[MAPREDUCE-3656](https://www.google.com/url?q=https://issues.apache.org/jira/browse/MAPREDUCE-3656&sa=D&source=editors&ust=1751358312749884&usg=AOvVaw1UOXtyvz7QM7kYHQoqWdtc)

Sort job on 350 scale is consistently failing with latest MRV2 code

**(1)  Log information**

**(1.1) Roles in this case**

 mapper   and  AM

**(1.2) Symptoms  (based on TT’s logs)**

“Sort Job on 350 node scale with 16800 maps and 680 reduces consistently failing for around last 6 runs. When around 50% of maps are completed, suddenly job jumps to failed state. On looking at NM log, found RM sent Stop Container Request to NM for AM container. But at INFO level from RM log not able to find why RM is killing AM when job is not killed manually.”

2012-01-10 14:36:03,779 INFO org.apache.hadoop.yarn.server.nodemanager.NMAuditLogger: USER=<jobuser> IP=<ip\_address\_of\_RM> OPERATION=Stop Container Request TARGET=ContainerManageImpl RESULT=SUCCESS APPID=application\_1326205390797\_0002 CONTAINERID=container\_1326205390797\_0002\_01\_000001

2012-01-10 14:36:03,780 INFO 2012-01-10 14:36:03,785 INFO org.apache.hadoop.yarn.server.nodemanager.containermanager.container.Container: Processing container\_1326205390797\_0002\_01\_000001 of type KILL\_CONTAINER

2012-01-10 14:33:14,505 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: Processing container\_1326205390797\_0002\_01\_000001 of type LAUNCHED

2012-01-10 14:33:14,505 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: container\_1326205390797\_0002\_01\_000001 Container Transitioned from ACQUIRED to RUNNING

2012-01-10 14:36:03,846 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: Processing container\_1326205390797\_0002\_01\_000001 of type KILL

2012-01-10 14:36:03,846 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: container\_1326205390797\_0002\_01\_000001 Container Transitioned from RUNNING to KILLED

2012-01-10 14:36:03,846 INFO org.apache.hadoop.yarn.server.resourcemanager.scheduler.SchedulerApp: Completed container: container\_1326205390797\_0002\_01\_000001 in state: KILLED event:KILL

2012-01-10 14:34:39,289 INFO [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.v2.app.job.impl.JobImpl: Processing job\_1326205390797\_0002 of type JOB\_TASK\_COMPLETED

2012-01-10 14:34:39,289 INFO [AsyncDispatcher event handler]org.apache.hadoop.mapreduce.v2.app.job.impl.TaskAttemptImpl: Processing attempt\_1326205390797\_0002\_r\_000154\_0 of type TA\_UPDATE

2012-01-10 14:34:39,289 INFO [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.v2.app.job.impl.JobImpl: Processing job\_1326205390797\_0002 of type JOB\_COUNTER\_UPDATE

2012-01-10 14:34:39,290 ERROR [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.v2.app.job.impl.JobImpl: Can't handle this event at current state

org.apache.hadoop.yarn.state.InvalidStateTransitonException: Invalid event: JOB\_COUNTER\_UPDATE at ERROR

at org.apache.hadoop.yarn.state.StateMachineFactory.doTransition(StateMachineFactory.java:301)

at org.apache.hadoop.yarn.state.StateMachineFactory.access$300(StateMachineFactory.java:43)

at

org.apache.hadoop.yarn.state.StateMachineFactory$InternalStateMachine.doTransition(StateMachineFactory.java:443)

at org.apache.hadoop.mapreduce.v2.app.job.impl.JobImpl.handle(JobImpl.java:699)

at org.apache.hadoop.mapreduce.v2.app.job.impl.JobImpl.handle(JobImpl.java:112)

at org.apache.hadoop.mapreduce.v2.app.MRAppMaster$JobEventDispatcher.handle(MRAppMaster.java:849)

at org.apache.hadoop.mapreduce.v2.app.MRAppMaster$JobEventDispatcher.handle(MRAppMaster.java:845)

at org.apache.hadoop.yarn.event.AsyncDispatcher.dispatch(AsyncDispatcher.java:125)

at org.apache.hadoop.yarn.event.AsyncDispatcher$1.run(AsyncDispatcher.java:82)

at java.lang.Thread.run(Thread.java:619)

2012-01-10 14:36:03,755 INFO [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.jobhistory.JobHistoryEventHandler: Moved tmp to done: hdfs://NN/mapred/history/done\_intermediate/jobuser/job\_1326205390797\_0002.summary\_tmp to hdfs://NN/mapred/history/done\_intermediate/jobuser/job\_1326205390797\_0002.summary

2012-01-10 14:36:03,755 INFO [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.jobhistory.JobHistoryEventHandler: Moved tmp to done: hdfs://NN/mapred/history/done\_intermediate/jobuser/job\_1326205390797\_0002\_conf.xml\_tmp to hdfs://NN/mapred/history/done\_intermediate/jobuser/job\_1326205390797\_0002\_conf.xml

2012-01-10 14:36:03,756 INFO [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.jobhistory.JobHistoryEventHandler: Moved tmp to done: hdfs://NN/mapred/history/done\_intermediate/jobuser/job\_1326205390797\_0002-1326205993489-jobuser-sorter-1326206079288-0-0-ERROR-default.jhist\_tmp to hdfs://NN/mapred/history/done\_intermediate/jobuser/job\_1326205390797\_0002-1326205993489-jobuser-sorter-1326206079288-0-0-ERROR-default.jhist

2012-01-10 14:36:03,756 INFO [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.jobhistory.JobHistoryEventHandler: Stopped JobHistoryEventHandler. super.stop()

2012-01-10 14:36:03,756 INFO [AsyncDispatcher event handler] org.apache.hadoop.yarn.service.AbstractService: Service:JobHistoryEventHandler is stopped.

2012-01-10 14:36:03,756 ERROR [ContainerLauncher Event Handler] org.apache.hadoop.mapreduce.v2.app.launcher.ContainerLauncherImpl: Returning, interrupted : java.lang.InterruptedException

2012-01-10 14:36:03,759 INFO [AsyncDispatcher event handler] org.apache.hadoop.yarn.service.AbstractService: Service:org.apache.hadoop.mapreduce.v2.app.launcher.ContainerLauncherImpl is stopped.

2012-01-10 14:36:03,759 INFO [AsyncDispatcher event handler] org.apache.hadoop.yarn.service.AbstractService: Service:org.apache.hadoop.mapreduce.v2.app.MRAppMaster$ContainerLauncherRouter is stopped.

2012-01-10 14:36:03,760 INFO [RMCommunicator Allocator] org.apache.hadoop.mapreduce.v2.app.rm.RMContainerAllocator: Allocated thread interrupted. Returning.

2012-01-10 14:36:03,760 ERROR [Thread-27] org.apache.hadoop.mapreduce.v2.app.rm.RMContainerAllocator: Returning,interrupted : java.lang.InterruptedException

2012-01-10 14:36:03,761 INFO [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.v2.app.rm.RMContainerAllocator: Setting job diagnostics to Invalid event TA\_UPDATE on

TaskAttempt attempt\_1326205390797\_0002\_m\_007534\_0

Invalid event JOB\_COUNTER\_UPDATE on Job job\_1326205390797\_0002

Invalid event JOB\_COUNTER\_UPDATE on Job job\_1326205390797\_0002

Invalid event JOB\_COUNTER\_UPDATE on Job job\_1326205390797\_0002

Invalid event JOB\_COUNTER\_UPDATE on Job job\_1326205390797\_0002

Invalid event JOB\_COUNTER\_UPDATE on Job job\_1326205390797\_0002

Exception found on failed AM logs is:

2012-01-11 13:50:21,402 ERROR org.apache.hadoop.yarn.state.InvalidStateTransitonException

2012-01-11 13:50:21,402 ERROR org.apache.hadoop.yarn.state.InvalidStateTransitonException: Invalid event: TA\_UPDATE at ASSIGNED

Since there is exception in AM. So AM is killed.

NM logs:

2012-01-11 13:50:21,402 INFO org.apache.hadoop.yarn.server.nodemanager.NMAuditLogger: USER=<jobuser> IP=<ip\_addres\_of\_RM>            OPERATION=Stop Container Request             TARGET=ContainerManageImpl              RESULT=SUCCESS                  APPID=application\_1326289061888\_0002              CONTAINERID=container\_1326289061888\_0002\_01\_000001    (AM)

2012-01-11 13:50:21,406 INFO org.apache.hadoop.yarn.server.nodemanager.containermanager.container.Container: Processing container\_1326289061888\_0002\_01\_000001 of type KILL\_CONTAINER

2012-01-11 13:50:21,407 INFO org.apache.hadoop.yarn.server.nodemanager.containermanager.container.Container: Container container\_1326289061888\_0002\_01\_000001 transitioned from RUNNING to KILLING

2012-01-11 13:50:21,407 INFO org.apache.hadoop.yarn.server.nodemanager.containermanager.launcher.ContainerLaunch: Cleaning up container container\_1326289061888\_0002\_01\_000001

2012-01-11 13:50:21,432 INFO org.apache.hadoop.yarn.server.nodemanager.containermanager.container.Container: Processing container\_1326289061888\_0002\_01\_000001 of type UPDATE\_DIAGNOSTICS\_MSG

2012-01-11 13:50:21,449 INFO org.apache.hadoop.yarn.server.nodemanager.containermanager.container.Container: Processing container\_1326289061888\_0002\_01\_000001 of type CONTAINER\_KILLED\_ON\_REQUEST

RM logs:

2012-01-11 13:47:34,326 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: Processing container\_1326289061888\_0002\_01\_000001 of type LAUNCHED

2012-01-11 13:47:34,326 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: container\_1326289061888\_0002\_01\_000001 Container Transitioned from ACQUIRED to RUNNING

***Through the timestamp, we notice that the above NM’s log and the AM’s log below get printed during between these two log entries.***

2012-01-11 13:50:22,377 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: Processing container\_1326289061888\_0002\_01\_000001 of type KILL

2012-01-11 13:50:22,377 INFO org.apache.hadoop.yarn.server.resourcemanager.rmcontainer.RMContainerImpl: container\_1326289061888\_0002\_01\_000001 Container Transitioned from RUNNING to KILLED

2012-01-11 13:50:22,377 INFO org.apache.hadoop.yarn.server.resourcemanager.scheduler.SchedulerApp: Completed container: container\_1326289061888\_0002\_01\_000001 in state: KILLED event:KILL

AM log:

2012-01-11 13:48:45,526 ERROR [AsyncDispatcher event handler] org.apache.hadoop.mapreduce.v2.app.job.impl.TaskAttemptImpl: Can't handle this event at current state for attempt\_1326289061888\_0002\_m\_006598\_0

org.apache.hadoop.yarn.state.InvalidStateTransitonException: Invalid event: TA\_UPDATE at ASSIGNED

            at org.apache.hadoop.yarn.state.StateMachineFactory.doTransition(StateMachineFactory.java:301)

            at org.apache.hadoop.yarn.state.StateMachineFactory.access$300(StateMachineFactory.java:43)

            at org.apache.hadoop.yarn.state.StateMachineFactory$InternalStateMachine.doTransition(StateMachineFactory.java:443)

            at org.apache.hadoop.mapreduce.v2.app.job.impl.TaskAttemptImpl.handle(TaskAttemptImpl.java:919)

            at org.apache.hadoop.mapreduce.v2.app.job.impl.TaskAttemptImpl.handle(TaskAttemptImpl.java:130)

            at org.apache.hadoop.mapreduce.v2.app.MRAppMaster$TaskAttemptEventDispatcher.handle(MRAppMaster.java:871)

            at org.apache.hadoop.mapreduce.v2.app.MRAppMaster$TaskAttemptEventDispatcher.handle(MRAppMaster.java:863)

            at org.apache.hadoop.yarn.event.AsyncDispatcher.dispatch(AsyncDispatcher.java:125)

            at org.apache.hadoop.yarn.event.AsyncDispatcher$1.run(AsyncDispatcher.java:82)

at java.lang.Thread.run(Thread.java:619)