```
2020-02-15 01:51:25,320 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-79-141.ec2.internal/172.31.79.141:8032
2020-02-15 01:51:27,177 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-02-15 01:51:27,189 INFO com.hadoop.compression.lzo.GPLNativeCodeLoader (main): Loaded
native gpl library
2020-02-15 01:51:27,192 INFO com.hadoop.compression.lzo.LzoCodec (main): Successfully loaded
& initialized native-lzo library [hadoop-lzo rev 5f788d5e8f90539ee331702c753fa250727128f4]
2020-02-15 01:51:27,496 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:20
2020-02-15 01:51:27,616 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1581731370893_0001
2020-02-15 01:51:28,167 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1581731370893_0001
2020-02-15 01:51:28,252 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-79-141.ec2.internal:20888/proxy/application_1581731370893_0001/
2020-02-15 01:51:28,253 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1581731370893 0001
2020-02-15 01:51:34,332 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581731370893 0001 running in uber mode : false
2020-02-15 01:51:34,333 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-02-15 01:51:46,428 INFO org.apache.hadoop.mapreduce.Job (main): map 5% reduce 0%
2020-02-15 01:51:47,435 INFO org.apache.hadoop.mapreduce.Job (main): map 20% reduce 0%
2020-02-15 01:51:53,457 INFO org.apache.hadoop.mapreduce.Job (main): map 25% reduce 0%
2020-02-15 01:51:54,460 INFO org.apache.hadoop.mapreduce.Job (main): map 31% reduce 0%
2020-02-15 01:51:55,465 INFO org.apache.hadoop.mapreduce.Job (main): map 65% reduce 0%
2020-02-15 01:51:56,471 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-02-15 01:51:59,484 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 18%
2020-02-15 01:52:01,490 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 27%
2020-02-15 01:52:02,494 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 64%
2020-02-15 01:52:04,500 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 73%
2020-02-15 01:52:07,510 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 82%
2020-02-15 01:52:08,513 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 91%
2020-02-15 01:52:11,521 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 99%
2020-02-15 01:52:14,532 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-02-15 01:52:14,537 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581731370893 0001 completed successfully
2020-02-15 01:52:14,638 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 56
        File System Counters
                FILE: Number of bytes read=1585832
                FILE: Number of bytes written=8547769
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=2240
                HDFS: Number of bytes written=1092272771
                HDFS: Number of read operations=73
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=22
                S3: Number of bytes read=1319498021
                S3: Number of bytes written=0
                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=20
                Launched reduce tasks=12
                Data-local map tasks=20
                Total time spent by all maps in occupied slots (ms)=32944896
                Total time spent by all reduces in occupied slots (ms)=19432896
                Total time spent by all map tasks (ms)=343176
                Total time spent by all reduce tasks (ms)=101213
```

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Total vcore-milliseconds taken by all map tasks=343176
                Total vcore-milliseconds taken by all reduce tasks=101213
                Total megabyte-milliseconds taken by all map tasks=1054236672
                Total megabyte-milliseconds taken by all reduce tasks=621852672
        Map-Reduce Framework
                Map input records=85331845
                Map output records=258402
                Map output bytes=3809721
                Map output materialized bytes=1696355
                Input split bytes=2240
                Combine input records=0
                Combine output records=0
                Reduce input groups=9999
                Reduce shuffle bytes=1696355
                Reduce input records=258402
                Reduce output records=73697208
                Spilled Records=516804
                Shuffled Maps =220
                Failed Shuffles=0
                Merged Map outputs=220
                GC time elapsed (ms)=11932
                CPU time spent (ms)=320970
                Physical memory (bytes) snapshot=29458456576
                Virtual memory (bytes) snapshot=173154861056
                Total committed heap usage (bytes)=29601824768
        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=1319498021
        File Output Format Counters
                Bytes Written=1092272771
2020-02-15 01:52:14,695 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-79-141.ec2.internal/172.31.79.141:8032
2020-02-15 01:52:14,892 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 12
2020-02-15 01:52:14,947 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:34
2020-02-15 01:52:14,984 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1581731370893 0002
2020-02-15 01:52:15,207 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1581731370893 0002
2020-02-15 01:52:15,210 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-79-141.ec2.internal:20888/proxy/application 1581731370893 0002/
2020-02-15 01:52:15,210 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1581731370893 0002
2020-02-15 01:52:20,260 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581731370893 0002 running in uber mode : false
2020-02-15 01:52:20,260 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-02-15 01:52:31,328 INFO org.apache.hadoop.mapreduce.Job (main): map 3% reduce 0%
2020-02-15 01:52:37,359 INFO org.apache.hadoop.mapreduce.Job (main): map 4% reduce 0%
2020-02-15 01:52:39,366 INFO org.apache.hadoop.mapreduce.Job (main): map 14% reduce 0%
2020-02-15 01:52:40,370 INFO org.apache.hadoop.mapreduce.Job (main): map 47% reduce 0%
2020-02-15 01:52:41,374 INFO org.apache.hadoop.mapreduce.Job (main): map 61% reduce 0%
2020-02-15 01:52:46,391 INFO org.apache.hadoop.mapreduce.Job (main): map 62% reduce 0%
2020-02-15 01:52:49,400 INFO org.apache.hadoop.mapreduce.Job (main): map 63% reduce 0%
2020-02-15 01:52:52,410 INFO org.apache.hadoop.mapreduce.Job (main): map 66% reduce 0%
2020-02-15 01:52:53,414 INFO org.apache.hadoop.mapreduce.Job (main): map 69% reduce 0%
2020-02-15 01:52:55,421 INFO org.apache.hadoop.mapreduce.Job (main): map 70% reduce 0%
2020-02-15 01:52:56,424 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 75% reduce 0%
2020-02-15 01:52:57,426 INFO org.apache.hadoop.mapreduce.Job (main): map 75% reduce 6%
```

```
2020-02-15 01:52:58,429 INFO org.apache.hadoop.mapreduce.Job (main): map 82% reduce 8%
2020-02-15 01:52:59,433 INFO org.apache.hadoop.mapreduce.Job (main): map 86% reduce 8%
2020-02-15 01:53:02,441 INFO org.apache.hadoop.mapreduce.Job (main): map 87% reduce 8%
2020-02-15 01:53:03,443 INFO org.apache.hadoop.mapreduce.Job (main): map 87% reduce 9%
2020-02-15 01:53:04,448 INFO org.apache.hadoop.mapreduce.Job (main): map 90% reduce 9%
2020-02-15 01:53:07,456 INFO org.apache.hadoop.mapreduce.Job (main): map 91% reduce 9%
2020-02-15 01:53:08,460 INFO org.apache.hadoop.mapreduce.Job (main): map 93% reduce 11%
2020-02-15 01:53:09,463 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 93% reduce 12%
2020-02-15 01:53:10,466 INFO org.apache.hadoop.mapreduce.Job (main): map 94% reduce 13%
2020-02-15 01:53:11,468 INFO org.apache.hadoop.mapreduce.Job (main): map 95% reduce 13%
2020-02-15 01:53:16,479 INFO org.apache.hadoop.mapreduce.Job (main): map 96% reduce 13%
2020-02-15 01:53:19,486 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 97% reduce 16%
2020-02-15 01:53:21,491 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                     map 98% reduce 16%
2020-02-15 01:53:22,494 INFO org.apache.hadoop.mapreduce.Job (main): map 99% reduce 19%
2020-02-15 01:53:24,499 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 22%
2020-02-15 01:53:26,504 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 28%
2020-02-15 01:53:27,507 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 31%
2020-02-15 01:53:28,510 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 40%
2020-02-15 01:53:30,515 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 44%
2020-02-15 01:53:31,518 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 47%
2020-02-15 01:53:32,520 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 53%
2020-02-15 01:53:33,523 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 58%
2020-02-15 01:53:34,526 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 63%
2020-02-15 01:53:36,531 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 65%
2020-02-15 01:53:37,533 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 68%
2020-02-15 01:53:38,537 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 86%
2020-02-15 01:53:39,540 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 97%
2020-02-15 01:53:40,547 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 98%
2020-02-15 01:53:41,551 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 99%
2020-02-15 01:53:43,557 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-02-15 01:53:43,560 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581731370893 0002 completed successfully
2020-02-15 01:53:43,585 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 57
        File System Counters
                FILE: Number of bytes read=1788326016
               FILE: Number of bytes written=2700957447
               FILE: Number of read operations=0
               FILE: Number of large read operations=0
               FILE: Number of write operations=0
               HDFS: Number of bytes read=1092473593
               HDFS: Number of bytes written=20291544
               HDFS: Number of read operations=115
               HDFS: Number of large read operations=0
               HDFS: Number of write operations=22
               S3: Number of bytes read=1319526205
               S3: Number of bytes written=0
                S3: Number of read operations=0
               S3: Number of large read operations=0
                S3: Number of write operations=0
        Job Counters
               Killed map tasks=2
               Killed reduce tasks=1
               Launched map tasks=34
               Launched reduce tasks=12
               Data-local map tasks=20
               Rack-local map tasks=14
                Total time spent by all maps in occupied slots (ms)=72334176
                Total time spent by all reduces in occupied slots (ms)=82231680
                Total time spent by all map tasks (ms)=753481
               Total time spent by all reduce tasks (ms)=428290
               Total vcore-milliseconds taken by all map tasks=753481
                Total vcore-milliseconds taken by all reduce tasks=428290
                Total megabyte-milliseconds taken by all map tasks=2314693632
                Total megabyte-milliseconds taken by all reduce tasks=2631413760
       Map-Reduce Framework
```

```
Map input records=159029053
                Map output records=147652818
                Map output bytes=2916174874
                Map output materialized bytes=916661949
                Input split bytes=4214
                Combine input records=0
                Combine output records=0
                Reduce input groups=9999
                Reduce shuffle bytes=916661949
                Reduce input records=147652818
                Reduce output records=1560888
                Spilled Records=433927460
                Shuffled Maps =374
                Failed Shuffles=0
                Merged Map outputs=374
                GC time elapsed (ms)=19101
                CPU time spent (ms)=815270
                Physical memory (bytes) snapshot=55166971904
                Virtual memory (bytes) snapshot=238177067008
                Total committed heap usage (bytes)=55252090880
        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=2411995584
        File Output Format Counters
                Bytes Written=20291544
2020-02-15 01:53:43,645 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-79-141.ec2.internal/172.31.79.141:8032
2020-02-15 01:53:43,773 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 11
2020-02-15 01:53:43,816 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:11
2020-02-15 01:53:43,836 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1581731370893 0003
2020-02-15 01:53:43,847 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1581731370893 0003
2020-02-15 01:53:43,864 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-79-141.ec2.internal:20888/proxy/application 1581731370893 0003/
2020-02-15 01:53:43,865 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1581731370893 0003
2020-02-15 01:53:49,989 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581731370893 0003 running in uber mode : false
2020-02-15 01:53:49,990 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-02-15 01:53:58,042 INFO org.apache.hadoop.mapreduce.Job (main): map 18% reduce 0%
2020-02-15 01:53:59,045 INFO org.apache.hadoop.mapreduce.Job (main): map 36% reduce 0%
2020-02-15 01:54:01,053 INFO org.apache.hadoop.mapreduce.Job (main): map 64% reduce 0%
2020-02-15 01:54:03,059 INFO org.apache.hadoop.mapreduce.Job (main): map 73% reduce 0%
2020-02-15 01:54:04,062 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-02-15 01:54:05,065 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 9%
2020-02-15 01:54:06,068 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 55%
2020-02-15 01:54:07,072 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 73%
2020-02-15 01:54:08,074 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 82%
2020-02-15 01:54:10,080 INFO org.apache.hadoop.mapreduce.Job (main):
                                                                      map 100% reduce 91%
2020-02-15 01:54:11,082 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-02-15 01:54:11,092 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581731370893 0003 completed successfully
2020-02-15 01:54:11,115 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 56
        File System Counters
                FILE: Number of bytes read=1111001
                FILE: Number of bytes written=5959616
```

```
FILE: Number of read operations=0
        FILE: Number of large read operations=0
        FILE: Number of write operations=0
        HDFS: Number of bytes read=20293183
        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=0
        S3: Number of bytes written=44
        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
        Launched map tasks=11
        Launched reduce tasks=11
        Data-local map tasks=9
        Rack-local map tasks=2
        Total time spent by all maps in occupied slots (ms)=8832960
        Total time spent by all reduces in occupied slots (ms)=11947584
        Total time spent by all map tasks (ms)=92010
        Total time spent by all reduce tasks (ms)=62227
        Total vcore-milliseconds taken by all map tasks=92010
        Total vcore-milliseconds taken by all reduce tasks=62227
        Total megabyte-milliseconds taken by all map tasks=282654720
        Total megabyte-milliseconds taken by all reduce tasks=382322688
Map-Reduce Framework
        Map input records=1560888
        Map output records=1560888
        Map output bytes=20291544
        Map output materialized bytes=1112749
        Input split bytes=1639
        Combine input records=0
        Combine output records=0
        Reduce input groups=1
        Reduce shuffle bytes=1112749
        Reduce input records=1560888
        Reduce output records=1
        Spilled Records=3121776
        Shuffled Maps =121
        Failed Shuffles=0
        Merged Map outputs=121
        GC time elapsed (ms)=7309
        CPU time spent (ms)=39460
        Physical memory (bytes) snapshot=12904456192
        Virtual memory (bytes) snapshot=131592196096
        Total committed heap usage (bytes)=12528386048
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=20291544
File Output Format Counters
        Bytes Written=44
```