```
2017-01-28 01:44:20,179 INFO org.apache.hadoop.yarn.client.api.impl.TimelineClientImpl
(main): Timeline service address: http://ip-172-31-54-90.ec2.internal:8188/ws/v1/timeline/
2017-01-28 01:44:20,198 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-54-90.ec2.internal/172.31.54.90:8032
2017-01-28 01:44:22,798 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input paths to process: 1
2017-01-28 01:44:22,817 INFO com.hadoop.compression.lzo.GPLNativeCodeLoader (main): Loaded
native gpl library
2017-01-28 01:44:22,822 INFO com.hadoop.compression.lzo.LzoCodec (main): Successfully loaded
& initialized native-lzo library [hadoop-lzo rev f644c4f7eb0b342b189783939524370d26bf554f]
2017-01-28 01:44:22,943 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:22
2017-01-28 01:44:23,153 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1485562631206_0002
2017-01-28 01:44:23,759 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1485562631206_0002
2017-01-28 01:44:23,903 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-54-90.ec2.internal:20888/proxy/application_1485562631206_0002/
2017-01-28 01:44:23,904 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1485562631206 0002
2017-01-28 01:44:40,109 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1485562631206 0002 running in uber mode : false
2017-01-28 01:44:40,111 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 0% reduce 0%
2017-01-28 01:45:17,427 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 1% reduce 0%
2017-01-28 01:45:20,449 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 2% reduce 0%
2017-01-28 01:45:21,455 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 3% reduce 0%
2017-01-28 01:45:23,467 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 4% reduce 0%
2017-01-28 01:45:24,473 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 5% reduce 0%
2017-01-28 01:45:26,488 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 6% reduce 0%
2017-01-28 01:45:29,509 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 7% reduce 0%
2017-01-28 01:45:32,532 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 8% reduce 0%
2017-01-28 01:45:35,553 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 9% reduce 0%
2017-01-28 01:45:38,576 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 10% reduce 0%
2017-01-28 01:45:41,595 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 11% reduce 0%
2017-01-28 01:45:43,610 INFO org.apache.hadoop.mapreduce.Job (main): map 12% reduce 0%
2017-01-28 01:45:45,627 INFO org.apache.hadoop.mapreduce.Job (main): map 13% reduce 0%
2017-01-28 01:45:46,637 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 14% reduce 0%
2017-01-28 01:45:48,651 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 15% reduce 0%
2017-01-28 01:45:49,657 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 16% reduce 0%
2017-01-28 01:45:51,669 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 17% reduce 0%
2017-01-28 01:45:53,692 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 18% reduce 0%
2017-01-28 01:45:55,706 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 19% reduce 0%
2017-01-28 01:45:57,718 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 20% reduce 0%
2017-01-28 01:46:00,739 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 21% reduce 0%
2017-01-28 01:46:01,744 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 22% reduce 0%
2017-01-28 01:46:03,758 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 23% reduce 0%
2017-01-28 01:46:05,773 INFO org.apache.hadoop.mapreduce.Job (main): map 24% reduce 0%
2017-01-28 01:46:08,790 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 25% reduce 0%
2017-01-28 01:46:16,868 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 26% reduce 0%
2017-01-28 01:46:20,894 INFO org.apache.hadoop.mapreduce.Job (main): map 28% reduce 0%
2017-01-28 01:46:22,909 INFO org.apache.hadoop.mapreduce.Job (main): map 29% reduce 0%
2017-01-28 01:46:27,937 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 31% reduce 0%
2017-01-28 01:46:44,042 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 32% reduce 0%
2017-01-28 01:46:45,049 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 33% reduce 0%
2017-01-28 01:46:47,064 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 34% reduce 0%
2017-01-28 01:46:48,071 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 35% reduce 0%
2017-01-28 01:46:50,084 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 36% reduce 0%
2017-01-28 01:46:52,093 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 37% reduce 0%
2017-01-28 01:46:55,115 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 38% reduce 0%
2017-01-28 01:46:57,128 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 39% reduce 0%
2017-01-28 01:47:00,144 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 40% reduce 0%
2017-01-28 01:47:02,155 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 41% reduce 0%
2017-01-28 01:47:05,183 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 42% reduce 0%
2017-01-28 01:47:06,188 INFO org.apache.hadoop.mapreduce.Job (main): map 43% reduce 0%
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2017-01-28 01:47:09,204 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 44% reduce 0%
2017-01-28 01:47:14,248 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 45% reduce 0%
2017-01-28 01:47:16,270 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 48% reduce 0%
2017-01-28 01:47:19,286 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 49% reduce 0%
2017-01-28 01:47:20,292 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 51% reduce 0%
2017-01-28 01:47:21,297 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 52% reduce 0%
2017-01-28 01:47:27,334 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 54% reduce 0%
2017-01-28 01:47:32,373 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 55% reduce 0%
2017-01-28 01:47:41,414 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 56% reduce 0%
2017-01-28 01:47:44,427 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 57% reduce 0%
2017-01-28 01:47:47,449 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 58% reduce 0%
2017-01-28 01:47:50,468 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 59% reduce 0%
2017-01-28 01:47:53,489 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 60% reduce 0%
2017-01-28 01:47:54,493 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 60% reduce 3%
2017-01-28 01:47:56,506 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 61% reduce 3%
2017-01-28 01:47:57,511 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 62% reduce 3%
2017-01-28 01:47:59,520 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 63% reduce 3%
2017-01-28 01:48:00,525 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 64% reduce 3%
2017-01-28 01:48:02,536 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 66% reduce 3%
2017-01-28 01:48:03,541 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 66% reduce 4%
2017-01-28 01:48:05,551 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 68% reduce 4%
2017-01-28 01:48:06,556 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 70% reduce 4%
2017-01-28 01:48:21,643 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 71% reduce 4%
2017-01-28 01:48:24,658 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 72% reduce 4%
2017-01-28 01:48:27,678 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 72% reduce 8%
2017-01-28 01:48:31,696 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 73% reduce 8%
2017-01-28 01:48:32,700 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 74% reduce 8%
2017-01-28 01:48:34,714 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 76% reduce 8%
2017-01-28 01:48:37,729 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 77% reduce 8%
2017-01-28 01:48:39,738 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 78% reduce 8%
2017-01-28 01:48:40,745 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 79% reduce 8%
2017-01-28 01:48:42,755 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 80% reduce 8%
2017-01-28 01:48:49,786 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 81% reduce 8%
2017-01-28 01:48:50,792 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 82% reduce 8%
2017-01-28 01:48:53,152 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 84% reduce 9%
2017-01-28 01:48:55,162 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 84% reduce 10%
2017-01-28 01:48:56,170 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 85% reduce 10%
2017-01-28 01:48:59,187 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 87% reduce 10%
2017-01-28 01:49:00,193 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 88% reduce 10%
2017-01-28 01:49:01,197 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 88% reduce 11%
2017-01-28 01:49:02,203 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 88% reduce 12%
2017-01-28 01:49:10,241 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 90% reduce 12%
2017-01-28 01:49:12,249 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 91% reduce 12%
2017-01-28 01:49:19,288 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 92% reduce 12%
2017-01-28 01:49:22,310 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 95% reduce 17%
2017-01-28 01:49:25,328 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 97% reduce 17%
2017-01-28 01:49:26,333 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 97% reduce 18%
2017-01-28 01:49:30,349 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 98% reduce 18%
2017-01-28 01:49:32,358 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 98% reduce 19%
2017-01-28 01:49:36,375 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 19%
2017-01-28 01:49:37,380 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 26%
2017-01-28 01:49:38,384 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 40%
2017-01-28 01:49:39,388 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 53%
2017-01-28 01:49:40,393 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 80%
2017-01-28 01:49:47,421 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 100%
2017-01-28 01:49:49,437 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1485562631206 0002 completed successfully
2017-01-28 01:49:49,599 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 56
        File System Counters
                FILE: Number of bytes read=8720677
                FILE: Number of bytes written=9059870
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=2002
```

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HDFS: Number of bytes written=0
        HDFS: Number of read operations=22
        HDFS: Number of large read operations=0
        HDFS: Number of write operations=0
        S3: Number of bytes read=1454229767
        S3: Number of bytes written=72815
        S3: Number of read operations=0
        S3: Number of large read operations=0
        S3: Number of write operations=0
Job Counters
        Killed map tasks=1
        Killed reduce tasks=1
        Launched map tasks=22
        Launched reduce tasks=5
        Data-local map tasks=22
        Total time spent by all maps in occupied slots (ms)=54844680
        Total time spent by all reduces in occupied slots (ms)=13969296
        Total time spent by all map tasks (ms)=2285195
        Total time spent by all reduce tasks (ms)=291027
        Total vcore-milliseconds taken by all map tasks=2285195
        Total vcore-milliseconds taken by all reduce tasks=291027
        Total megabyte-milliseconds taken by all map tasks=1755029760
        Total megabyte-milliseconds taken by all reduce tasks=447017472
Map-Reduce Framework
        Map input records=21907700
        Map output records=248943500
        Map output bytes=2418234700
        Map output materialized bytes=1953146
        Input split bytes=2002
        Combine input records=248943500
        Combine output records=232012
        Reduce input groups=5273
        Reduce shuffle bytes=1953146
        Reduce input records=232012
        Reduce output records=5273
        Spilled Records=696036
        Shuffled Maps =110
        Failed Shuffles=0
        Merged Map outputs=110
        GC time elapsed (ms)=24663
        CPU time spent (ms)=762760
        Physical memory (bytes) snapshot=13586538496
        Virtual memory (bytes) snapshot=70888468480
        Total committed heap usage (bytes)=11661737984
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=1454229767
File Output Format Counters
        Bytes Written=72815
```