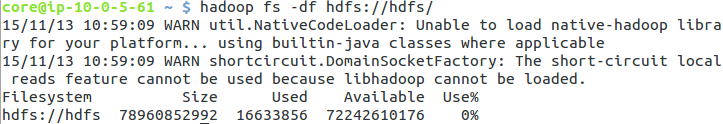
This test was performed once manually to assert that no data is lost on HDFS when scaling up/down number of slave nodes.

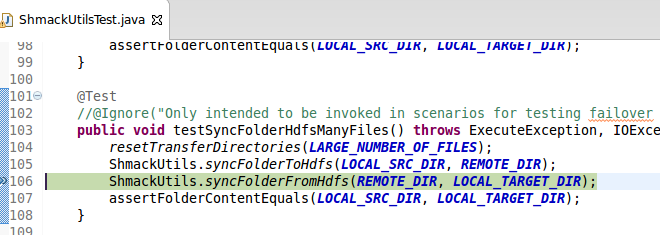
# Steps performed

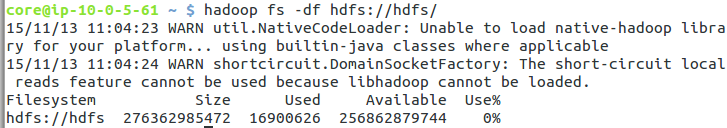
## Start with 10 Slaves



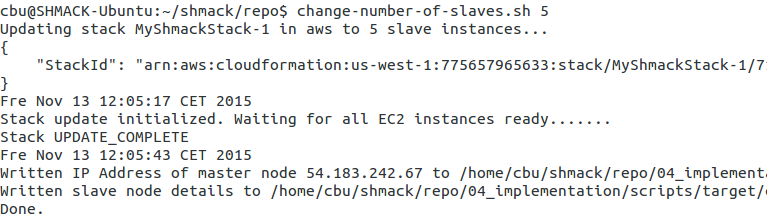
## Write 1000 files into hdfs

Run testcase until this line: ShmackUtils.syncFolderToHdfs

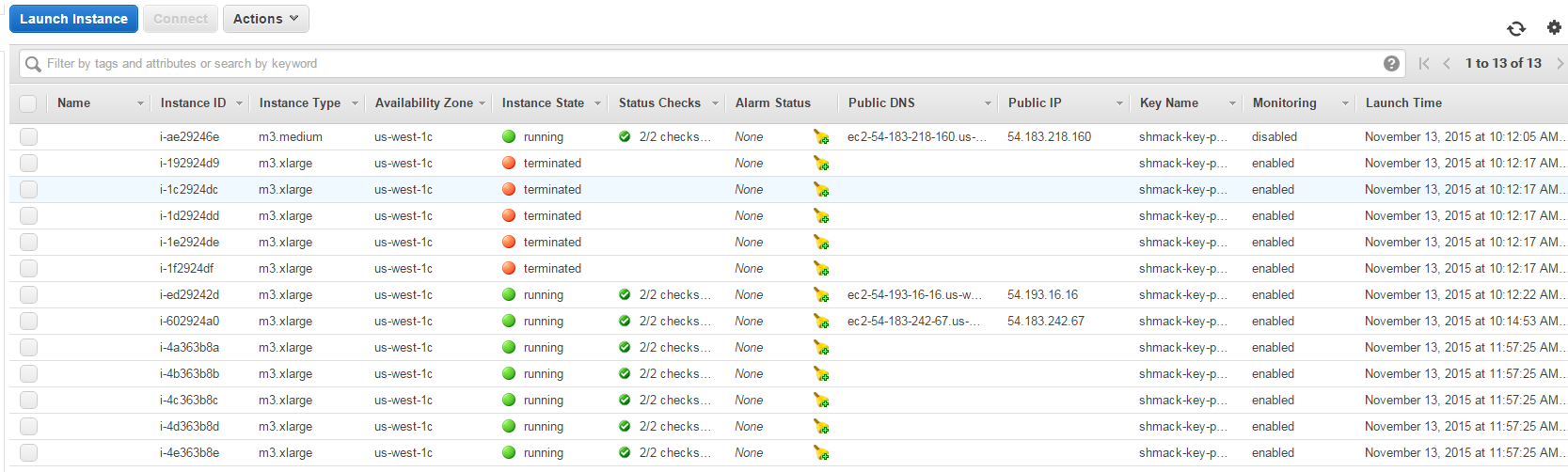




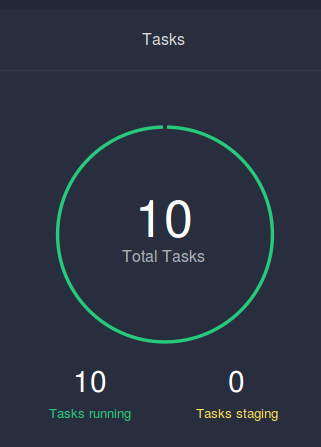
## Scale cluster down to 5 slave nodes



Interesting not the new nodes are removed but old ones… This could be a problem!  
(see “Launch time”)

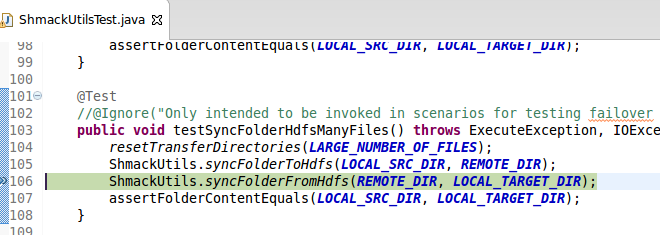


## Wait until all DCOS task are ready



## Try to read the 1000 files from hdfs

Finish Testcase (continue from Breakpoint)



org.apache.commons.exec.ExecuteException: Failed to execute [/bin/bash, run-on-dcos-master.sh, hadoop, fs, -copyToLocal, hdfs://hdfs/tmp/ssh-transfer-test/\*, /tmp/hdfs-xchange/from-hdfs/tmp/ssh-transfer-test/] - Output: com.zuehlke.shmack.sparkjobs.infrastructure.ExecuteResult@33cb5951[

standardOutput=

standardError=15/11/13 11:10:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

15/11/13 11:10:38 WARN hdfs.DFSUtil: Namenode for hdfs remains unresolved for ID nn1. Check your hdfs-site.xml file to ensure namenodes are configured properly.

15/11/13 11:10:38 WARN hdfs.DFSUtil: Namenode for hdfs remains unresolved for ID nn2. Check your hdfs-site.xml file to ensure namenodes are configured properly.

-copyToLocal: java.net.UnknownHostException: namenode1.hdfs.mesos

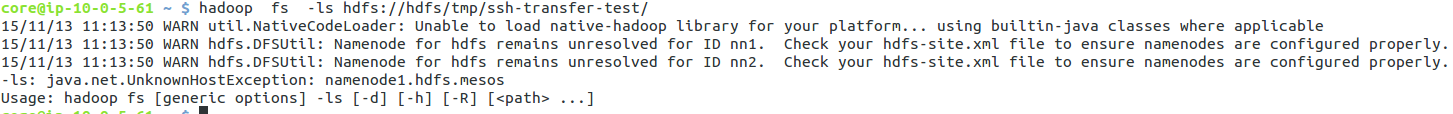
Usage: hadoop fs [generic options] -copyToLocal [-p] [-ignoreCrc] [-crc] <src> ... <localdst>

exitValue=255

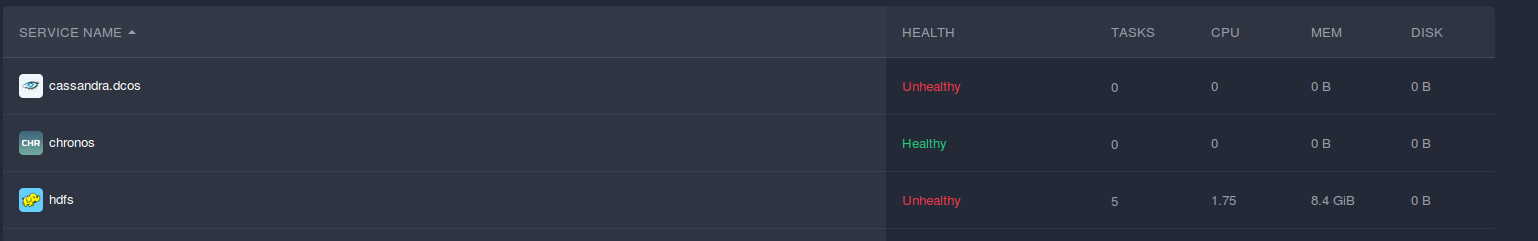
] (Exit value: 255)

## Try on console on dcos master 🡪 ls failing

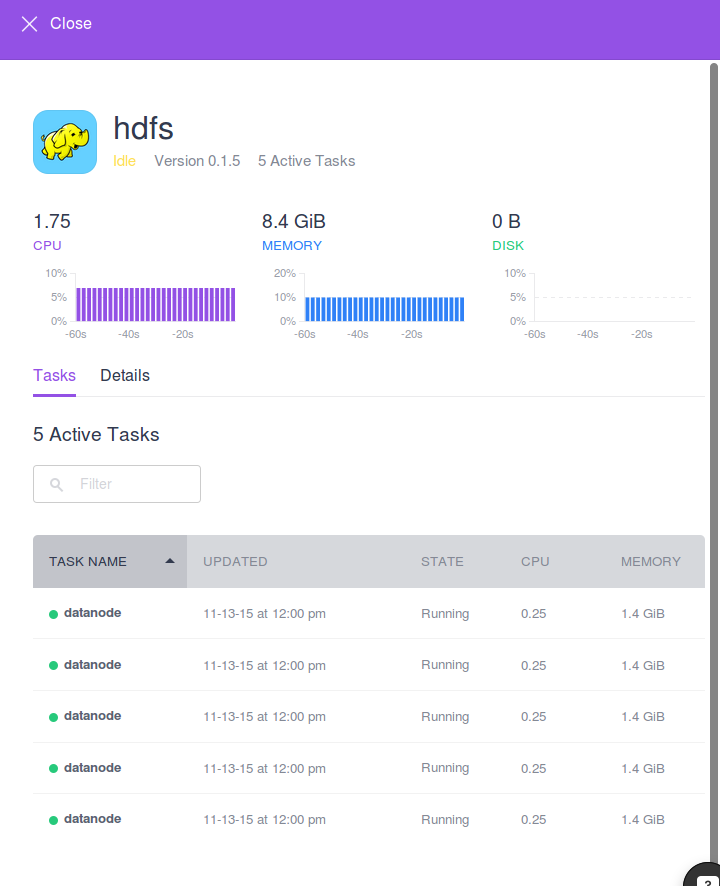
hadoop fs -ls hdfs://hdfs/tmp/ssh-transfer-test/



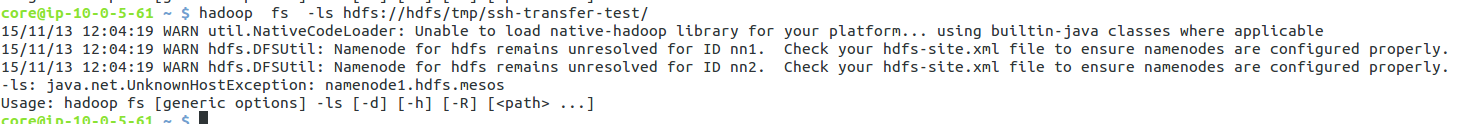
## DCOS Console is also unhappy



No namenode here:



## Wait approx. 1 hr 🡪 Still no namenode 🡪 All data lost



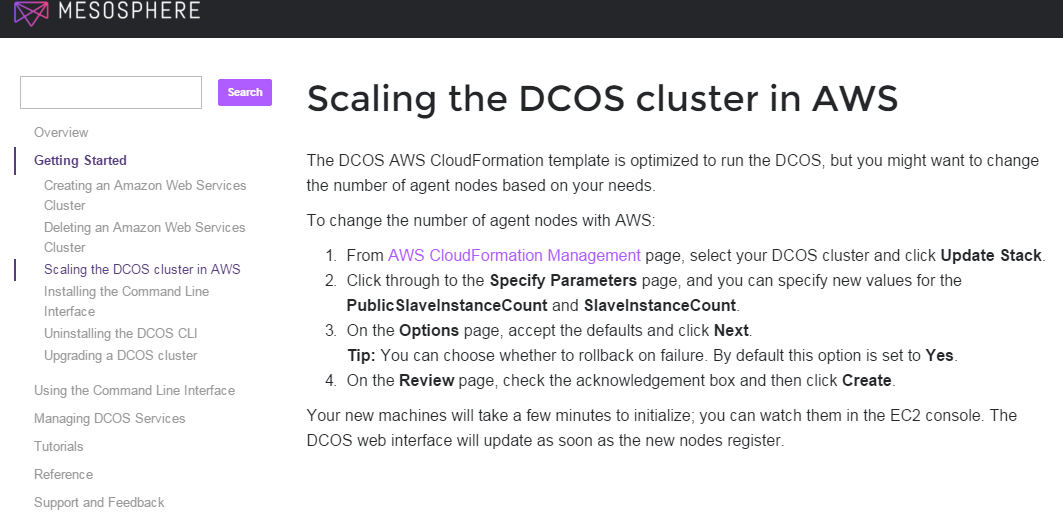
# Conclusion

It is not easily possible to scale down a DCOS-Cluster without using all Data in HDFS.

**This issue blocks use in productive environments.**

This is the complete documentation for scaling clusters:

<https://docs.mesosphere.com/install/templatescale/>



* It does not forbid to scale down and there are no hints that scaling down causes trouble.