[Cassandra-6622](https://www.google.com/url?q=https://issues.apache.org/jira/browse/CASSANDRA-6622&sa=D&source=editors&ust=1751363290779414&usg=AOvVaw1YNJXn0vfskr1EHsUbj_TX)

Streaming session failures during node replace of same address

**(1)  Log information**

**(1.1) Roles in this case**

node .72      sends stream request to         node .80

**(1.2) Symptoms**

<1> node x.x.x.72 is dead

<2> node x.x.x.80's FailureDetector (FD) keeps notifying its listener to convict .72 as PHI for .72 > threshold, every minute.  (Although .82 knows that .72 is down, it will still keep checking .72 to see whether it comes back. The PHI value for .72 is continuously increasing)

TRACE [GossipTasks:1] 2014-02-08 18:55:23,656 Gossiper.java (line 598) Performing status check ...

...

TRACE [GossipTasks:1] 2014-02-08 18:55:23,657 FailureDetector.java (line 229) PHI for /x.x.x.72 : 36643.639468390524

TRACE [GossipTasks:1] 2014-02-08 18:55:23,657 FailureDetector.java (line 233) notifying listeners that /x.x.x.72 is down

...

TRACE [GossipTasks:1] 2014-02-08 18:55:24,659 Gossiper.java (line 598) Performing status check ...

...

TRACE [GossipTasks:1] 2014-02-08 18:55:24,660 FailureDetector.java (line 229) PHI for /x.x.x.72 : 36644.432127252854

TRACE [GossipTasks:1] 2014-02-08 18:55:24,660 FailureDetector.java (line 233) notifying listeners that /x.x.x.72 is down

...

TRACE [GossipTasks:1] 2014-02-08 18:55:25,662 Gossiper.java (line 598) Performing status check ...

...

TRACE [GossipTasks:1] 2014-02-08 18:55:25,662 FailureDetector.java (line 229) PHI for /x.x.x.72 : 36645.22442135811

TRACE [GossipTasks:1] 2014-02-08 18:55:25,663 FailureDetector.java (line 233) notifying listeners that /x.x.x.72 is down

...

TRACE [GossipTasks:1] 2014-02-08 18:55:26,664 Gossiper.java (line 598) Performing status check ...

...

TRACE [GossipTasks:1] 2014-02-08 18:55:26,665 FailureDetector.java (line 229) PHI for /x.x.x.72 : 36646.016701132285

TRACE [GossipTasks:1] 2014-02-08 18:55:26,665 FailureDetector.java (line 233) notifying listeners that /x.x.x.72 is down

...

<3> node x.x.x.72 is restarted with replace\_address=x.x.x.72 at 18:56:27,806  (The administrator replaced the dead node with a new node, and still use the same ip address x.x.x.72)

INFO [main] 2014-02-08 18:56:27,806 CassandraDaemon.java (line 130) Logging initialized

INFO [main] 2014-02-08 18:56:27,833 YamlConfigurationLoader.java (line 76) Loading settings from file:/home/y/libexec64/cassandra/conf/cassandra.yaml

<4> node x.x.x.72: Gossip thread starts at 18:56:33,308

INFO [main] 2014-02-08 18:56:33,308 StorageService.java (line 627) Starting up server gossip

<5> node x.xx.72: start stream request at 18:56:35,443   (When Cassandra node starts, it will exchange data with the other nodes through bootstrap)

INFO [main] 2014-02-08 18:56:35,405 StorageService.java (line 947) JOINING: Starting to bootstrap...

INFO [CompactionExecutor:1] 2014-02-08 18:56:35,432 CompactionTask.java (line 275) Compacted 4 sstables to [/home/y/var/cassandra/data/system/local/system-local-jb-5,].  755 bytes to 538 (~71% of original) in 25ms = 0.020523MB/s.  4 total partitions merged to 1.  Partition merge counts were {4:1, }

INFO [main] 2014-02-08 18:56:35,443 StreamResultFuture.java (line 82) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Executing streaming plan for Bootstrap

INFO [main] 2014-02-08 18:56:35,443 StreamResultFuture.java (line 86) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Beginning stream session with /x.x.x.80

INFO [main] 2014-02-08 18:56:35,444 StreamResultFuture.java (line 86) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Beginning stream session with /x.x.x.81

INFO [main] 2014-02-08 18:56:35,444 StreamResultFuture.java (line 86) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Beginning stream session with /x.x.x.73

INFO [STREAM-IN-/x.x.x.81] 2014-02-08 18:56:35,462 StreamResultFuture.java (line 181) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Session with /x.x.x.81 is complete

<6> node x.x.x.80: get the stream request at 18:56:35,450

INFO [STREAM-INIT-/x.x.x.72:47408] 2014-02-08 18:56:35,450 StreamResultFuture.java (line 116) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Received streaming plan for Bootstrap

INFO [STREAM-IN-/x.x.x.72] 2014-02-08 18:56:35,460 ColumnFamilyStore.java (line 784) Enqueuing flush of Memtable-facetrevs4@509747825(251160/2013133 serialized/live bytes, 20934 ops)

<7> node x.x.x.80: at 18:56:36,090, still hasn't seen the gossip from .72, and the PHI value for .72 is still increasing

TRACE [GossipTasks:1] 2014-02-08 18:56:36,090 FailureDetector.java (line 229) PHI for /x.x.x.72 : 36700.87918907657

TRACE [GossipTasks:1] 2014-02-08 18:56:36,090 FailureDetector.java (line 233) notifying listeners that /x.x.x.72 is down

<8> node x.x.x.80: Since the PHI value for .72 exceeds a certain value, .82 closes the stream session.

INFO [GossipTasks:1] 2014-02-08 18:56:36,090 StreamResultFuture.java (line 181) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Session with /x.x.x.72 is complete

WARN [GossipTasks:1] 2014-02-08 18:56:36,091 StreamResultFuture.java (line 210) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Stream failed

<9> node x.x.x.80: At this time, .80 receives the gossip from .72(with a new generation). Then gossiper thread on x.x.x.80 clears the interval times for .72, and resets its PHI.

DEBUG [GossipStage:1] 2014-02-08 18:56:36,097 Gossiper.java (line 790) Clearing interval times for /x.x.x.72 due to generation change

TRACE [GossipStage:1] 2014-02-08 18:56:36,097 FailureDetector.java (line 203) reporting /x.x.x.72

...

TRACE [GossipStage:1] 2014-02-08 18:56:36,097 Gossiper.java (line 946) /x.x.x.72local generation 1391830955, remote generation 1391885793

TRACE [GossipStage:1] 2014-02-08 18:56:36,097 Gossiper.java (line 951) Updating heartbeat state generation to 1391885793 from 1391830955 for /x.x.x.72

TRACE [GossipStage:1] 2014-02-08 18:56:36,097 Gossiper.java (line 886) Adding endpoint state for /x.x.x.72

...

<10> node x.x.x.80: PHI score for .72 at 18:56:37,094  (Since the session between .80 & .72 has already been closed, when .80 tries to sendMessage, the ERROR happens )

TRACE [GossipTasks:1] 2014-02-08 18:56:37,093 Gossiper.java (line 598) Performing status check ...

...

TRACE [GossipTasks:1] 2014-02-08 18:56:37,094 FailureDetector.java (line 229) PHI for /x.x.x.72 : 0.06483452387313912

TRACE [GossipTasks:1] 2014-02-08 18:56:37,094 FailureDetector.java (line 229) PHI for /x.x.x.81 : 0.7806744414980482

TRACE [GossipTasks:1] 2014-02-08 18:56:37,094 FailureDetector.java (line 229) PHI for /x.x.x.71 : 1.7235166979455117

TRACE [GossipTasks:1] 2014-02-08 18:56:37,094 FailureDetector.java (line 229) PHI for /x.x.x.84 : 0.8088014574340049

ERROR [STREAM-IN-/x.x.x.72] 2014-02-08 18:56:37,105 StreamSession.java (line 418) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Streaming error occurred

java.lang.RuntimeException: Outgoing stream handler has been closed

                      at org.apache.cassandra.streaming.ConnectionHandler.sendMessage(ConnectionHandler.java:170)

                      at org.apache.cassandra.streaming.StreamSession.prepare(StreamSession.java:444)

                      at org.apache.cassandra.streaming.StreamSession.messageReceived(StreamSession.java:366)

                      at org.apache.cassandra.streaming.ConnectionHandler$IncomingMessageHandler.run(ConnectionHandler.java:289)

                      at java.lang.Thread.run(Thread.java:724)

INFO [STREAM-IN-/x.x.x.72] 2014-02-08 18:56:37,108 StreamResultFuture.java (line 181) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Session with /x.x.x.72 is complete

WARN [STREAM-IN-/x.x.x.72] 2014-02-08 18:56:37,108 StreamResultFuture.java (line 210) [Stream #bb897500-90f2-11e3-9d67-d5d417af8653] Stream failed