[HDFS-720](https://www.google.com/url?q=https://issues.apache.org/jira/browse/HDFS-720&sa=D&source=editors&ust=1751359162225520&usg=AOvVaw2bZxc4pUy5_YOfIFsxApV-)

NPE in BlockReceiver$PacketResponder.run(BlockReceiver.java:923)

**(1)  Log information**

**(1.1) Roles in this case**

 two DataNodes in the pipeline:   DataNode1 (client-side)    DataNode2 (server-side)

**(1.2) Symptoms**

“Running some loadings on hdfs I had one of these on the DN XX.XX.XX.139:51010:”

The following log is from the DataNode (denoted as DN2) who is receiving data from upstream DataNode(denoted as DN1):

2009-10-21 04:57:02,755 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: Receiving block blk\_6345892463926159834\_1029 src: /XX,XX,XX.140:37890 dest: /XX.XX.XX.139:51010

2009-10-21 04:57:02,829 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder blk\_6345892463926159834\_1029 1 Exception java.lang.NullPointerException

            at org.apache.hadoop.hdfs.server.datanode.BlockReceiver$PacketResponder.run(BlockReceiver.java:923)

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

DN2(XX.XX.XX.139:51010) is receiving blk\_6345892463926159834\_1029 from DN1(XX,XX,XX.140:37890), and NPE occurs unexpectedly.

On DN1(XX,XX,XX.140) , it looks like this:

2009-10-21 04:57:01,866 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: Receiving block blk\_6345892463926159834\_1029 src: /XX.XX.XX.140:37385 dest: /XX.XX.XX140:51010

2009-10-21 04:57:02,836 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder 2 for block blk\_6345892463926159834\_1029 terminating

2009-10-21 04:57:02,885 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: DatanodeRegistration(XX.XX.XX.140:51010, storageID=DS-1292310101-208.76.44.140-51010-1256100924816, infoPort=51075, ipcPort=51020):Exception writing block blk\_6345892463926159834\_1029 to mirror XX.XX.XX.139:51010 **(DN2)**

java.io.**IOException**: Connection reset by peer

        at sun.nio.ch.FileDispatcher.write0(Native Method)

        at sun.nio.ch.SocketDispatcher.write(SocketDispatcher.java:29)

        at sun.nio.ch.IOUtil.writeFromNativeBuffer(IOUtil.java:104)

        at sun.nio.ch.IOUtil.write(IOUtil.java:75)

        at sun.nio.ch.SocketChannelImpl.write(SocketChannelImpl.java:334)

        at org.apache.hadoop.net.SocketOutputStream$Writer.performIO(SocketOutputStream.java:55)

        at org.apache.hadoop.net.SocketIOWithTimeout.doIO(SocketIOWithTimeout.java:142)

        at org.apache.hadoop.net.SocketOutputStream.write(SocketOutputStream.java:146)

        at org.apache.hadoop.net.SocketOutputStream.write(SocketOutputStream.java:107)

        at java.io.BufferedOutputStream.write(BufferedOutputStream.java:105)

        at java.io.DataOutputStream.write(DataOutputStream.java:90)

        at org.apache.hadoop.hdfs.server.datanode.BlockReceiver.receivePacket(BlockReceiver.java:466)

        at org.apache.hadoop.hdfs.server.datanode.BlockReceiver.receivePacket(BlockReceiver.java:434)

        at org.apache.hadoop.hdfs.server.datanode.BlockReceiver.receiveBlock(BlockReceiver.java:573)

        at org.apache.hadoop.hdfs.server.datanode.DataXceiver.opWriteBlock(DataXceiver.java:352)

        at org.apache.hadoop.hdfs.protocol.DataTransferProtocol$Receiver.opWriteBlock(DataTransferProtocol.java:382)

        at org.apache.hadoop.hdfs.protocol.DataTransferProtocol$Receiver.processOp(DataTransferProtocol.java:323)

        at org.apache.hadoop.hdfs.server.datanode.DataXceiver.run(DataXceiver.java:111)

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

2009-10-21 18:23:11,323 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder 1 for block blk\_-7356834145770439479\_1586 responded my status for seqno 895

2009-10-21 18:23:11,323 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: Receiving one packet for block blk\_-7356834145770439479\_1586 of length 65024 seqno 896 offsetInBlock 58025472 lastPacketInBlock false

2009-10-21 18:23:11,324 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder 1 got seqno = 896

2009-10-21 18:23:11,325 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder 1 adding seqno 897 to ack queue.

2009-10-21 18:23:11,325 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder blk\_-7356834145770439479\_1586 1 Exception

java.lang.NullPointerException

at org.apache.hadoop.hdfs.server.datanode.BlockReceiver$PacketResponder.run(BlockReceiver.java:923)

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

2009-10-21 18:23:11,326 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder 1 got seqno = 4546

2009-10-21 18:23:11,326 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: Receiving one packet for block blk\_-7356834145770439479\_1586 of length 65024 seqno 898 offsetInBlock 58155520 lastPacketInBlock false

2009-10-21 18:23:11,327 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder 1 for block blk\_-7356834145770439479\_1586 terminating

2009-10-21 18:23:11,338 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder 1 for block blk\_-830254393316092139\_1588 responded my status for seqno 4555

2009-10-21 18:23:11,338 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: Number of active connections is: 184

2009-10-21 18:23:11,338 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: PacketResponder blk\_-830254393316092139\_1588 1 responded other status for seqno 4555

2009-10-21 18:23:11,339 DEBUG org.apache.hadoop.hdfs.server.datanode.DataNode: writeBlock receive buf size 131071 tcp no delay true

2009-10-21 18:23:11,339 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: Receiving block blk\_-7356834145770439479\_1586 src: /XX,XX,XX.142:49468 dest: /XX,XX,XX.139:51010

2009-10-21 18:23:11,339 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: Recover the RBW replica blk\_-7356834145770439479\_1586

2009-10-21 18:23:11,339 INFO org.apache.hadoop.hdfs.server.datanode.DataNode: Recovering replica ReplicaBeingWritten, blk\_-7356834145770439479\_1586, RBW

DN1 is receiving the block from its upstream node and sending it to its downstream node DN2 by processing writeBlock operation “opWriteBlock”, and the IOException happens.

PacketResponder is responsible for processing responses from downstream datanodes in the pipeline and sends back replies to the originator.