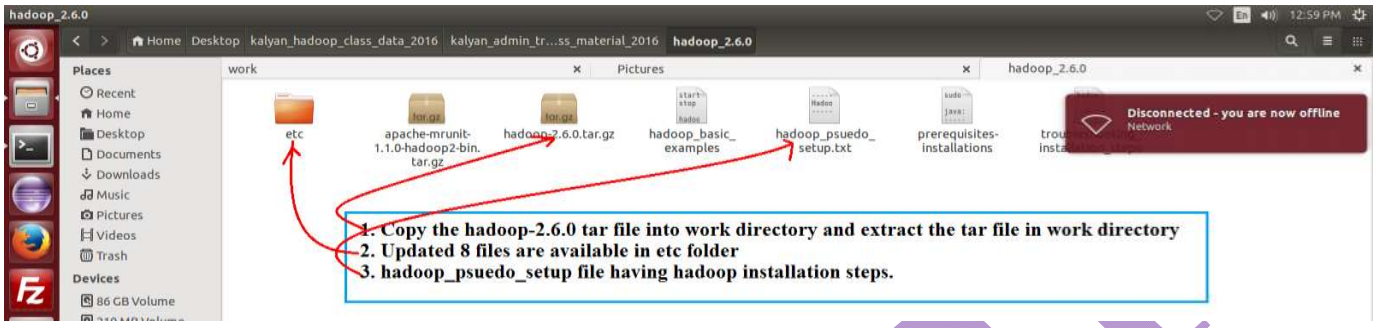
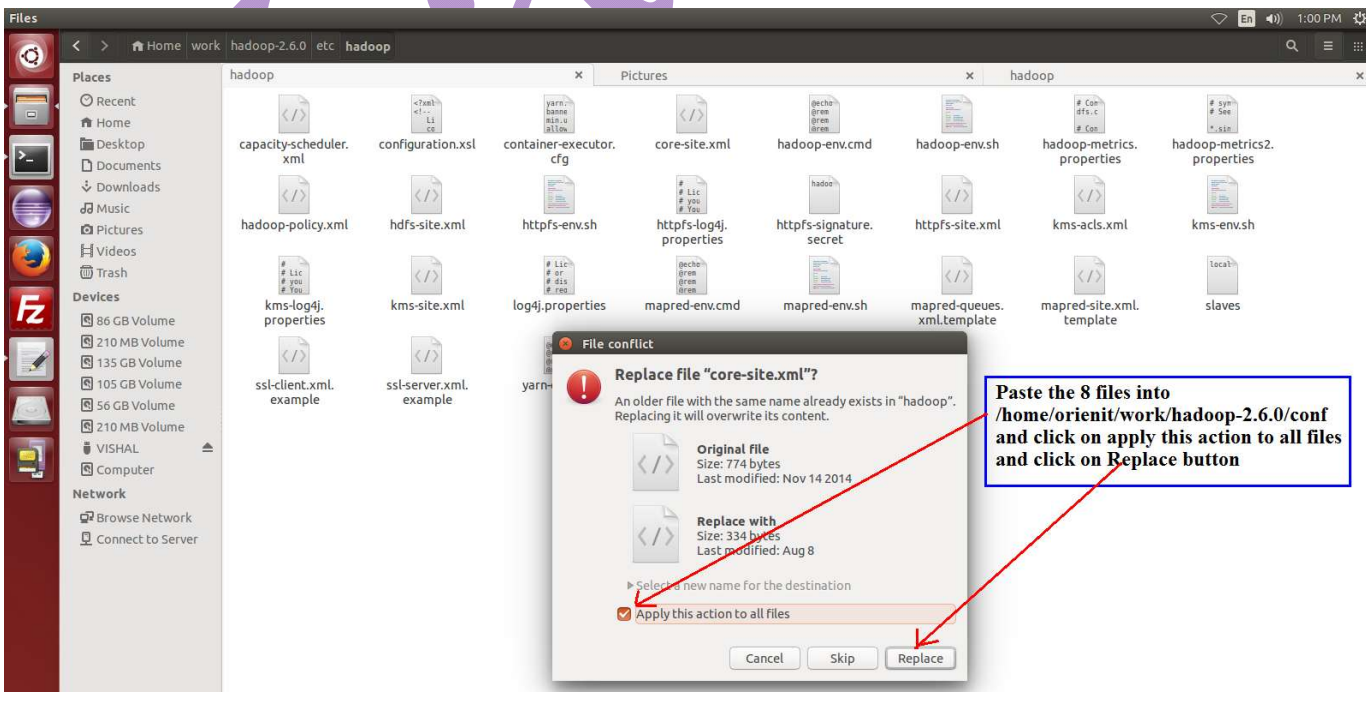
Hadoop-2.6.0 Version Installation Steps:

1. Download the hadoop-2.6.0 version from **Apache Mirrors**
2. Create the **work** directory in **orienit** user, path is `**/home/orienit**`
3. Please follow the below screen shot steps.

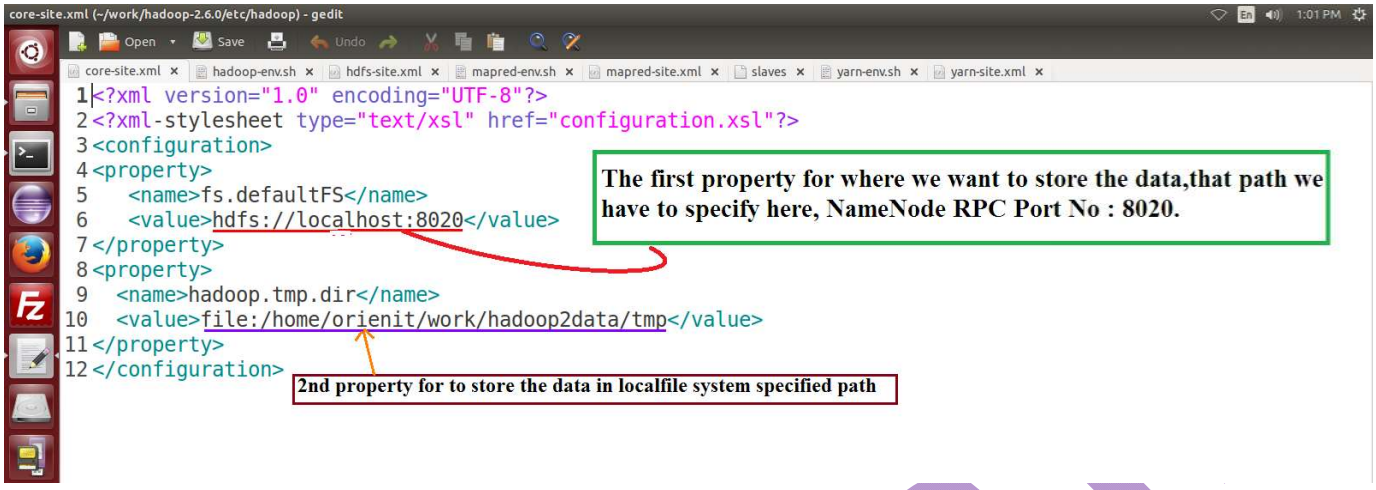


4. These 8 files contains the proper content for hadoop-2.6.0 configuration.

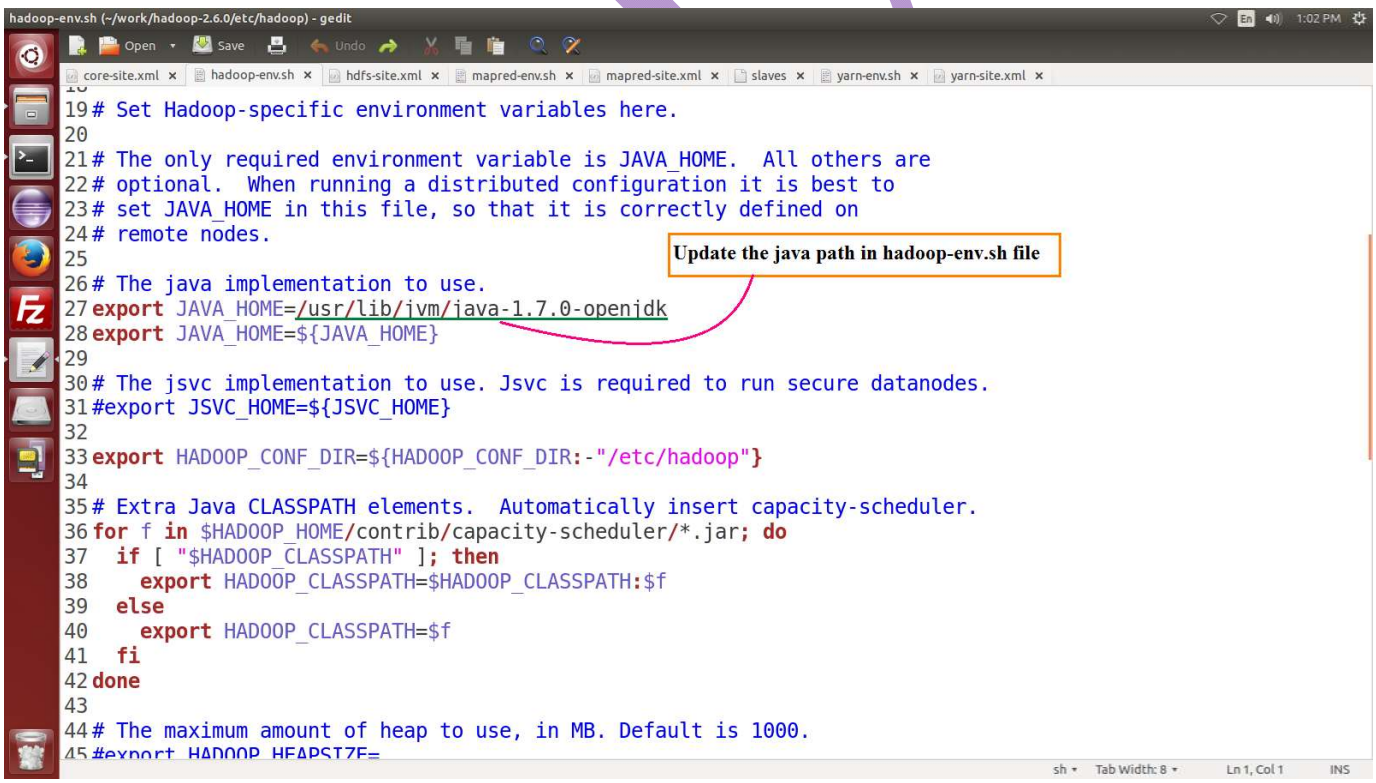
5. Follow the below screen shot steps.



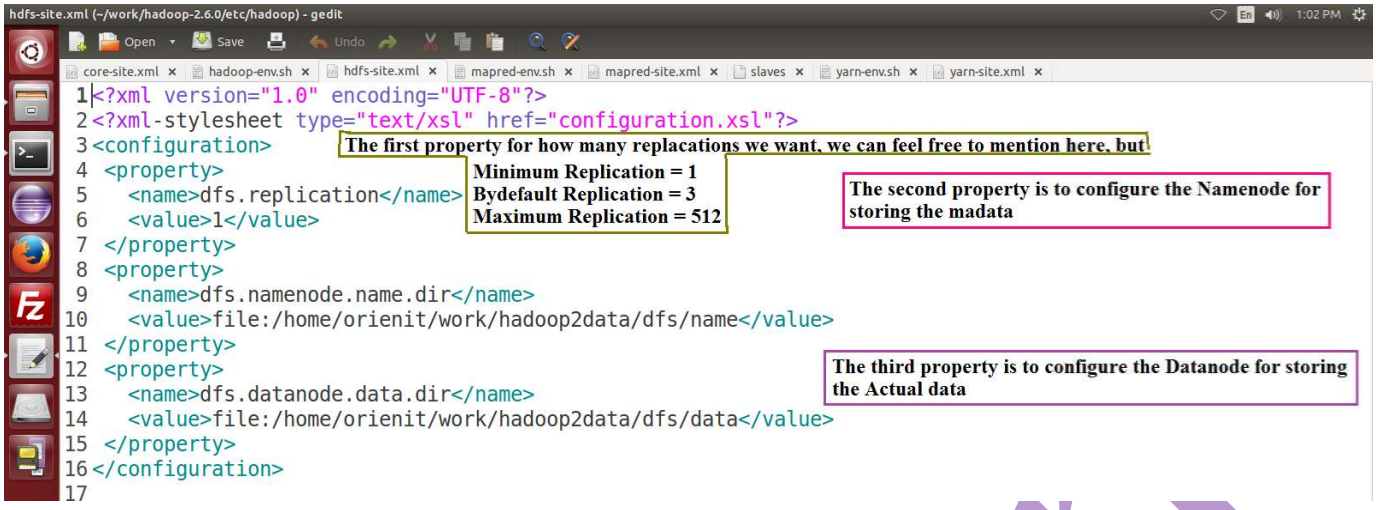
6. Open the **core-site.xml** file , this file having two properties and understand the two properties information.



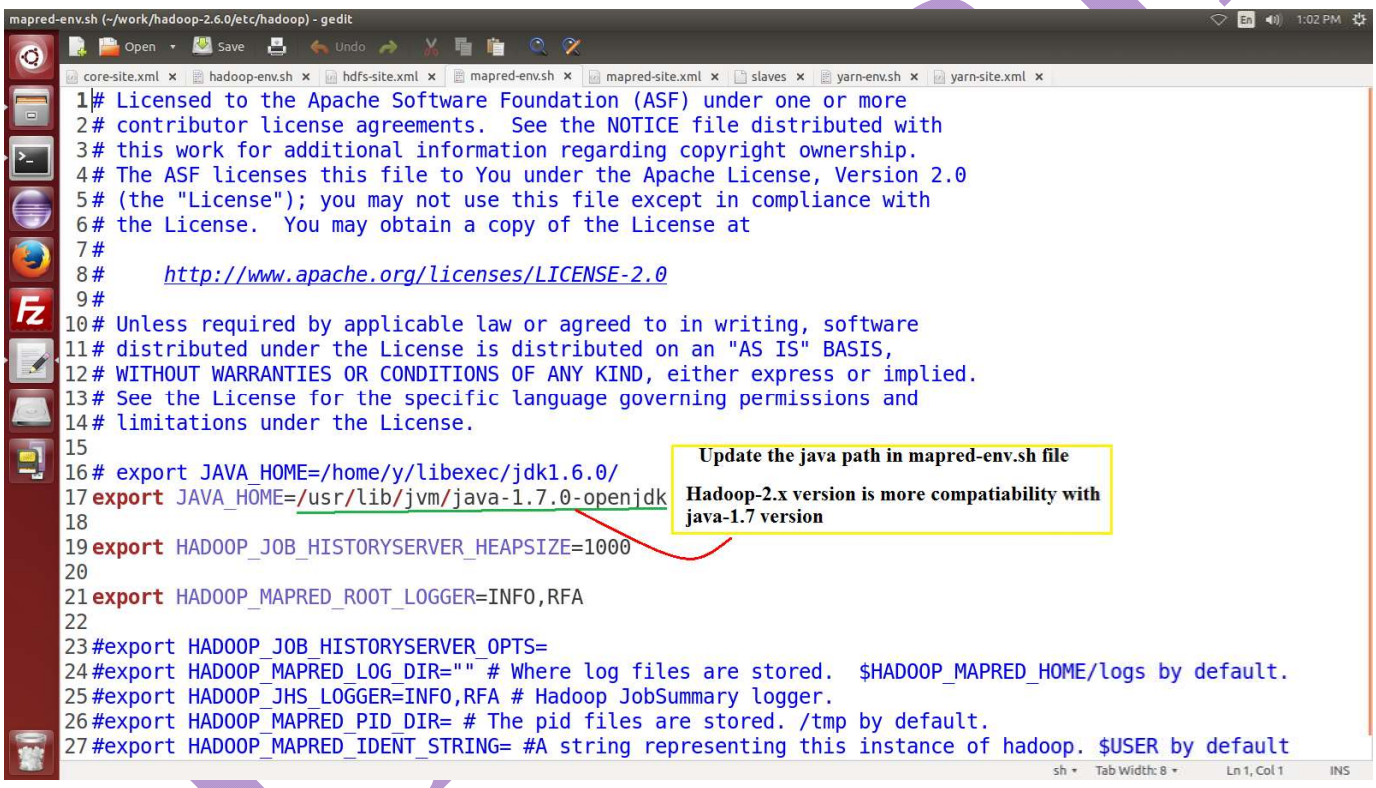
7. Open the **hadoop-env.sh** file and update the **JAVA_HOME** path.



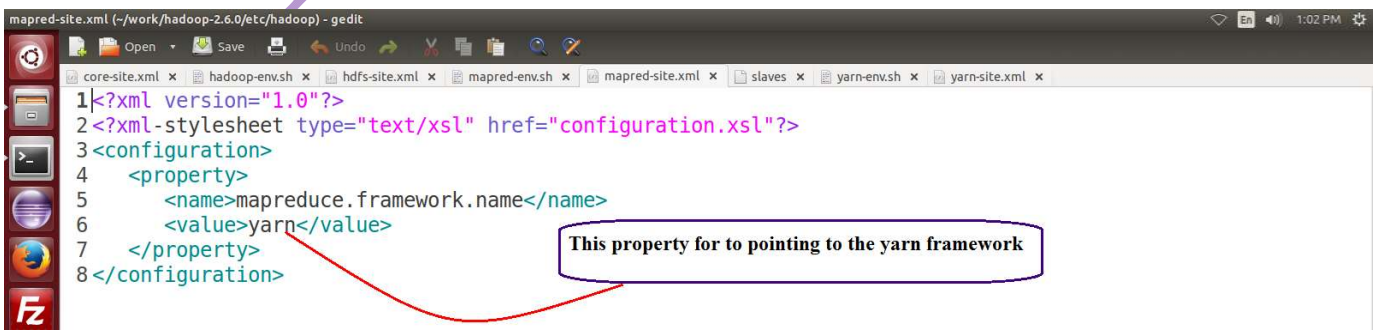
8. Open the **hdfs-site.xml** file and follow the below properties information.



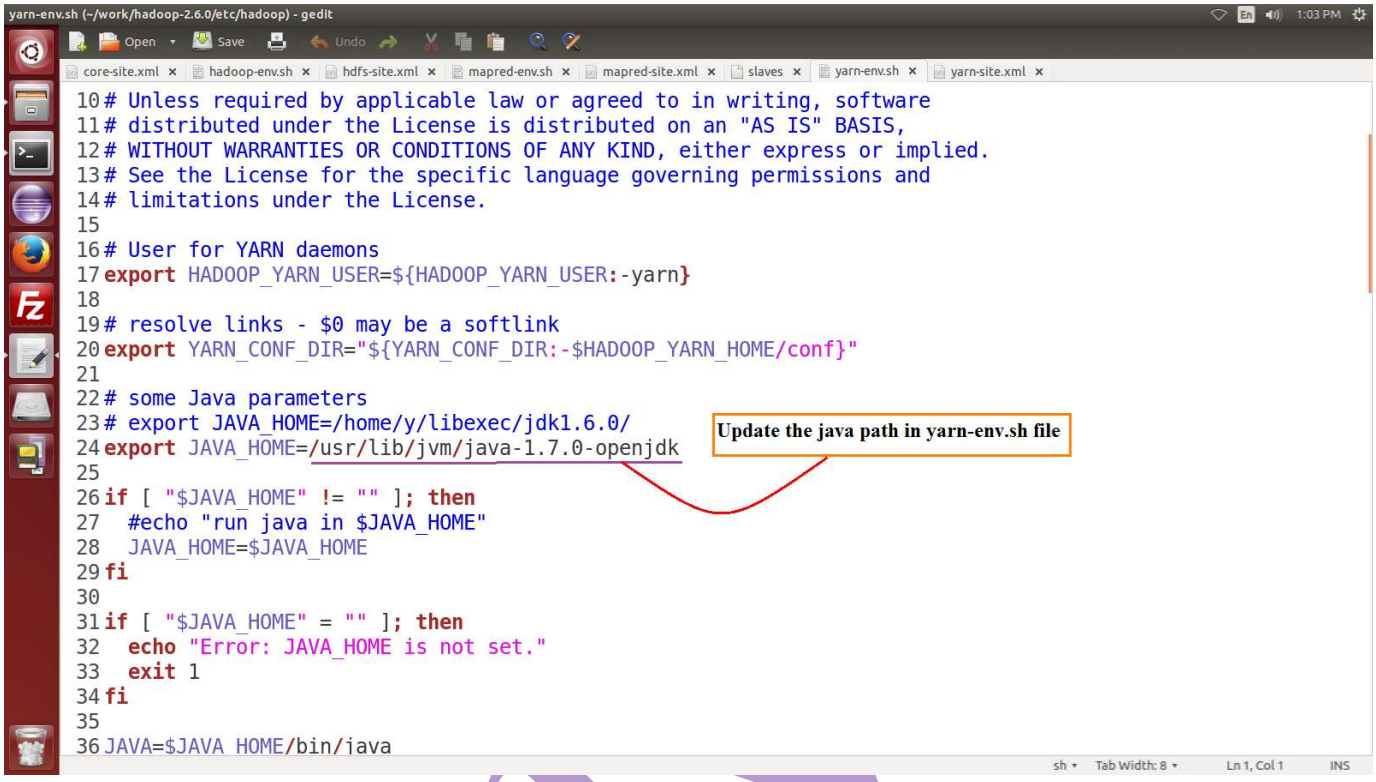
9. Open the **mapred-env.sh** and update the **JAVA_HOME** path



10. Open the **mapred-site.xml**, this file contains value as to pointing to the yarn architecture

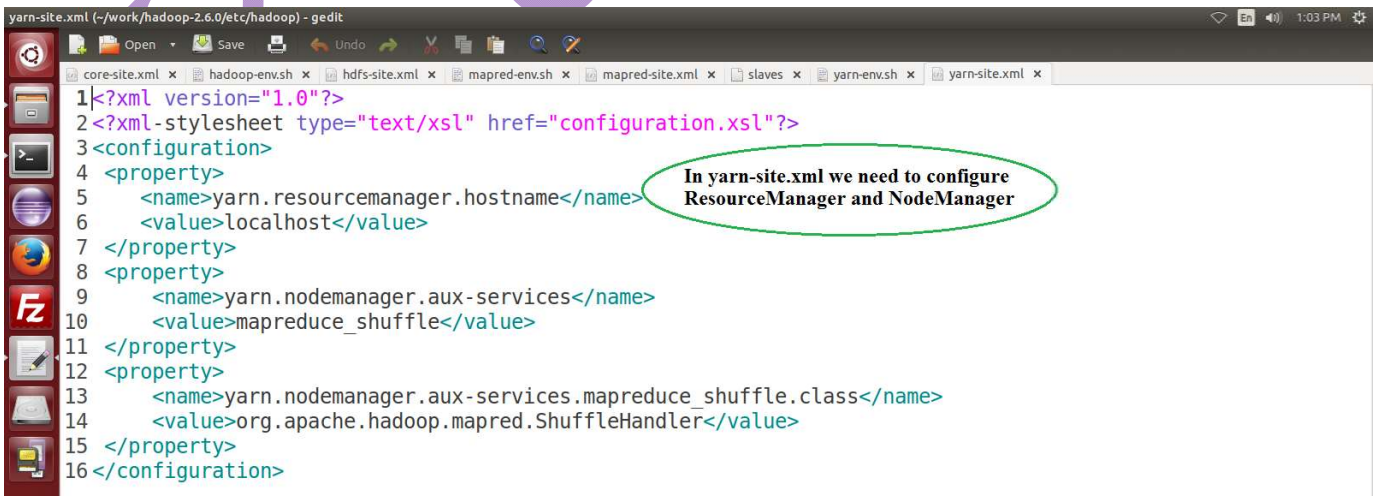


11. Open the **yarn-env.sh** and update the **JAVA_HOME** path.



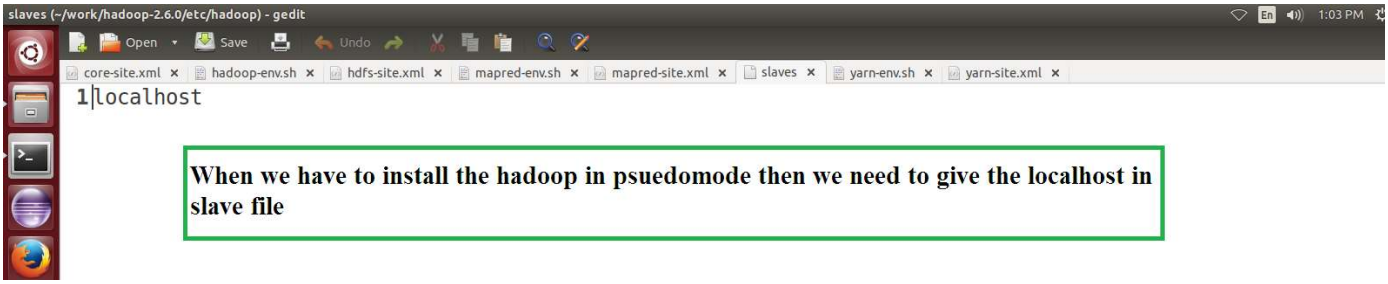

```
# Unless required by applicable law or agreed to in writing, software
# distributed under the License is distributed on an "AS IS" BASIS,
# WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
# See the License for the specific language governing permissions and
# limitations under the License.

# User for YARN daemons
export HADOOP_YARN_USER=${HADOOP_YARN_USER:-yarn}

# resolve links - $0 may be a softlink
export YARN_CONF_DIR="${YARN_CONF_DIR:-$HADOOP_YARN_HOME/conf}"

# some Java parameters
# export JAVA_HOME=/home/y/libexec/jdk1.6.0/
export JAVA_HOME=/usr/lib/jvm/java-1.7.0-openjdk

if [ "$JAVA_HOME" != "" ]; then
  #echo "run java in $JAVA_HOME"
  JAVA_HOME=$JAVA_HOME
fi

if [ "$JAVA_HOME" = "" ]; then
  echo "Error: JAVA_HOME is not set."
  exit 1
fi

JAVA=$JAVA_HOME/bin/java
```

12. Open the **yarn-site.xml** and this file contains two properties for to configure the ResourceManager, NodeManager.

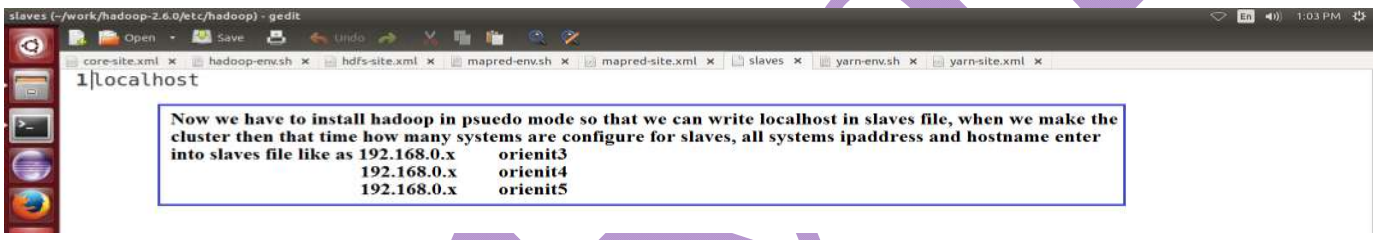



```
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<configuration>
 <property>
    <name>yarn.resourcemanager.hostname</name>
    <value>localhost</value>
 </property>
 <property>
     <name>yarn.nodemanager.aux-services</name>
     <value>mapreduce_shuffle</value>
 </property>
 <property>
     <name>yarn.nodemanager.aux-services.mapreduce_shuffle.class</name>
     <value>org.apache.hadoop.mapred.ShuffleHandler</value>
 </property>
</configuration>
```

13. When we install hadoop-2.6.0 in pseudo mode , then in **slaves** file we will write only **localhost**

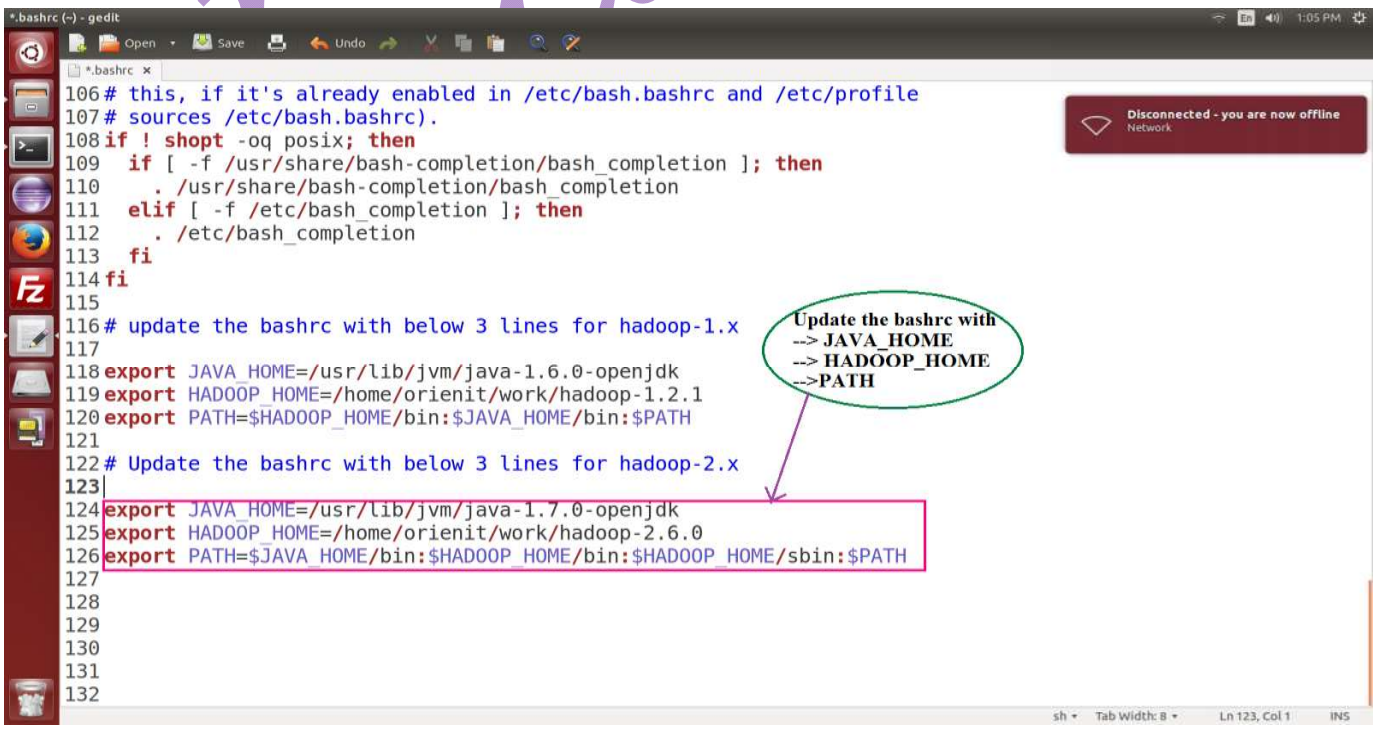


14. When we install hadoop in cluster mode, then in **slaves** file we will update all systems ip address / hostnames

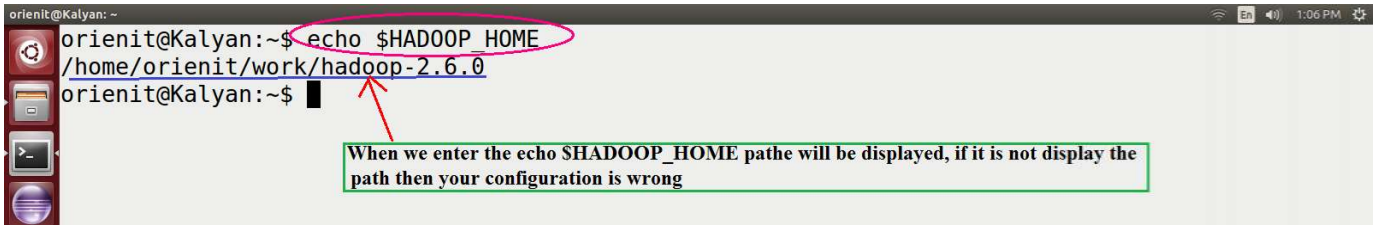


15. Open the **~/.bashrc** file and update the hadoop-2.6.0 related information.

export JAVA_HOME=/usr/lib/jvm/java-1.7.0-openjdk
export HADOOP_HOME=/home/orienit/work/hadoop-2.6.0
export PATH=$HADOOP_HOME/bin: =$HADOOP_HOME/sbin:$JAVA_HOME/bin:$PATH



16. If we want confirm the all configuration files are updated or not then verify with below command

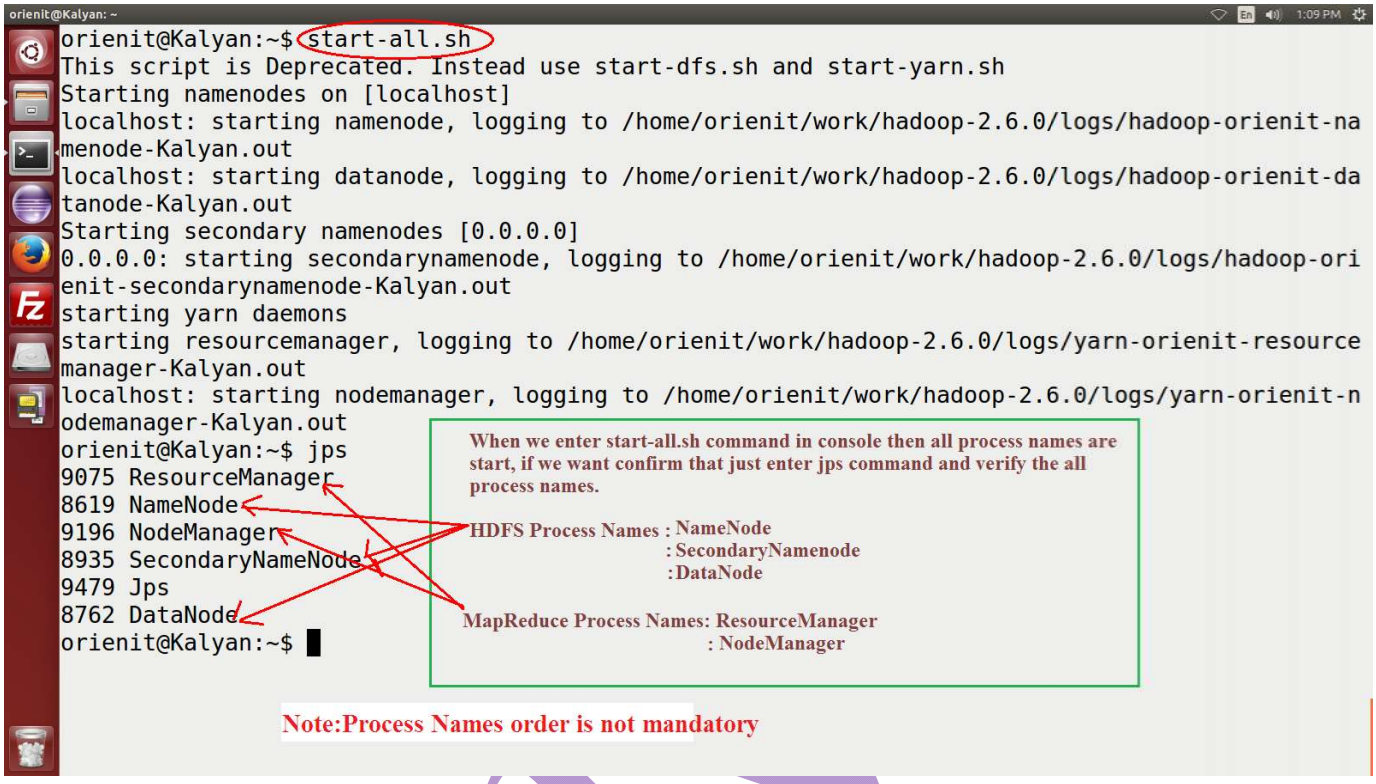


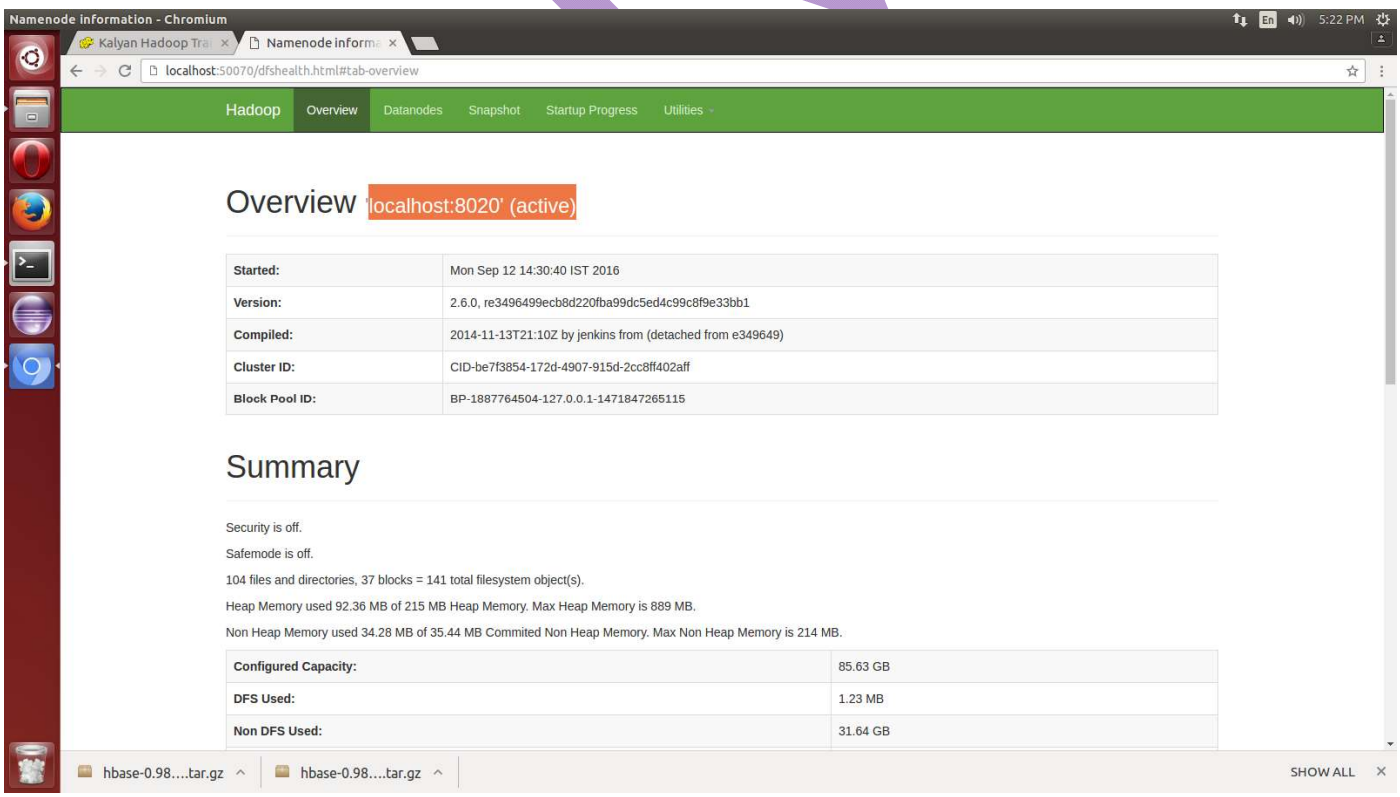
17. Execute the NameNode format command (hadoop namenode -format)

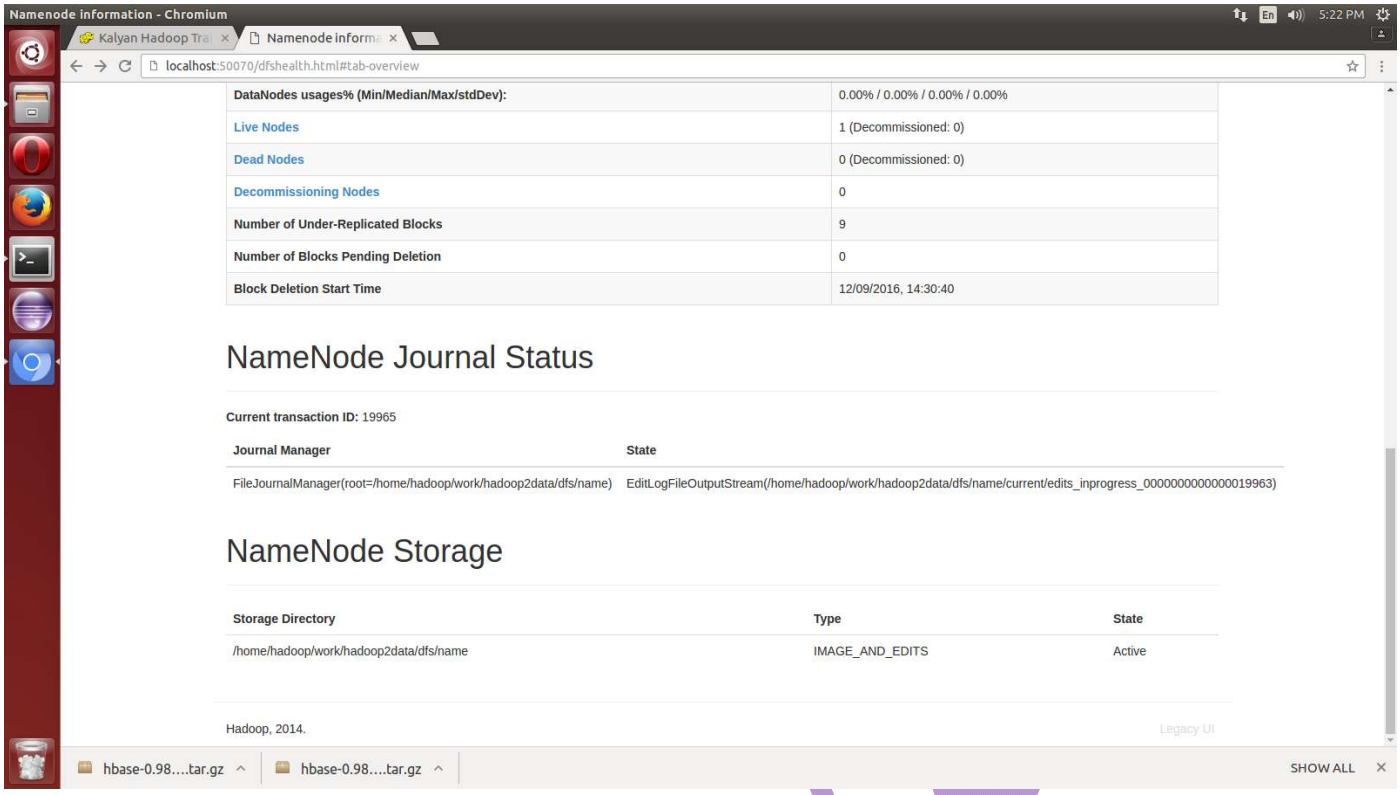
18. When we execute format command then the NameNode information displayed on console, verify the below screen shot.

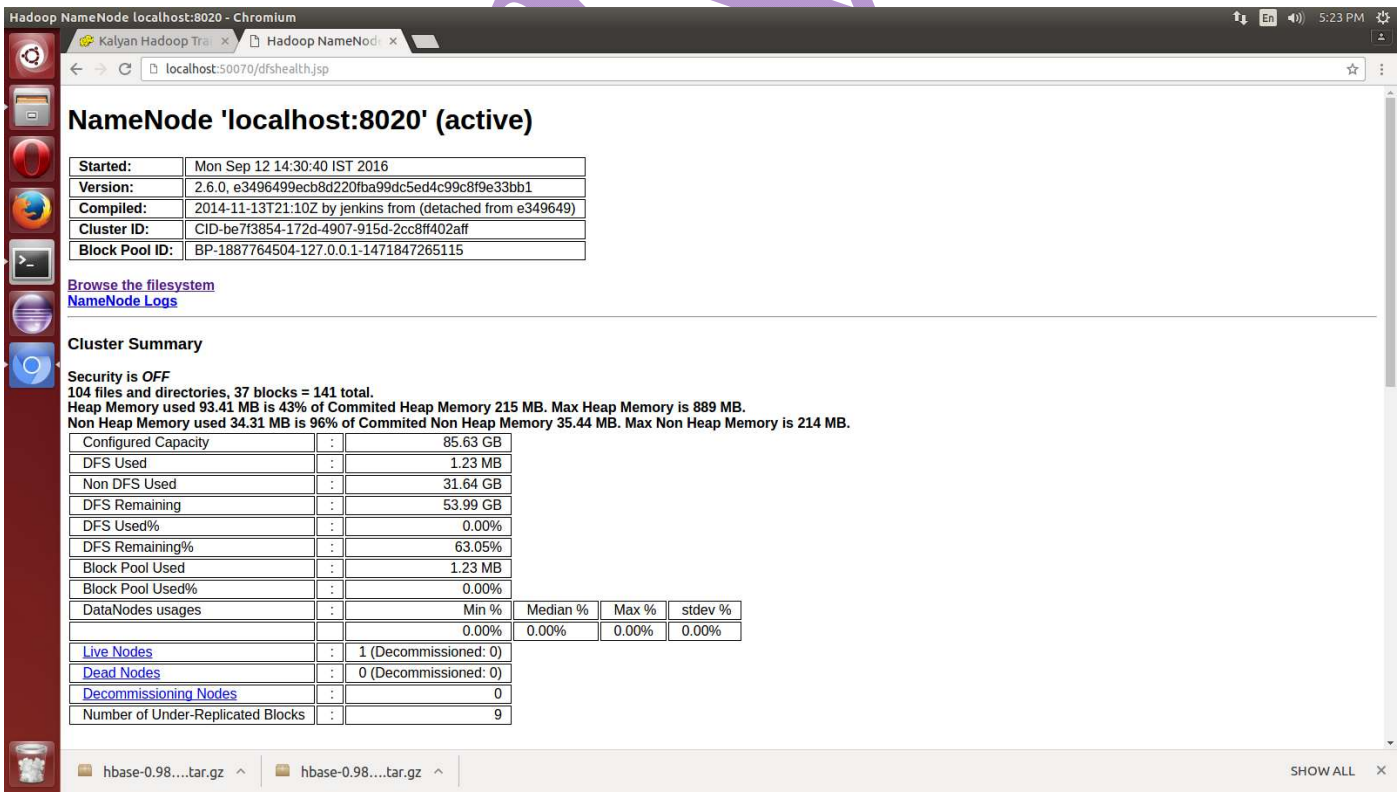

orienit@Kalyan:~$ hadoop namenode -format
DEPRECATED: Use of this script to execute hdfs command is deprecated.
Instead use the hdfs command for it.
16/09/07 13:06:51 INFO namenode.NameNode: STARTUP_MSG:
/**
STARTUP_MSG: Starting NameNode
STARTUP_MSG: host = Kalyan/127.0.0.1
STARTUP_MSG: args = [-format]
STARTUP_MSG: version = 2.6.0
STARTUP_MSG: classpath = /home/orienit/work/hadoop-2.6.0/etc/hadoop:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/log4j-1.2.17.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/commons-configuration-1.6.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/asm-3.2.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/junit-4.11.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/xmlenc-0.52.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/jets3t-0.9.0.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/snappy-java-1.0.4.1.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/stax-api-1.0-2.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/jackson-mapper-asl-1.9.13.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/jettison-1.1.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/slf4j-log4j12-1.7.5.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/jersey-json-1.9.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/activation-1.1.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/commons-httpclient-3.1.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/htrace-core-3.0.4.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/commons-codec-1.4.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/jetty-6.1.26.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/commons-math3-3.1.1.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/hamcrest-core-1.3.jar:/home/orienit/work/hadoop-2.6.0/share/hadoop/common/lib/commons-compress-1.4.1.jar:/hom
Before start the hadoop we must and should format the Namenode otherwise Namenode wont happend. check the information about NN.
Formatting using clusterid: CID-34de76c0-b913-4191-a266-f6c2f7b55bd8
16/09/07 13:06:52 INFO namenode.FSNamesystem: No KeyProvider found.
16/09/07 13:06:52 INFO namenode.FSNamesystem: fsLock is fair:true
16/09/07 13:06:52 INFO blockmanagement.DatanodeManager: dfs.block.invalidate.limit=1000
16/09/07 13:06:52 INFO blockmanagement.DatanodeManager: dfs.namenode.datanode.registration.ip-hostname-check=true
16/09/07 13:06:52 INFO blockmanagement.BlockManager: dfs.namenode.startup.delay.block.deletion.sec is set to 000:00:00:00.000
16/09/07 13:06:52 INFO blockmanagement.BlockManager: The block deletion will start around 2016 Sep 07 13:06:52
16/09/07 13:06:52 INFO util.GSet: Computing capacity for map BlocksMap
16/09/07 13:06:52 INFO util.GSet: VM type = 64-bit
16/09/07 13:06:52 INFO util.GSet: 2.0% max memory 889 MB = 17.8 MB
16/09/07 13:06:52 INFO util.GSet: capacity = 2^21 = 2097152 entries
16/09/07 13:06:52 INFO blockmanagement.BlockManager: dfs.block.access.token.enable=false
16/09/07 13:06:52 INFO blockmanagement.BlockManager: defaultReplication = 1
16/09/07 13:06:52 INFO blockmanagement.BlockManager: maxReplication = 512
16/09/07 13:06:52 INFO blockmanagement.BlockManager: minReplication = 1
16/09/07 13:06:52 INFO blockmanagement.BlockManager: maxReplicationStreams = 2
16/09/07 13:06:52 INFO blockmanagement.BlockManager: shouldCheckForEnoughRacks = false
16/09/07 13:06:52 INFO blockmanagement.BlockManager: replicationRecheckInterval = 3000
16/09/07 13:06:52 INFO blockmanagement.BlockManager: encryptDataTransfer = false
16/09/07 13:06:52 INFO blockmanagement.BlockManager: maxNumBlocksToLog = 1000
16/09/07 13:06:52 INFO namenode.FSNamesystem: fsOwner = orienit (auth:SIMPLE)
16/09/07 13:06:52 INFO namenode.FSNamesystem: supergroup = supergroup
16/09/07 13:06:52 INFO namenode.FSNamesystem: isPermissionEnabled = true
16/09/07 13:06:52 INFO namenode.FSNamesystem: HA Enabled: false
16/09/07 13:06:52 INFO util.GSet: capacity = 2^18 = 262144 entries
16/09/07 13:06:52 INFO namenode.FSNamesystem: dfs.namenode.safemode.threshold-pct = 0.9990000128746033
16/09/07 13:06:52 INFO namenode.FSNamesystem: dfs.namenode.safemode.min.datanodes = 0
16/09/07 13:06:52 INFO namenode.FSNamesystem: dfs.namenode.safemode.extension = 30000
16/09/07 13:06:52 INFO namenode.FSNamesystem: Retry cache on namenode is enabled
16/09/07 13:06:52 INFO namenode.FSNamesystem: Retry cache will use 0.03 of total heap and retry cache entry expiry time is 600000 millis
16/09/07 13:06:52 INFO util.GSet: Computing capacity for map NameNodeRetryCache
16/09/07 13:06:52 INFO util.GSet: VM type = 64-bit
16/09/07 13:06:52 INFO util.GSet: 0.029999999329447746% max memory 889 MB = 273.1 KB
16/09/07 13:06:52 INFO util.GSet: capacity = 2^15 = 32768 entries
16/09/07 13:06:52 INFO namenode.NNConf: ACLs enabled? false
16/09/07 13:06:52 INFO namenode.NNConf: XAttrs enabled? true
16/09/07 13:06:52 INFO namenode.NNConf: Maximum size of an xattr: 16384
16/09/07 13:06:52 INFO namenode.FSImage: Allocated new BlockPoolId: BP-1134642002-127.0.0.1-1473233812747
16/09/07 13:06:52 INFO common.Storage: Storage directory /home/orienit/work/hadoop2data/dfs/name has been successfully formatted.
16/09/07 13:06:53 INFO namenode.NNStorageRetentionManager: Going to retain 1 images with txid >= 0
16/09/07 13:06:53 INFO util.ExitUtil: Exiting with status 0
16/09/07 13:06:53 INFO namenode.NameNode: SHUTDOWN_MSG:
/**
SHUTDOWN_MSG: Shutting down NameNode at Kalyan/127.0.0.1
**/
orienit@Kalyan:~$

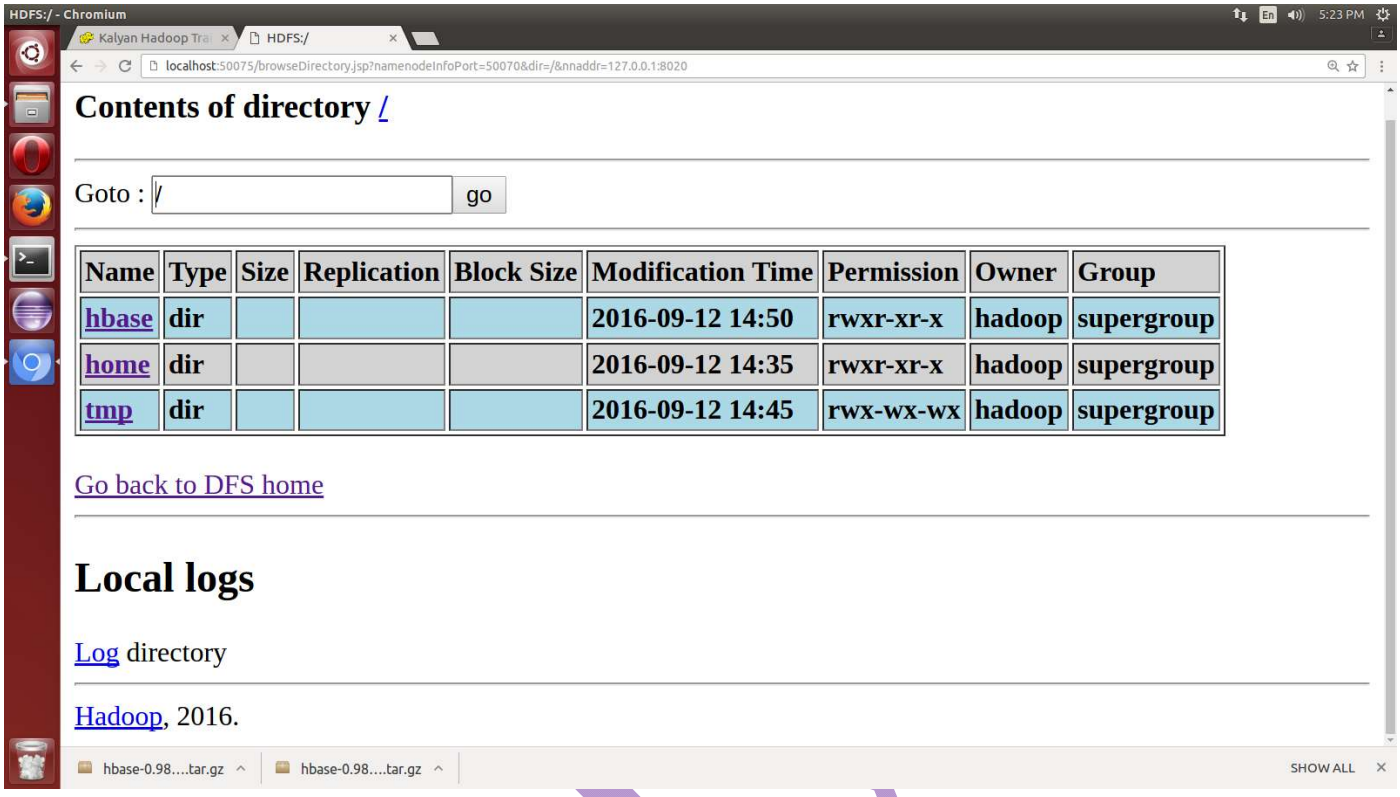
19. Start the hadoop-2.6.0 using "**start-all.sh**" Command
(Observe the all process names of hadoop-2.6.0 on console.)

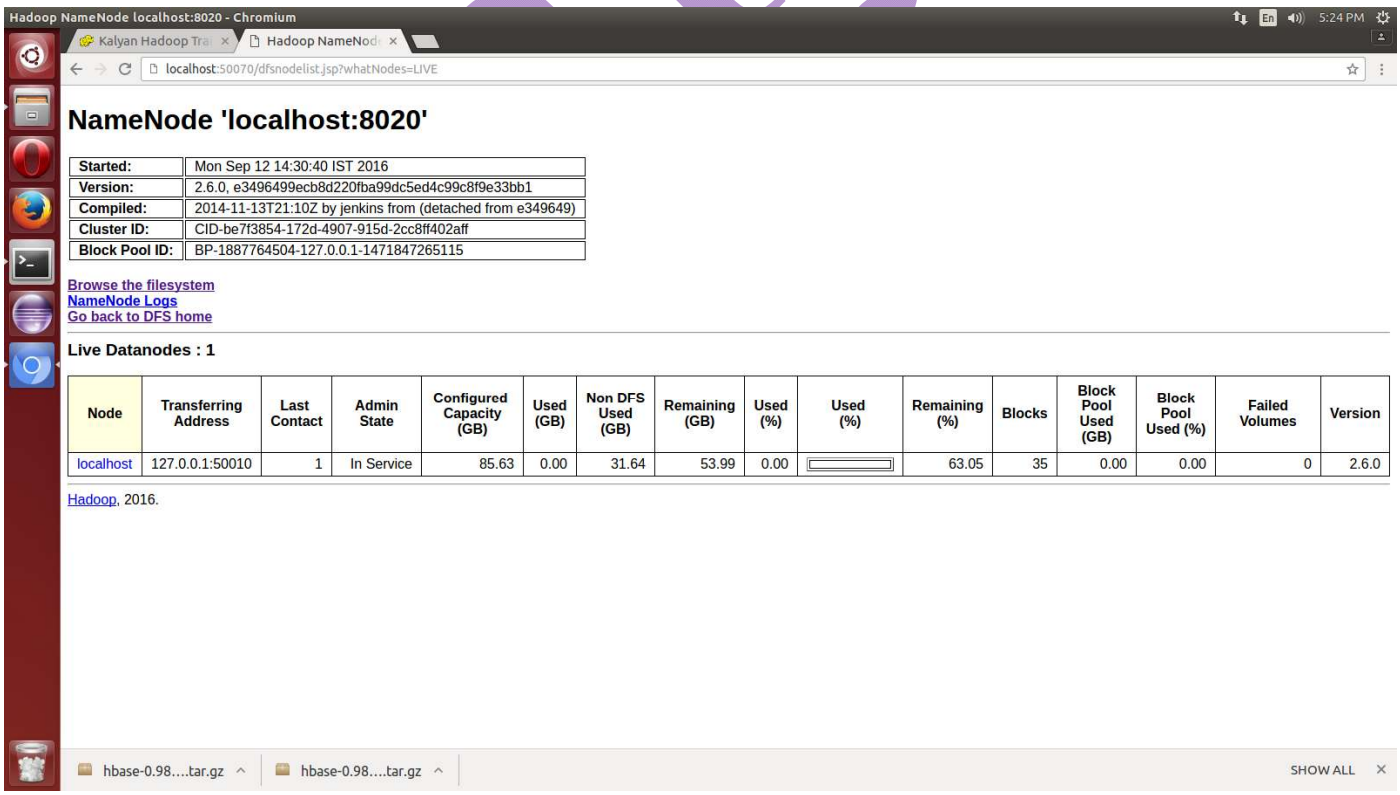


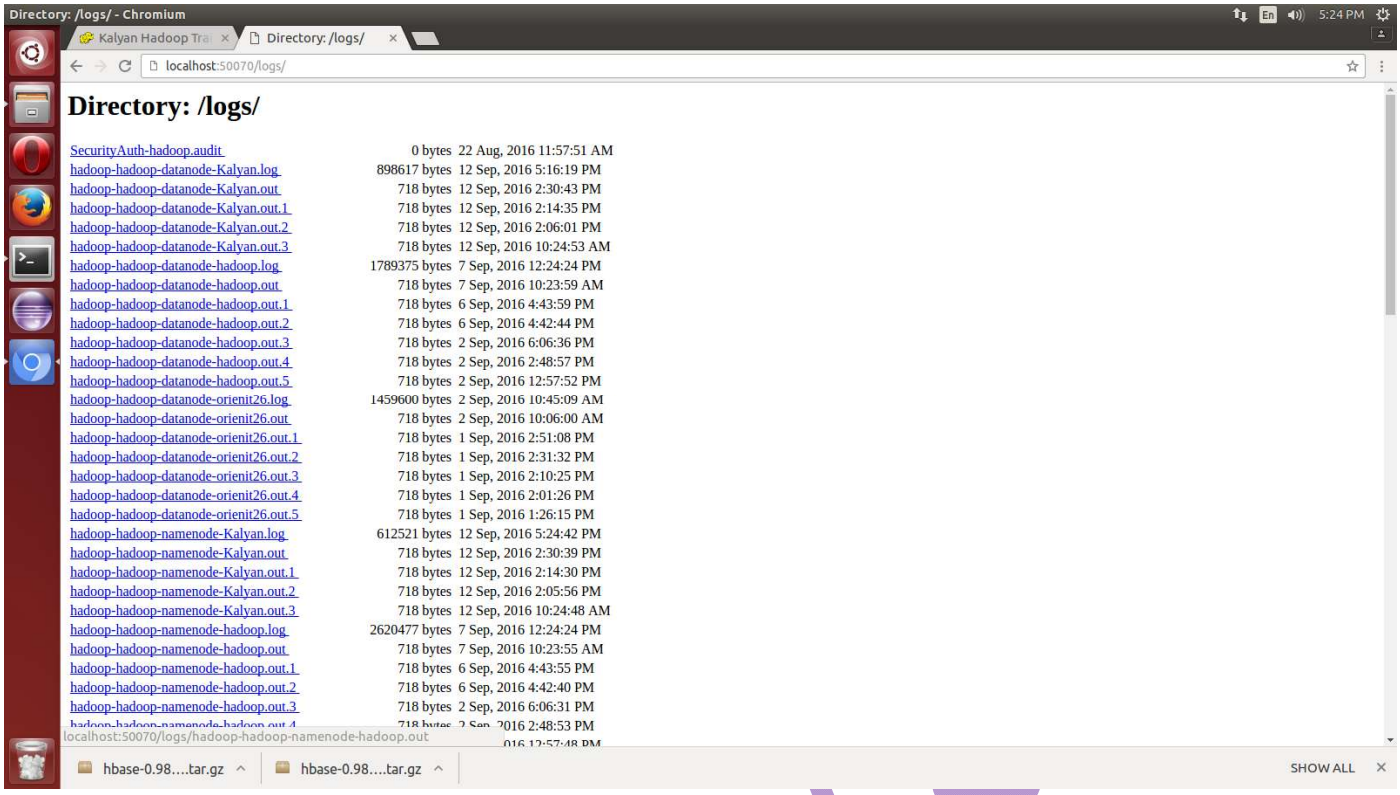



Namenode information - Chromium
5:22 PM
localhost:50070/dfshealth.html#tab-overview
DataNodes usages% (Min/Median/Max/stdDev): 0.00% / 0.00% / 0.00% / 0.00%
Live Nodes 1 (Decommissioned: 0)
Dead Nodes 0 (Decommissioned: 0)
Decommissioning Nodes 0
Number of Under-Replicated Blocks 9
Number of Blocks Pending Deletion 0
Block Deletion Start Time 12/09/2016, 14:30:40
NameNode Journal Status
Current transaction ID: 19965
Journal Manager
State
FileJournalManager(root=/home/hadoop/work/hadoop2data/dfs/name)
EditLogFileOutputStream(/home/hadoop/work/hadoop2data/dfs/name/current/edits_inprogress_0000000000000019963)
NameNode Storage
Storage Directory
Type
State
/home/hadoop/work/hadoop2data/dfs/name
IMAGE_AND_EDITS
Active
Hadoop, 2014.
Legacy UI
hbase-0.98....tar.gz
hbase-0.98....tar.gz
SHOW ALL


Hadoop NameNode localhost:8020 - Chromium
5:23 PM
localhost:50070/dfshealth.jsp
NameNode 'localhost:8020' (active)
Started: Mon Sep 12 14:30:40 IST 2016
Version: 2.6.0, e3496499ecb8d220fba99dc5ed4c99c8f9e33bb1
Compiled: 2014-11-13T21:10Z by jenkins from (detached from e349649)
Cluster ID: CID-be7f3854-172d-4907-915d-2cc8ff402aff
Block Pool ID: BP-1887764504-127.0.0.1-1471847265115
Browse the filesystem
NameNode Logs
Cluster Summary
Security is OFF
104 files and directories, 37 blocks = 141 total.
Heap Memory used 93.41 MB is 43% of Commited Heap Memory 215 MB. Max Heap Memory is 889 MB.
Non Heap Memory used 34.31 MB is 96% of Commited Non Heap Memory 35.44 MB. Max Non Heap Memory is 214 MB.
Configured Capacity : 85.63 GB
DFS Used : 1.23 MB
Non DFS Used : 31.64 GB
DFS Remaining : 53.99 GB
DFS Used% : 0.00%
DFS Remaining% : 63.05%
Block Pool Used : 1.23 MB
Block Pool Used% : 0.00%
DataNodes usages : Min % Median % Max % stdev %
0.00% 0.00% 0.00% 0.00%
Live Nodes : 1 (Decommissioned: 0)
Dead Nodes : 0 (Decommissioned: 0)
Decommissioning Nodes : 0
Number of Under-Replicated Blocks : 9
hbase-0.98....tar.gz
hbase-0.98....tar.gz
SHOW ALL


HDFS:/ - Chromium
5:23 PM
Kalyan Hadoop Tra
HDFS:/
localhost:50075/browseDirectory.jsp?namenodeInfoPort=50070&dir=/&nnaddr=127.0.0.1:8020
Contents of directory /
Goto : /
go
Name Type Size Replication Block Size Modification Time Permission Owner Group
hbase dir 2016-09-12 14:50 rwxr-xr-x hadoop supergroup
home dir 2016-09-12 14:35 rwxr-xr-x hadoop supergroup
tmp dir 2016-09-12 14:45 rwx-wx-wx hadoop supergroup
Go back to DFS home
Local logs
Log directory
Hadoop, 2016.
hbase-0.98....tar.gz
hbase-0.98....tar.gz
SHOW ALL


Hadoop NameNode localhost:8020 - Chromium
5:24 PM
Kalyan Hadoop Tra
Hadoop NameNod
localhost:50070/dfsnodelist.jsp?whatNodes=LIVE
NameNode 'localhost:8020'
Started: Mon Sep 12 14:30:40 IST 2016
Version: 2.6.0, e3496499ecb8d220fba99dc5ed4c99c8f9e33bb1
Compiled: 2014-11-13T21:10Z by jenkins from (detached from e349649)
Cluster ID: CID-be7f3854-172d-4907-915d-2cc8ff402aff
Block Pool ID: BP-1887764504-127.0.0.1-1471847265115
Browse the filesystem
NameNode Logs
Go back to DFS home
Live Datanodes : 1
Node Transferring Address Last Contact Admin State Configured Capacity (GB) Used (GB) Non DFS Used (GB) Remaining (GB) Used (%) Used (%) Remaining (%) Blocks Block Pool Used (GB) Block Pool Used (%) Failed Volumes Version
localhost 127.0.0.1:50010 1 In Service 85.63 0.00 31.64 53.99 0.00 63.05 35 0.00 0.00 0 2.6.0
Hadoop, 2016.
hbase-0.98....tar.gz
hbase-0.98....tar.gz
SHOW ALL


Directory: /logs/ - Chromium
Kalyan Hadoop Tra
Directory: /logs/
localhost:50070/logs/
Directory: /logs/
SecurityAuth-hadoop.audit 0 bytes 22 Aug, 2016 11:57:51 AM
hadoop-hadoop-datanode-Kalyan.log 898617 bytes 12 Sep, 2016 5:16:19 PM
hadoop-hadoop-datanode-Kalyan.out 718 bytes 12 Sep, 2016 2:30:43 PM
hadoop-hadoop-datanode-Kalyan.out.1 718 bytes 12 Sep, 2016 2:14:35 PM
hadoop-hadoop-datanode-Kalyan.out.2 718 bytes 12 Sep, 2016 2:06:01 PM
hadoop-hadoop-datanode-Kalyan.out.3 718 bytes 12 Sep, 2016 10:24:53 AM
hadoop-hadoop-datanode-hadoop.log 1789375 bytes 7 Sep, 2016 12:24:24 PM
hadoop-hadoop-datanode-hadoop.out 718 bytes 7 Sep, 2016 10:23:59 AM
hadoop-hadoop-datanode-hadoop.out.1 718 bytes 6 Sep, 2016 4:43:59 PM
hadoop-hadoop-datanode-hadoop.out.2 718 bytes 6 Sep, 2016 4:42:44 PM
hadoop-hadoop-datanode-hadoop.out.3 718 bytes 2 Sep, 2016 6:06:36 PM
hadoop-hadoop-datanode-hadoop.out.4 718 bytes 2 Sep, 2016 2:48:57 PM
hadoop-hadoop-datanode-hadoop.out.5 718 bytes 2 Sep, 2016 12:57:52 PM
hadoop-hadoop-datanode-orienit26.log 1459600 bytes 2 Sep, 2016 10:45:09 AM
hadoop-hadoop-datanode-orienit26.out 718 bytes 2 Sep, 2016 10:06:00 AM
hadoop-hadoop-datanode-orienit26.out.1 718 bytes 1 Sep, 2016 2:51:08 PM
hadoop-hadoop-datanode-orienit26.out.2 718 bytes 1 Sep, 2016 2:31:32 PM
hadoop-hadoop-datanode-orienit26.out.3 718 bytes 1 Sep, 2016 2:10:25 PM
hadoop-hadoop-datanode-orienit26.out.4 718 bytes 1 Sep, 2016 2:01:26 PM
hadoop-hadoop-datanode-orienit26.out.5 718 bytes 1 Sep, 2016 1:26:15 PM
hadoop-hadoop-namenode-Kalyan.log 612521 bytes 12 Sep, 2016 5:24:42 PM
hadoop-hadoop-namenode-Kalyan.out 718 bytes 12 Sep, 2016 2:30:39 PM
hadoop-hadoop-namenode-Kalyan.out.1 718 bytes 12 Sep, 2016 2:14:30 PM
hadoop-hadoop-namenode-Kalyan.out.2 718 bytes 12 Sep, 2016 2:05:56 PM
hadoop-hadoop-namenode-Kalyan.out.3 718 bytes 12 Sep, 2016 10:24:48 AM
hadoop-hadoop-namenode-hadoop.log 2620477 bytes 7 Sep, 2016 12:24:24 PM
hadoop-hadoop-namenode-hadoop.out 718 bytes 7 Sep, 2016 10:23:55 AM
hadoop-hadoop-namenode-hadoop.out.1 718 bytes 6 Sep, 2016 4:43:55 PM
hadoop-hadoop-namenode-hadoop.out.2 718 bytes 6 Sep, 2016 4:42:40 PM
hadoop-hadoop-namenode-hadoop.out.3 718 bytes 2 Sep, 2016 6:06:31 PM
localhost:50070/logs/hadoop-hadoop-namenode-hadoop.out
hbase-0.98....tar.gz
hbase-0.98....tar.gz
SHOW ALL