[HDFS-3441](https://www.google.com/url?q=https://issues.apache.org/jira/browse/HDFS-3441&sa=D&source=editors&ust=1751359165459140&usg=AOvVaw1Gfn-KNCS4gXnCwFvKuvCf)

Race condition between rolling logs at active NN and purging at standby

**(1)  Log information**

**(1.1) Roles in this case**

ActiveNN (client-side)          BookKeeperJournalManager (server-side)

StandbyNN (client-side)          BookKeeperJournalManager (server-side)             Zookeeper is also involved

**(1.2) Symptoms**

The log from StanbyNameNode is provided:

2012-05-17 22:15:03,867 INFO org.apache.hadoop.hdfs.server.namenode.FSImage: Image file of size 201 saved in 0 seconds.

2012-05-17 22:15:03,874 INFO org.apache.hadoop.hdfs.server.namenode.ha.EditLogTailer: Triggering log roll on remote NameNode /xx.xx.xx.102:8020   StandbyNN asks NN to roll logs

2012-05-17 22:15:03,923 INFO org.apache.hadoop.hdfs.server.namenode.NNStorageRetentionManager: Going to retain 2 images with txid >= 111

2012-05-17 22:15:03,923 INFO org.apache.hadoop.hdfs.server.namenode.NNStorageRetentionManager: Purging old image FSImageFile(file=/home/May8/hadoop-3.0.0-SNAPSHOT/hadoop-root/dfs/name/current/fsimage\_0000000000000000109, cpktTxId=0000000000000000109)

2012-05-17 22:15:03,961 FATAL org.apache.hadoop.hdfs.server.namenode.FSEditLog: Error: purgeLogsOlderThan 0 failed for required journal (JournalAndStream(mgr=org.apache.hadoop.contrib.bkjournal.BookKeeperJournalManager@142e6767, stream=null))

java.io.IOException: Exception reading ledger list from zk

at org.apache.hadoop.contrib.bkjournal.BookKeeperJournalManager.getLedgerList(BookKeeperJournalManager.java:531)

at org.apache.hadoop.contrib.bkjournal.BookKeeperJournalManager.purgeLogsOlderThan(BookKeeperJournalManager.java:444)

at org.apache.hadoop.hdfs.server.namenode.JournalSet$5.apply(JournalSet.java:541)

at org.apache.hadoop.hdfs.server.namenode.JournalSet.mapJournalsAndReportErrors(JournalSet.java:322)

at org.apache.hadoop.hdfs.server.namenode.JournalSet.purgeLogsOlderThan(JournalSet.java:538)

at org.apache.hadoop.hdfs.server.namenode.FSEditLog.purgeLogsOlderThan(FSEditLog.java:1011)

at org.apache.hadoop.hdfs.server.namenode.NNStorageRetentionManager.purgeOldStorage(NNStorageRetentionManager.java:98)

at org.apache.hadoop.hdfs.server.namenode.FSImage.purgeOldStorage(FSImage.java:900)

at org.apache.hadoop.hdfs.server.namenode.FSImage.saveFSImageInAllDirs(FSImage.java:885)

at org.apache.hadoop.hdfs.server.namenode.FSImage.saveNamespace(FSImage.java:822)

at org.apache.hadoop.hdfs.server.namenode.ha.StandbyCheckpointer.doCheckpoint(StandbyCheckpointer.java:157)

at org.apache.hadoop.hdfs.server.namenode.ha.StandbyCheckpointer.access$900(StandbyCheckpointer.java:52)

at org.apache.hadoop.hdfs.server.namenode.ha.StandbyCheckpointer$CheckpointerThread.doWork(StandbyCheckpointer.java:279)

at org.apache.hadoop.hdfs.server.namenode.ha.StandbyCheckpointer$CheckpointerThread.access$300(StandbyCheckpointer.java:200)

at org.apache.hadoop.hdfs.server.namenode.ha.StandbyCheckpointer$CheckpointerThread$1.run(StandbyCheckpointer.java:220)

at org.apache.hadoop.security.SecurityUtil.doAsLoginUserOrFatal(SecurityUtil.java:512)

at org.apache.hadoop.hdfs.server.namenode.ha.StandbyCheckpointer$CheckpointerThread.run(StandbyCheckpointer.java:216)

**Caused by:** org.apache.zookeeper.KeeperException$NoNodeException: KeeperErrorCode = NoNode for /nnedits/ledgers/inprogress\_72

at org.apache.zookeeper.KeeperException.create(KeeperException.java:111)

at org.apache.zookeeper.KeeperException.create(KeeperException.java:51)

at org.apache.zookeeper.ZooKeeper.getData(ZooKeeper.java:1113)

at org.apache.zookeeper.ZooKeeper.getData(ZooKeeper.java:1142)

at org.apache.hadoop.contrib.bkjournal.EditLogLedgerMetadata.read(EditLogLedgerMetadata.java:113)

at org.apache.hadoop.contrib.bkjournal.BookKeeperJournalManager.getLedgerList(BookKeeperJournalManager.java:528)

... 16 more

2012-05-17 22:15:03,963 INFO org.apache.hadoop.hdfs.server.namenode.NameNode: SHUTDOWN\_MSG:

StanbyNN shuts down.