

Before regression:

svn checkout -r1480731 https://svn.apache.org/repos/asf/activemq/trunk
activemq-broker/src/main/java/org/apache/activemq/broker/region/Queue.java

```
@Override
public void afterCommit() throws Exception {
    LinkedList<Transaction> orderedWork = null;
    // use existing object to sync orderIndexUpdates that can be reassigned
    synchronized (sendLock) {
        if (transaction == orderIndexUpdates.peek()) {
            orderedWork = orderIndexUpdates;
            orderIndexUpdates = new LinkedList<Transaction>();

            // talking all the ordered work means that earlier
            // and later threads do nothing.
            // this avoids contention/race on the sendLock that
            // guards the actual work.
        }
    }
    // do the ordered work
    if (orderedWork != null) {
        sendLock.lockInterruptibly();
        try {
            for (Transaction tx : orderedWork) {
                sendSyncs.get(tx).processSend();
            }
        } finally {
            sendLock.unlock();
        }
    }
    for (Transaction tx : orderedWork) {
        sendSyncs.get(tx).processSent();
    }
    sendSyncs.remove(transaction);
}
}
```

Regressed version:

svn checkout -r1482789 https://svn.apache.org/repos/asf/activemq/trunk
 activemq-broker/src/main/java/org/apache/activemq/broker/region/Queue.java

```
@Override
public void afterCommit() throws Exception {
    LinkedList<Transaction> orderedWork = new LinkedList<Transaction>();
    // use existing object to sync orderIndexUpdates that can be reassigned
    synchronized (sendLock) {
        Transaction next = orderIndexUpdates.peek();
        while( next!=null && next.isCommitted() ) {
            orderedWork.addLast(orderIndexUpdates.removeFirst());
            next = orderIndexUpdates.peek();
        }
    }
    // do the ordered work
    if (!orderedWork.isEmpty()) {
        sendLock.lockInterruptibly();
        try {
            for (Transaction tx : orderedWork) {
                sendSyncs.get(tx).processSend();
                sendSyncs.remove(tx);
            }
        } finally {
            sendLock.unlock();
        }
    }
}
}
```

```
//failed test:
/activemq-ra/target
List : [org.apache.activemq.ra.JmsXARollback2CxTransactionTest.txt,
org.apache.activemq.ra.JmsXAQueueTransactionTest.txt]
/activemq-stomp/target
List : [org.apache.activemq.transport.stomp.StompNIOSSLTest.txt,
org.apache.activemq.transport.stomp.StompNIOTest.txt,
org.apache.activemq.transport.stomp.StompSslAuthTest.txt,
org.apache.activemq.transport.stomp.StompSslTest.txt,
org.apache.activemq.transport.stomp.StompTest.txt]

/activemq-broker/target
List : [org.apache.activemq.JmsQueueTransactionTest.txt]

//More details :
    Classes StompNIOSSLTest, StompNIOTest, StompSslAuthTest, StompSslTest extends
        StompTest

// failed test in StompTest.java :
testTransactionCommit:
    ligne 842: assertNotNull("Should have received a message", message);
testTransactionRollback:
    ligne 876: assertNotNull(message);
message = null ???
TextMessage message = (TextMessage)consumer.receive(10000);
MessageConsumer consumer = session.createConsumer(queue);
protected ActiveMQQueue queue;
ActiveMQQueue extends Queue
```

corrected version:

svn checkout -r1482794 https://svn.apache.org/repos/asf/activemq/trunk
/activemq-broker/src/main/java/org/apache/activemq/broker/region/Queue.java

```
@Override
public void afterCommit() throws Exception {
    LinkedList<Transaction> orderedWork = new LinkedList<Transaction>();
    // use existing object to sync orderIndexUpdates that can be reassigned
    synchronized (sendLock) {
        Transaction next = orderIndexUpdates.peek();
        while( next!=null && next.isCommitted() ) {
            orderedWork.addLast(orderIndexUpdates.removeFirst());
            next = orderIndexUpdates.peek();
        }
    }
    // do the ordered work
    if (!orderedWork.isEmpty()) {
        ArrayList<SendSync> syncs = new ArrayList<SendSync>(orderedWork.size());
        sendLock.lockInterruptibly();
        try {
            for (Transaction tx : orderedWork) {
                SendSync sync = sendSyncs.get(tx);
                sync.processSend();
                syncs.add(sync);
                sendSyncs.remove(tx);
            }
        } finally {
            sendLock.unlock();
        }
        for (SendSync sync : syncs) {
            sync.processSent();
        }
    }
}
```

```
//succeeded tests :
/activemq-ra/target
List : [org.apache.activemq.ra.JmsXARollback2CxTransactionTest.txt,
org.apache.activemq.ra.JmsXAQueueTransactionTest.txt]

/activemq-stomp/target
List : [org.apache.activemq.transport.stomp.StompNIOSSLTest.txt,
org.apache.activemq.transport.stomp.StompNIOTest.txt,
org.apache.activemq.transport.stomp.StompSslAuthTest.txt,
org.apache.activemq.transport.stomp.StompSslTest.txt,
org.apache.activemq.transport.stomp.StompTest.txt]

/activemq-broker/target
List : [org.apache.activemq.JmsQueueTransactionTest.txt]
```