

Item 255

git_comments:

git_commits:

1. **summary:** HIVE-2767 [jira] Optionally use framed transport with metastore
message: HIVE-2767 [jira] Optionally use framed transport with metastore (Travis Crawford via Ashutosh Chauhan) Summary: Add support for optionally using the thrift framed transport, enabling integration with environments where that is necessary. Users may want/need to use thrift's framed transport when communicating with the Hive MetaStore. This patch adds a new property `hive.metastore.thrift.framed.transport.enabled` that enables the framed transport (defaults to off, aka no change from before the patch). This property must be set for both clients and the HMS server. It wasn't immediately clear how to use the framed transport with SASL, so as written an exception is thrown if you try starting the server with both options. If SASL and the framed transport will indeed work together I can update the patch (although I don't have a secured environment to test in). Test Plan: Tested locally that client and server can connect, both with and without the flag. Tests pass. Reviewers: JIRA, ashutoshc Reviewed By: ashutoshc Differential Revision: <https://reviews.facebook.net/D2661> git-svn-id: <https://svn.apache.org/repos/asf/hive/trunk@1325446> 13f79535-47bb-0310-9956-ffa450edef68

github_issues:

github_issues_comments:

github_pulls:

github_pulls_comments:

github_pulls_reviews:

jira_issues:

1. **summary:** Optionally use framed transport with metastore
description: Users may want/need to use thrift's framed transport when communicating with the Hive MetaStore. This patch adds a new property `{hive.metastore.thrift.framed.transport.enabled}` that enables the framed transport (defaults to off, aka no change from before the patch). This property must be set for both clients and the HMS server. It wasn't immediately clear how to use the framed transport with SASL, so as written an exception is thrown if you try starting the server with both options. If SASL and the framed transport will indeed work together I can update the patch (although I don't have a secured environment to test in).

jira_issues_comments:

1. **body:** Patch looks ok to me. I presume this is for performance. Just curious, have you seen substantial performance gains because of this. Since, most of the rpc call in MetaStore are of fairly small payload. To me, it appears it won't bring in much perf gains.
label: code-design
2. **body:** Thanks for the feedback Ashutosh - if this is something you'd consider adding I can update based on current trunk if things have changed. While there may be perf gains, this is needed to integrate with our compute grid. Basically a wrapper registers the metastore host:port in zookeeper, and a thrift framed-transport-only proxy proxies metastore requests based on its ZK registration. This lets us launch the metastore on our mesos cluster and still give clients the hard-coded host:port they expect.
label: code-design
3. Thanks Travis for explaining the usecase. Makes sense. Without that I was shooting in dark about why you need Framed Transport. :) Yeah, update the patch. I will test and commit.
4. I have an updated patch, as Hive changed since this patch. Will post it soon.
5. patch updated to latest Hive
6. Not to the latest trunk :) Patch fails to apply. Also, can you use arc to submit the patch. Instructions are here: <https://cwiki.apache.org/confluence/display/Hive/PhabricatorCodeReview>
7. Patch needs to be rebased.

8. travis requested code review of "HIVE-2767 [jira] Optionally use framed transport with metastore".
Reviewers: JIRA Add support for optionally using the thrift framed transport, enabling integration with environments where that is necessary. Users may want/need to use thrift's framed transport when communicating with the Hive MetaStore. This patch adds a new property `hive.metastore.thrift.framed.transport.enabled` that enables the framed transport (defaults to off, aka no change from before the patch). This property must be set for both clients and the HMS server. It wasn't immediately clear how to use the framed transport with SASL, so as written an exception is thrown if you try starting the server with both options. If SASL and the framed transport will indeed work together I can update the patch (although I don't have a secured environment to test in). TEST PLAN Tested locally that client and server can connect, both with and without the flag. Tests pass. REVISION DETAIL <https://reviews.facebook.net/D2661> AFFECTED FILES
`common/src/java/org/apache/hadoop/hive/conf/HiveConf.java`
`metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStore.java`
`metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStoreClient.java` MANAGE HERALD DIFFERENTIAL RULES <https://reviews.facebook.net/herald/view/differential/> WHY DID I GET THIS EMAIL? <https://reviews.facebook.net/herald/transcript/6111/> Tip: use the X-Herald-Rules header to filter Herald messages in your client.
9. ashutoshc has requested changes to the revision "HIVE-2767 [jira] Optionally use framed transport with metastore". What will happen if the config variable is set to true in client, but is false in server and vice-versa? INLINE COMMENTS `common/src/java/org/apache/hadoop/hive/conf/HiveConf.java:269` This also needs to be added in `conf/hive-default.xml.template` which serve as a documentation. `metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStore.java:3020` In your earlier version of patch you were throwing exception in case both secure mode as well as framed transport is set to true. If you have tested with both true and it works then its fine, otherwise we should throw an exception here. REVISION DETAIL <https://reviews.facebook.net/D2661> BRANCH HIVE-2767_optional_framed_transport
10. travis has commented on the revision "HIVE-2767 [jira] Optionally use framed transport with metastore". If just one side of the connection is using the framed transport the connection will fail, likely after the timeout. As this is something that is setup just once per site its not likely to change often, and it defaults off, so the risk of casual misconfiguration is low. Any suggestions on how to better clue the user in that the transport may be the issue? INLINE COMMENTS `common/src/java/org/apache/hadoop/hive/conf/HiveConf.java:269` Good suggestion, done. `metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStore.java:3020` Good suggestion. I don't have an environment to test SASL in, so I'll add the check back. REVISION DETAIL <https://reviews.facebook.net/D2661> BRANCH HIVE-2767_optional_framed_transport
11. travis updated the revision "HIVE-2767 [jira] Optionally use framed transport with metastore".
Reviewers: JIRA, ashutoshc - REVISION DETAIL <https://reviews.facebook.net/D2661> AFFECTED FILES `common/src/java/org/apache/hadoop/hive/conf/HiveConf.java` `conf/hive-default.xml.template` `metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStore.java` `metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStoreClient.java`
12. travis updated the revision "HIVE-2767 [jira] Optionally use framed transport with metastore".
Reviewers: JIRA, ashutoshc Update per comments from review. Add option to `hive-default.xml`, and disallow framed transport when using SASL as that has not been tested. REVISION DETAIL <https://reviews.facebook.net/D2661> AFFECTED FILES
`common/src/java/org/apache/hadoop/hive/conf/HiveConf.java` `conf/hive-default.xml.template` `metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStore.java` `metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStoreClient.java`
13. After your patch test `{ ant test -Dtestcase=TestHiveServerSessions }` is timing out. Can you take a look?
14. @ashutoshc - Yeah this test does seem problematic. It works fine in IntelliJ but I can't get it to pass with the command you gave, even when doing a clean trunk build. Looking at Jenkins the test works fine, so perhaps its something to do with my machine (osx 10.7.3). I'm looking into why the test doesn't work on trunk, then will see if this change affects it.
15. @Travis, It has nothing to do with your patch. Problem exists on trunk. See, HIVE-2937 And ya, its a race condition, so it doesn't show up always.
16. Cool - thanks for the pointer! I'll watch that issue and afterwards rebase if necessary and update.
17. Committed. Thanks, Travis!
18. ashutoshc has accepted the revision "HIVE-2767 [jira] Optionally use framed transport with metastore". +1 will commit soon. REVISION DETAIL <https://reviews.facebook.net/D2661> BRANCH HIVE-2767_optional_framed_transport

19. travis has committed the revision "HIVE-2767 [jira] Optionally use framed transport with metastore". Change committed by hashutosh. REVISION DETAIL <https://reviews.facebook.net/D2661> COMMIT <https://reviews.facebook.net/rHIVE1325446>
20. Integrated in Hive-trunk-h0.21 #1370 (See [<https://builds.apache.org/job/Hive-trunk-h0.21/1370/>]) HIVE-2767 [jira] Optionally use framed transport with metastore (Travis Crawford via Ashutosh Chauhan) Summary: Add support for optionally using the thrift framed transport, enabling integration with environments where that is necessary. Users may want/need to use thrift's framed transport when communicating with the Hive MetaStore. This patch adds a new property `hive.metastore.thrift.framed.transport.enabled` that enables the framed transport (defaults to off, aka no change from before the patch). This property must be set for both clients and the HMS server. It wasn't immediately clear how to use the framed transport with SASL, so as written an exception is thrown if you try starting the server with both options. If SASL and the framed transport will indeed work together I can update the patch (although I don't have a secured environment to test in). Test Plan: Tested locally that client and server can connect, both with and without the flag. Tests pass. Reviewers: JIRA, ashutoshc Reviewed By: ashutoshc Differential Revision: <https://reviews.facebook.net/D2661> (Revision 1325446) Result = SUCCESS hashutosh : <http://svn.apache.org/viewcvcs.cgi/?root=Apache-SVN&view=rev&rev=1325446> Files : *
- `/hive/trunk/common/src/java/org/apache/hadoop/hive/conf/HiveConf.java` *
 - `/hive/trunk/conf/hive-default.xml.template` *
 - `/hive/trunk/metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStore.java` *
 - `/hive/trunk/metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStoreClient.java`
21. Integrated in Hive-trunk-hadoop2 #54 (See [<https://builds.apache.org/job/Hive-trunk-hadoop2/54/>]) HIVE-2767 [jira] Optionally use framed transport with metastore (Travis Crawford via Ashutosh Chauhan) Summary: Add support for optionally using the thrift framed transport, enabling integration with environments where that is necessary. Users may want/need to use thrift's framed transport when communicating with the Hive MetaStore. This patch adds a new property `hive.metastore.thrift.framed.transport.enabled` that enables the framed transport (defaults to off, aka no change from before the patch). This property must be set for both clients and the HMS server. It wasn't immediately clear how to use the framed transport with SASL, so as written an exception is thrown if you try starting the server with both options. If SASL and the framed transport will indeed work together I can update the patch (although I don't have a secured environment to test in). Test Plan: Tested locally that client and server can connect, both with and without the flag. Tests pass. Reviewers: JIRA, ashutoshc Reviewed By: ashutoshc Differential Revision: <https://reviews.facebook.net/D2661> (Revision 1325446) Result = ABORTED hashutosh : <http://svn.apache.org/viewcvcs.cgi/?root=Apache-SVN&view=rev&rev=1325446> Files : *
- `/hive/trunk/common/src/java/org/apache/hadoop/hive/conf/HiveConf.java` *
 - `/hive/trunk/conf/hive-default.xml.template` *
 - `/hive/trunk/metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStore.java` *
 - `/hive/trunk/metastore/src/java/org/apache/hadoop/hive/metastore/HiveMetaStoreClient.java`
22. This issue is fixed and released as part of 0.10.0 release. If you find an issue which seems to be related to this one, please create a new jira and link this one with new jira.
23. **body:** Doc note: This adds configuration parameter `*hive.metastore.thrift.framed.transport.enabled*` to `HiveConf.java`, so it needs to be documented in the wiki: * [Configuration Properties -- MetaStore | <https://cwiki.apache.org/confluence/display/Hive/Configuration+Properties#ConfigurationProperties-MetaStore>]
- label:** documentation