

Item 16

git_comments:

1. In hadoop2, YARN/MR2 starts a mini cluster with its own conf instance and updates settings. Our HBase MR jobs need several of these settings in order to properly run. So we copy the necessary config properties here. YARN-129 required adding a few properties.

git_commits:

1. **summary:** HBASE-8528 [hadoop2] TestMultiTableInputFormat always on hadoop with YARN-129 applied (with Gary Helmling)
message: HBASE-8528 [hadoop2] TestMultiTableInputFormat always on hadoop with YARN-129 applied (with Gary Helmling) git-svn-id: <https://svn.apache.org/repos/asf/hbase/branches/0.95@1482563> 13f79535-47bb-0310-9956-ffa450edef68

github_issues:

github_issues_comments:

github_pulls:

github_pulls_comments:

github_pulls_reviews:

jira_issues:

1. **summary:** [hadoop2] TestMultiTableInputFormat always fails on hadoop with YARN-129 applied
description: TestMulitTableInputFormat always fails if YARN-129 is applied. Its error message isn't useful (assertion failed) -- but if you look at the stderr/stdout/syslog files of the jobs in hbase-server/target/org.apache.hadoop.mapred.MinicMRCluster* (minicluster data dirs) you'll find this class not found exception: {code} Exception in thread "main" java.lang.NoClassDefFoundError: org/apache/hadoop/mapreduce/v2/app/MRAppMaster Caused by: java.lang.ClassNotFoundException: org.apache.hadoop.mapreduce.v2.app.MRAppMaster at java.net.URLClassLoader\$1.run(URLClassLoader.java:202) at java.security.AccessController.doPrivileged(Native Method) at java.net.URLClassLoader.findClass(URLClassLoader.java:190) at java.lang.ClassLoader.loadClass(ClassLoader.java:306) at sun.misc.Launcher\$AppClassLoader.loadClass(Launcher.java:301) at java.lang.ClassLoader.loadClass(ClassLoader.java:247) Could not find the main class: org.apache.hadoop.mapreduce.v2.app.MRAppMaster. Program will exit. {code}

jira_issues_comments:

1. Attached patch fixes problem for TestMultiTableInputFormat. Waiting for QA bot to see if it affects and other tests.
2. **body:** Somehow the simplification of the yarn classpaths in YARN-129 doesn't include as much as before. So we add unit tests's classpath into to the yarn.application.classpath so that the spawned children have the MR2 jars necessary to run.
label: code-design
3. Coincidentally, I've just been looking at the exact same problem when running against 2.0.4-alpha. Setting {{yarn.is.minicluster}} to "true" in the configuration solves the problem and in effect does the same as your patch (at least in 2.0.4-alpha).
4. Here's an alternate patch for trunk that sets yarn.is.minicluster. TestMultiTableInputFormat passes for me with this change.
5. [~ghelmling], I like the {{yarn.is.minicluster}} setting approach because it is more direct. I'm wondering why this isn't the default when every minimrcluster is created. I brought this up with our mr2 guy, [~sandy] -- he's going to do a quick look and post here explaining why.
6. +1 on Gary's patch.

7. {color:green}+1 overall{color}. Here are the results of testing the latest attachment http://issues.apache.org/jira/secure/attachment/12582734/hbase-8528_alt.patch against trunk revision . {color:green}+1 @author{color}. The patch does not contain any @author tags. {color:green}+1 tests included{color}. The patch appears to include 3 new or modified tests. {color:green}+1 hadoop1.0{color}. The patch compiles against the hadoop 1.0 profile. {color:green}+1 hadoop2.0{color}. The patch compiles against the hadoop 2.0 profile. {color:green}+1 javadoc{color}. The javadoc tool did not generate any warning messages. {color:green}+1 javac{color}. The applied patch does not increase the total number of javac compiler warnings. {color:green}+1 findbugs{color}. The patch does not introduce any new Findbugs (version 1.3.9) warnings. {color:green}+1 release audit{color}. The applied patch does not increase the total number of release audit warnings. {color:green}+1 lineLengths{color}. The patch does not introduce lines longer than 100 {color:green}+1 site{color}. The mvn site goal succeeds with this patch. {color:green}+1 core tests{color}. The patch passed unit tests in . Test results: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//testReport/> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-prefix-tree.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-client.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-common.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-protocol.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-server.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-hadoop1-compat.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-examples.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-hadoop-compat.html> Console output: <https://builds.apache.org/job/PreCommit-HBASE-Build/5631//console> This message is automatically generated.
8. bq. I like the yarn.is.minicluster setting approach because it is more direct. I'm wondering why this isn't the default when every minimrcluster is created. This is set in the MiniMRCluster configuration automatically, but the Configuration instance seems to be a copy of any Configuration passed down to the MiniMRCluster constructor, so it isn't visible externally. At the moment HBaseTestingUtility doesn't even pass down the Configuration instance, but even if it did it wouldn't help due to the above. If you see any more transparent way of getting yarn.is.minicluster set automatically, that would be cool.
9. Tracked it down -- in MiniMRClientClusterFactory, we get a conf from the job and feed it to the MiniMRYarnCluster [1]. The job doesn't get the same conf we build in hbase -- it instantiates its own. [2] This is why we need to manually copy over settings into the hbase mr client for mr2/yarn hbase jobs. I'm going to add some comments to gary's patch to this effect. [1] <https://github.com/apache/hadoop-common/blob/trunk/hadoop-mapreduce-project/hadoop-mapreduce-client/hadoop-mapreduce-client-jobclient/src/test/java/org/apache/hadoop/mapred/MiniMRClientClusterFactory.java#L73> [2] <https://github.com/apache/hadoop-common/blob/trunk/hadoop-mapreduce-project/hadoop-mapreduce-client/hadoop-mapreduce-client-core/src/main/java/org/apache/hadoop/mapreduce/Job.java#L147>
10. +1
11. Do we need this setting in other MR unit tests?
12. **body:** {color:red}-1 overall{color}. Here are the results of testing the latest attachment <http://issues.apache.org/jira/secure/attachment/12583145/hbase-8528.alt.v2.patch> against trunk revision . {color:green}+1 @author{color}. The patch does not contain any @author tags. {color:green}+1 tests included{color}. The patch appears to include 3 new or modified tests. {color:green}+1 hadoop1.0{color}. The patch compiles against the hadoop 1.0 profile. {color:green}+1 hadoop2.0{color}. The patch compiles against the hadoop 2.0 profile. {color:green}+1 javadoc{color}. The javadoc tool did not generate any warning messages. {color:green}+1 javac{color}. The applied patch does not increase the total number of javac compiler warnings. {color:green}+1 findbugs{color}. The patch does not introduce any new Findbugs (version 1.3.9) warnings. {color:green}+1 release audit{color}. The applied patch does not increase the total number of release audit warnings. {color:green}+1 lineLengths{color}. The patch does not introduce lines longer than 100 {color:green}+1 site{color}. The mvn site goal succeeds with this patch. {color:red}-1 core tests{color}. The patch failed these unit tests:

org.apache.hadoop.hbase.client.TestHCM {color:red}-1 core zombie tests{color}. There are 1 zombie test(s): Test results: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//testReport/> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-prefix-tree.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-client.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-common.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-protocol.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-server.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-hadoop1-compat.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-examples.html> Findbugs warnings: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//artifact/trunk/patchprocess/newPatchFindbugsWarningshbase-hadoop-compat.html> Console output: <https://builds.apache.org/job/PreCommit-HBASE-Build/5674//console> This message is automatically generated.

label: code-design

13. **body:** This affects all of the MR tests. Sandy and I will be looking more into why it just affects this one.
label: test
14. +1 on alt.v2 patch.
15. Thanks for the reviews folks. comitted to 0.95 and trunk.
16. Integrated in HBase-TRUNK #4117 (See [<https://builds.apache.org/job/HBase-TRUNK/4117/>]) HBASE-8528 [hadoop2] TestMultiTableInputFormat always hadoop with YARN-129 applied (with Gary Helmling) (Revision 1482561) Result = FAILURE jmhsieh : Files : * /hbase/trunk/hbase-server/src/test/java/org/apache/hadoop/hbase/HBaseTestingUtility.java
17. Integrated in hbase-0.95 #193 (See [<https://builds.apache.org/job/hbase-0.95/193/>]) HBASE-8528 [hadoop2] TestMultiTableInputFormat always on hadoop with YARN-129 applied (with Gary Helmling) (Revision 1482563) Result = SUCCESS jmhsieh : Files : * /hbase/branches/0.95/hbase-server/src/test/java/org/apache/hadoop/hbase/HBaseTestingUtility.java
18. Integrated in hbase-0.95-on-hadoop2 #99 (See [<https://builds.apache.org/job/hbase-0.95-on-hadoop2/99/>]) HBASE-8528 [hadoop2] TestMultiTableInputFormat always on hadoop with YARN-129 applied (with Gary Helmling) (Revision 1482563) Result = FAILURE jmhsieh : Files : * /hbase/branches/0.95/hbase-server/src/test/java/org/apache/hadoop/hbase/HBaseTestingUtility.java
19. Integrated in HBase-TRUNK-on-Hadoop-2.0.0 #530 (See [<https://builds.apache.org/job/HBase-TRUNK-on-Hadoop-2.0.0/530/>]) HBASE-8528 [hadoop2] TestMultiTableInputFormat always hadoop with YARN-129 applied (with Gary Helmling) (Revision 1482561) Result = FAILURE jmhsieh : Files : * /hbase/trunk/hbase-server/src/test/java/org/apache/hadoop/hbase/HBaseTestingUtility.java