[ZooKeeper-1732](https://www.google.com/url?q=https://issues.apache.org/jira/browse/ZOOKEEPER-1732&sa=D&source=editors&ust=1751358801946012&usg=AOvVaw1czi8A-JjTYhpuNqQwYhdh)

**ZooKeeper server unable to join established ensemble**

**(1)  Log information**

**(1.1) Roles in this case**

the inconsistency between server2 and server3 makes server1 fail to join the ensemble.

**(1.2) Symptoms**

“I have a test in which I do a rolling restart of three ZooKeeper servers and it was failing from time to time.

I ran the tests in a loop until the failure came out and it seems that at some point one of the servers is unable to join the ensemble formed by the other two.”

There are three zk servers. Rolling restart is operated as follows:

step1: start server1, server2, server3   (leader: 3;  follower: 1,2)

step2: stop server2, then restart server2

step3: stop server3, then restart server3

step4: stop server1, then restart server1

After server1 restarts, we see the following log printed repeatedly on server 1.

2013-07-19 10:16:45,428 [myid:1] - WARN  [NIOServerCxn.Factory:0.0.0.0/0.0.0.0:30101:NIOServerCnxn@354] - Exception causing close of session 0x0 due to java.io.IOException: ZooKeeperServer not running

2013-07-19 10:16:45,428 [myid:1] - DEBUG [NIOServerCxn.Factory:0.0.0.0/0.0.0.0:30101:NIOServerCnxn@358] - IOException stack trace

2013-07-19 10:16:45,428 [myid:1] - INFO  [NIOServerCxn.Factory:0.0.0.0/0.0.0.0:30101:NIOServerCnxn@1001] - Closed socket connection for client /127.0.0.1:61907 (no session established for client)

The “IOException: ZooKeeperServer not running” shows that currently there is no zk server instance running on server1, which means server1 has always been looking state and not joined the ensemble.

2013-07-19 10:17:00,833 [myid:1] - INFO [WorkerReceiver[myid=1]:FastLeaderElection@542] - Notification: 3 (n.leader), 0xb800000099 (n.zxid), 0xb9 (n.round), FOLLOWING (n.state), 2 (n.sid), 0xb8 (n.peerEPoch), LOOKING (my state)

2013-07-19 10:17:00,833 [myid:1] - INFO [WorkerReceiver[myid=1]:FastLeaderElection@542] - Notification: 3 (n.leader), 0xb900000052 (n.zxid), 0xba (n.round), LEADING (n.state), 3 (n.sid), 0xb9 (n.peerEPoch), LOOKING (my state)