patch passed
-1	unit	40m 39s	hadoop-yarn-server-resourcemanager in the patch failed.
+1	asflicense	0m 21s	The patch does not generate ASF License warnings.
		66m 46s	

Reason	Tests
Failed junit tests	hadoop.yarn.server.resourcemanager.TestRMRestart
	hadoop.yarn.server.resourcemanager.TestWorkPreservingRMRestart

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:a9ad5d6
JIRA Issue	YARN-6432

JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12861926/YARN-6432.001.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle
uname	Linux 4b23841a2e25 3.13.0-105-generic #152-Ubuntu SMP Fri Dec 2 15:37:11 UTC 2016 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 6eba792
Default Java	1.8.0_121
findbugs	v3.0.0
checkstyle	https://builds.apache.org/job/PreCommit-YARN-Build/15506/artifact/patchprocess/diff-checkstyle-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-resourcemanager.txt
unit	https://builds.apache.org/job/PreCommit-YARN-Build/15506/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-resourcemanager.txt
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/15506/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager U: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/15506/console
Powered by	Apache Yetus 0.5.0-SNAPSHOT http://yetus.apache.org

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▼  Hadoop QA added a comment - 05/Apr/17 01:20

 -1 overall



Vote	Subsystem	Runtime	Comment
0	reexec	0m 18s	Docker mode activated.
+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.
+1	mvninstall	15m 0s	trunk passed
+1	compile	0m 33s	trunk passed
+1	checkstyle	0m 26s	trunk passed
+1	mvnsite	0m 36s	trunk passed
+1	mvneclipse	0m 15s	trunk passed
+1	findbugs	1m 1s	trunk passed
+1	javadoc	0m 20s	trunk passed
+1	mvninstall	0m 30s	the patch passed
+1	compile	0m 31s	the patch passed
+1	javac	0m 31s	the patch passed
+1	checkstyle	0m 25s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager: The patch generated 0 new + 95 unchanged - 3 fixed = 95 total (was 98)
+1	mvnsite	0m 32s	the patch passed
+1	mvneclipse	0m 12s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	findbugs	1m 5s	the patch passed
+1	javadoc	0m 18s	the patch passed

-1	unit	37m 56s	hadoop-yarn-server-resourcemanager in the patch failed.
+1	asflicense	0m 19s	The patch does not generate ASF License warnings.
		61m 42s	

Reason	Tests
Failed junit tests	hadoop.yarn.server.resourcemanager.TestRMRestart

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:a9ad5d6
JIRA Issue	YARN-6432
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12861982/YARN-6432.002.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle
uname	Linux 169c87e8b458 3.13.0-107-generic #154-Ubuntu SMP Tue Dec 20 09:57:27 UTC 2016 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 9cc04b4
Default Java	1.8.0_121
findbugs	v3.0.0
unit	https://builds.apache.org/job/PreCommit-YARN-Build/15518/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-resourcemanager.txt
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/15518/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager U: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/15518/console
Powered by	Apache Yetus 0.5.0-SNAPSHOT http://yetus.apache.org

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  [Karthik Kambatla](#) added a comment - 12/Apr/17 21:14

+1, checking this in.

  [Hudson](#) added a comment - 12/Apr/17 21:44

SUCCESS: Integrated in Jenkins build Hadoop-trunk-Commit #11582 (See <https://builds.apache.org/job/Hadoop-trunk-Commit/11582/>)

[YARN-6432](#). FairScheduler: Reserve preempted resources for corresponding (kasha: rev c3375175d616e0380560f89d491b6b9753a8f3e1)

- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/rmcontainer/RMContainer.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/FSSAppAttempt.java
- (add) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/test/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/TestFSSchedulerNode.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/FSPreemptionThread.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/FSSchedulerNode.java

▼ Karthik Kambatla added a comment - 12/Apr/17 21:51

Committed to trunk. branch-2 patch has compilation issues. miklos.szegedi@cloudera.com - mind posting a branch-2 patch?

▼ Miklos Szegedi added a comment - 14/Apr/17 21:32

Thank you for checking this in. Attached the branch-2 patch.

▼ Hadoop QA added a comment - 14/Apr/17 21:38

✖

-1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 0s	Docker mode activated.
-1	docker	0m 8s	Docker failed to build yetus/hadoop:b59b8b7.

Subsystem	Report/Notes
JIRA Issue	YARN-6432
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12863505/YARN-6432.branch-2.patch
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/15645/console
Powered by	Apache Yetus 0.5.0-SNAPSHOT http://yetus.apache.org


This message was automatically generated.

▼ Hudson added a comment - 17/Apr/17 15:44


SUCCESS: Integrated in Jenkins build Hadoop-trunk-Commit #11591 (See <https://builds.apache.org/job/Hadoop-trunk-Commit/11591/>)

[YARN-6432](#). FairScheduler: Reserve preempted resources for corresponding (kasha: rev c3375175d616e0380560f89d491b6b9753a8f3e1)


- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/test/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/TestFairSchedulerPreemption.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/rmcontainer/RMContainerImpl.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/FSSchedulerNode.java
- (add) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/test/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/TestFSSchedulerNode.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/rmcontainer/RMContainer.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/FSAppAttempt.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/FairScheduler.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/fair/FSPreemptionThread.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src/main/java/org/apache/hadoop/yarn/server/resourcemanager/scheduler/SchedulerNode.java

▼  [Karthik Kambatla](#) added a comment - 17/Apr/17 21:37


Thanks for posting the branch-2 patch, Miklos. Just committed it to, well, branch-2.

▼  [John Zhuge](#) added a comment - 20/Apr/17 01:39

[kasha](#) `FSSchedulerNode.java` failed to build with JDK7 in branch-2, `Map#putIfAbsent` is introduced in JDK8. Tracked in [YARN-6501](#). I am surprised there is no JDK7 post-commit build.

▼  [Miklos Szegedi](#) added a comment - 20/Apr/17 03:55

Thank you, [jzhuge](#) for the report. I attached an addendum for branch-2.

▼  [John Zhuge](#) added a comment - 20/Apr/17 04:14


No problem miklos.szegedi@cloudera.com.

In the addendum patch, you probably should use the following code as specified by [Map#putIfAbsent JDK8 doc](#)


If the specified key is not already associated with a value (or is mapped to null)..."

```
if (get(key) == null) {  
    put(key, value);  
}
```

You can see [my patch posted to YARN-6501](#).

▼  [Miklos Szegedi](#) added a comment - 20/Apr/17 04:22


The original patch does not map null, however this might be changed in the future. I think we should use your patch in [YARN-6501](#). Thank you for the patch.

▼  [John Zhuge](#) added a comment - 20/Apr/17 05:37


Sounds good miklos.szegedi@cloudera.com.

▼ People

Assignee:

 [Miklos Szegedi](#)

Reporter:

 [Miklos Szegedi](#)

Votes:

 0 Vote for this issue

Watchers:

 7 Start watching this issue

▼ Dates

Created:

04/Apr/17 02:36

Updated:

21/Nov/17 22:45

Resolved:

17/Apr/17 21:37