

```
saidileep@saidileep-VirtualBox:~$ su hduser
Password:
hduser@saidileep-VirtualBox:/home/saidileep$ cd\
>
hduser@saidileep-VirtualBox:~$ cd /usr/local/hadoop/sbin
hduser@saidileep-VirtualBox:/usr/local/hadoop/sbin$ ./start-dfs.sh
20/12/10 14:26:22 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Starting namenodes on [localhost]
hduser@localhost's password:
localhost: starting namenode, logging to /usr/local/hadoop/logs/hadoop-hduser-namenode-saidileep-VirtualBox.out
hduser@localhost's password:
localhost: starting datanode, logging to /usr/local/hadoop/logs/hadoop-hduser-datanode-saidileep-VirtualBox.out
Starting secondary namenodes [0.0.0.0]
hduser@0.0.0.0's password:
0.0.0.0: starting secondarynamenode, logging to /usr/local/hadoop/logs/hadoop-hduser-secondarynamenode-saidileep-VirtualBox.out
20/12/10 14:26:50 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
hduser@saidileep-VirtualBox:/usr/local/hadoop/sbin$ ./start-yarn.sh
starting yarn daemons
starting resourcemanager, logging to /usr/local/hadoop/logs/yarn-hduser-resourcemanager-saidileep-VirtualBox.out
hduser@localhost's password:
localhost: starting nodemanager, logging to /usr/local/hadoop/logs/yarn-hduser-nodemanager-saidileep-VirtualBox.out
hduser@saidileep-VirtualBox:/usr/local/hadoop/sbin$ cd\
>
hduser@saidileep-VirtualBox:~$ ls
examples.desktop  hadoop-2.6.0  hadoop-2.6.0.tar.gz
hduser@saidileep-VirtualBox:~$ cd hadoop-2.6.0/
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```
hduser@saidileep-VirtualBox:~$ cd hadoop-2.6.0/
hduser@saidileep-VirtualBox:~/hadoop-2.6.0$ hadoop fs -ls /
20/12/10 14:27:48 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 1 items
drwxr-xr-x   - hduser supergroup          0 2020-11-26 20:02 /rgs1
hduser@saidileep-VirtualBox:~/hadoop-2.6.0$ hadoop fs -copyFromLocal /home/saidileep/Desktop/1901 /rgs1/test2.txt
20/12/10 14:29:05 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
hduser@saidileep-VirtualBox:~/hadoop-2.6.0$ hadoop fs-ls /rgs1
Error: Could not find or load main class fs-ls
hduser@saidileep-VirtualBox:~/hadoop-2.6.0$ hadoop fs -ls /rgs1
20/12/10 14:29:29 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 3 items
drwxr-xr-x   - hduser supergroup          0 2020-11-26 20:02 /rgs1/output
-rw-r--r--   1 hduser supergroup          89 2020-11-26 19:58 /rgs1/test.txt
-rw-r--r--   1 hduser supergroup    888190 2020-12-10 14:29 /rgs1/test2.txt
```



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hduser@saidileep-VirtualBox:~/hadoop-2.6.0$ hadoop jar /home/saidileep/Desktop/Average.jar AverageDriver /rgs1/test2.txt /rgs1/output2
20/12/10 15:32:45 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
20/12/10 15:32:46 INFO Configuration.deprecation: session.id is deprecated. Instead, use dfs.metrics.session-id
20/12/10 15:32:46 INFO jvm.JvmMetrics: Initializing JVM Metrics with processName=JobTracker, sessionId=
20/12/10 15:32:46 WARN mapreduce.JobSubmitter: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application with ToolRunner to remedy this.
20/12/10 15:32:46 INFO input.FileInputFormat: Total input paths to process : 1
20/12/10 15:32:46 INFO mapreduce.JobSubmitter: number of splits:1
20/12/10 15:32:46 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_local1378255195_0001
20/12/10 15:32:47 INFO mapreduce.Job: The url to track the job: http://localhost:8080/
20/12/10 15:32:47 INFO mapreduce.Job: Running job: job_local1378255195_0001
20/12/10 15:32:47 INFO mapred.LocalJobRunner: OutputCommitter set in config null
20/12/10 15:32:47 INFO mapred.LocalJobRunner: OutputCommitter is org.apache.hadoop.mapreduce.lib.output.FileOutputCommitter
20/12/10 15:32:47 INFO mapred.LocalJobRunner: Waiting for map tasks
20/12/10 15:32:47 INFO mapred.LocalJobRunner: Starting task: attempt_local1378255195_0001_m_000000_0
20/12/10 15:32:47 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]
20/12/10 15:32:47 INFO mapred.MapTask: Processing split: hdfs://localhost:54310/rgs1/test2.txt:0+888190
20/12/10 15:32:47 INFO mapred.MapTask: (EQUATOR) 0 kvi 26214396(104857584)
20/12/10 15:32:47 INFO mapred.MapTask: mapreduce.task.io.sort.mb: 100
20/12/10 15:32:47 INFO mapred.MapTask: soft limit at 83886080
20/12/10 15:32:47 INFO mapred.MapTask: bufstart = 0; bufvoid = 104857600
20/12/10 15:32:47 INFO mapred.MapTask: kvstart = 26214396; length = 6553600
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20/12/10 15:32:47 INFO mapred.MapTask: Map output collector class = org.apache.h
adoop.mapred.MapTask$MapOutputBuffer
20/12/10 15:32:48 INFO mapred.LocalJobRunner:
20/12/10 15:32:48 INFO mapred.MapTask: Starting flush of map output
20/12/10 15:32:48 INFO mapred.MapTask: Spilling map output
20/12/10 15:32:48 INFO mapred.MapTask: bufstart = 0; bufend = 59076; bufvoid = 1
04857600
20/12/10 15:32:48 INFO mapred.MapTask: kvstart = 26214396(104857584); kvend = 26
188144(104752576); length = 26253/6553600
20/12/10 15:32:48 INFO mapreduce.Job: Job job_local1378255195_0001 running in ub
er mode : false
20/12/10 15:32:48 INFO mapreduce.Job: map 0% reduce 0%
20/12/10 15:32:48 INFO mapred.MapTask: Finished spill 0
20/12/10 15:32:48 INFO mapred.Task: Task:attempt_local1378255195_0001_m_000000_0
is done. And is in the process of committing
20/12/10 15:32:48 INFO mapred.LocalJobRunner: map
20/12/10 15:32:48 INFO mapred.Task: Task 'attempt_local1378255195_0001_m_000000_
0' done.
20/12/10 15:32:48 INFO mapred.LocalJobRunner: Finishing task: attempt_local13782
55195_0001_m_000000_0
20/12/10 15:32:48 INFO mapred.LocalJobRunner: map task executor complete.
20/12/10 15:32:48 INFO mapred.LocalJobRunner: Waiting for reduce tasks
20/12/10 15:32:48 INFO mapred.LocalJobRunner: Starting task: attempt_local137825
5195_0001_r_000000_0
20/12/10 15:32:48 INFO mapred.Task: Using ResourceCalculatorProcessTree : [ ]
20/12/10 15:32:48 INFO mapred.ReduceTask: Using ShuffleConsumerPlugin: org.apach
e.hadoop.mapreduce.task.reduce.Shuffle@2d0d2bad
20/12/10 15:32:48 INFO reduce.MergeManagerImpl: MergerManager: memoryLimit=33433
8464, maxSingleShuffleLimit=83584616, mergeThreshold=220663392, ioSortFactor=10,
memToMemMergeOutputsThreshold=10
20/12/10 15:32:48 INFO reduce.EventFetcher: attempt_local1378255195_0001_r_00000
0_0 Thread started: EventFetcher for fetching Map Completion Events
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20/12/10 15:32:48 INFO reduce.LocalFetcher: localfetcher#1 about to shuffle output of map attempt_local1378255195_0001_m_000000_0 decomp: 72206 len: 72210 to MEMORY
20/12/10 15:32:48 INFO reduce.InMemoryMapOutput: Read 72206 bytes from map-output for attempt_local1378255195_0001_m_000000_0
20/12/10 15:32:48 INFO reduce.MergeManagerImpl: closeInMemoryFile -> map-output of size: 72206, inMemoryMapOutputs.size() -> 1, commitMemory -> 0, usedMemory -> 72206
20/12/10 15:32:48 INFO reduce.EventFetcher: EventFetcher is interrupted.. Returning
20/12/10 15:32:48 INFO mapred.LocalJobRunner: 1 / 1 copied.
20/12/10 15:32:48 INFO reduce.MergeManagerImpl: finalMerge called with 1 in-memory map-outputs and 0 on-disk map-outputs
20/12/10 15:32:48 INFO mapred.Merger: Merging 1 sorted segments
20/12/10 15:32:48 INFO mapred.Merger: Down to the last merge-pass, with 1 segments left of total size: 72199 bytes
20/12/10 15:32:48 INFO reduce.MergeManagerImpl: Merged 1 segments, 72206 bytes to disk to satisfy reduce memory limit
20/12/10 15:32:48 INFO reduce.MergeManagerImpl: Merging 1 files, 72210 bytes from disk
20/12/10 15:32:48 INFO reduce.MergeManagerImpl: Merging 0 segments, 0 bytes from memory into reduce
20/12/10 15:32:48 INFO mapred.Merger: Merging 1 sorted segments
20/12/10 15:32:48 INFO mapred.Merger: Down to the last merge-pass, with 1 segments left of total size: 72199 bytes
20/12/10 15:32:48 INFO mapred.LocalJobRunner: 1 / 1 copied.
20/12/10 15:32:48 INFO Configuration.deprecation: mapred.skip.on is deprecated. Instead, use mapreduce.job.skiprecords
20/12/10 15:32:48 INFO mapred.Task: Task:attempt_local1378255195_0001_r_000000_0 is done. And is in the process of committing
20/12/10 15:32:48 INFO mapred.LocalJobRunner: 1 / 1 copied.
20/12/10 15:32:48 INFO mapred.Task: Task attempt_local1378255195_0001_r_000000_0
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is allowed to commit now
20/12/10 15:32:48 INFO output.FileOutputCommitter: Saved output of task 'attempt
_local1378255195_0001_r_000000_0' to hdfs://localhost:54310/rgs1/output2/_tempor
ary/0/task_local1378255195_0001_r_000000
20/12/10 15:32:48 INFO mapred.LocalJobRunner: reduce > reduce
20/12/10 15:32:48 INFO mapred.Task: Task 'attempt_local1378255195_0001_r_000000_
0' done.
20/12/10 15:32:48 INFO mapred.LocalJobRunner: Finishing task: attempt_local13782
55195_0001_r_000000_0
20/12/10 15:32:48 INFO mapred.LocalJobRunner: reduce task executor complete.
20/12/10 15:32:49 INFO mapreduce.Job: map 100% reduce 100%
20/12/10 15:32:49 INFO mapreduce.Job: Job job_local1378255195_0001 completed suc
cessfully
20/12/10 15:32:49 INFO mapreduce.Job: Counters: 38
  File System Counters
    FILE: Number of bytes read=150832
    FILE: Number of bytes written=723216
    FILE: Number of read operations=0
    FILE: Number of large read operations=0
    FILE: Number of write operations=0
    HDFS: Number of bytes read=1776380
    HDFS: Number of bytes written=8
    HDFS: Number of read operations=13
    HDFS: Number of large read operations=0
    HDFS: Number of write operations=4
  Map-Reduce Framework
    Map input records=6565
    Map output records=6564
    Map output bytes=59076
    Map output materialized bytes=72210
    Input split bytes=102
    Combine input records=0
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Combine output records=0
Reduce input groups=1
Reduce shuffle bytes=72210
Reduce input records=6564
Reduce output records=1
Spilled Records=13128
Shuffled Maps =1
Failed Shuffles=0
Merged Map outputs=1
GC time elapsed (ms)=481
CPU time spent (ms)=0
Physical memory (bytes) snapshot=0
Virtual memory (bytes) snapshot=0
Total committed heap usage (bytes)=893386752
Shuffle Errors
BAD_ID=0
CONNECTION=0
IO_ERROR=0
WRONG_LENGTH=0
WRONG_MAP=0
WRONG_REDUCE=0
File Input Format Counters
  Bytes Read=888190
File Output Format Counters
  Bytes Written=8
```

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hduser@saidileep-VirtualBox:~/hadoop-2.6.0$ hadoop fs -ls /rgs1
20/12/10 15:35:53 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 4 items
drwxr-xr-x   - hduser supergroup          0 2020-11-26 20:02 /rgs1/output
drwxr-xr-x   - hduser supergroup          0 2020-12-10 15:32 /rgs1/output2
-rw-r--r--   1 hduser supergroup         89 2020-11-26 19:58 /rgs1/test.txt
-rw-r--r--   1 hduser supergroup    888190 2020-12-10 14:29 /rgs1/test2.txt
hduser@saidileep-VirtualBox:~/hadoop-2.6.0$ hadoop fs -cat /rgs1/output2/part-r-00000
20/12/10 15:36:36 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
1901      46
```