```
2020-02-15 05:55:02,004 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-77-138.ec2.internal/172.31.77.138:8032
2020-02-15 05:55:04,017 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 1
2020-02-15 05:55:04,029 INFO com.hadoop.compression.lzo.GPLNativeCodeLoader (main): Loaded
native gpl library
2020-02-15 05:55:04,032 INFO com.hadoop.compression.lzo.LzoCodec (main): Successfully loaded
& initialized native-lzo library [hadoop-lzo rev 5f788d5e8f90539ee331702c753fa250727128f4]
2020-02-15 05:55:04,397 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:20
2020-02-15 05:55:04,513 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1581746036314_0001
2020-02-15 05:55:05,037 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1581746036314_0001
2020-02-15 05:55:05,135 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-77-138.ec2.internal:20888/proxy/application_1581746036314_0001/
2020-02-15 05:55:05,136 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1581746036314 0001
2020-02-15 05:55:11,215 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581746036314_0001 running in uber mode : false
2020-02-15 05:55:11,216 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-02-15 05:55:23,312 INFO org.apache.hadoop.mapreduce.Job (main): map 10% reduce 0%
2020-02-15 05:55:24,315 INFO org.apache.hadoop.mapreduce.Job (main): map 30% reduce 0%
2020-02-15 05:55:25,319 INFO org.apache.hadoop.mapreduce.Job (main): map 40% reduce 0%
2020-02-15 05:55:31,338 INFO org.apache.hadoop.mapreduce.Job (main): map 45% reduce 0%
2020-02-15 05:55:32,342 INFO org.apache.hadoop.mapreduce.Job (main): map 64% reduce 0%
2020-02-15 05:55:33,346 INFO org.apache.hadoop.mapreduce.Job (main): map 95% reduce 0%
2020-02-15 05:55:34,349 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 15%
2020-02-15 05:55:35,352 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 54%
2020-02-15 05:55:36,356 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 62%
2020-02-15 05:55:37,358 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 77%
2020-02-15 05:55:38,361 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-02-15 05:55:38,366 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581746036314 0001 completed successfully
2020-02-15 05:55:38,451 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 55
        File System Counters
                FILE: Number of bytes read=38608
                FILE: Number of bytes written=5691176
                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=4451828
                HDFS: Number of read operations=79
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=26
                S3: Number of bytes read=1319478747
                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
                Launched map tasks=20
                Launched reduce tasks=13
                Data-local map tasks=20
                Total time spent by all maps in occupied slots (ms)=29949888
                Total time spent by all reduces in occupied slots (ms)=15733248
                Total time spent by all map tasks (ms)=311978
                Total time spent by all reduce tasks (ms)=81944
                Total vcore-milliseconds taken by all map tasks=311978
                Total vcore-milliseconds taken by all reduce tasks=81944
                Total megabyte-milliseconds taken by all map tasks=958396416
                Total megabyte-milliseconds taken by all reduce tasks=503463936
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Map-Reduce Framework
               Map input records=85331845
               Map output records=5680
               Map output bytes=63486
               Map output materialized bytes=46726
                Input split bytes=2240
                Combine input records=0
                Combine output records=0
               Reduce input groups=999
               Reduce shuffle bytes=46726
               Reduce input records=5680
               Reduce output records=402114
                Spilled Records=11360
                Shuffled Maps =260
               Failed Shuffles=0
               Merged Map outputs=260
               GC time elapsed (ms)=10731
               CPU time spent (ms)=247910
               Physical memory (bytes) snapshot=26930008064
               Virtual memory (bytes) snapshot=187635200000
                Total committed heap usage (bytes)=27379892224
        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=1319478747
       File Output Format Counters
                Bytes Written=4451828
2020-02-15 05:55:38,497 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-77-138.ec2.internal/172.31.77.138:8032
2020-02-15 05:55:38,716 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
Total input files to process: 14
2020-02-15 05:55:38,785 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:33
2020-02-15 05:55:38,818 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job 1581746036314 0002
2020-02-15 05:55:38,847 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application 1581746036314 0002
2020-02-15 05:55:38,861 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-77-138.ec2.internal:20888/proxy/application 1581746036314 0002/
2020-02-15 05:55:38,861 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1581746036314 0002
2020-02-15 05:55:43,916 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581746036314 0002 running in uber mode : false
2020-02-15 05:55:43,916 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-02-15 05:55:53,969 INFO org.apache.hadoop.mapreduce.Job (main): map 12% reduce 0%
2020-02-15 05:55:54,978 INFO org.apache.hadoop.mapreduce.Job (main): map 15% reduce 0%
2020-02-15 05:55:55,981 INFO org.apache.hadoop.mapreduce.Job (main): map 24% reduce 0%
2020-02-15 05:55:59,996 INFO org.apache.hadoop.mapreduce.Job (main): map 27% reduce 0%
2020-02-15 05:56:01,002 INFO org.apache.hadoop.mapreduce.Job (main): map 42% reduce 0%
2020-02-15 05:56:02,005 INFO org.apache.hadoop.mapreduce.Job (main): map 45% reduce 0%
2020-02-15 05:56:03,009 INFO org.apache.hadoop.mapreduce.Job (main): map 56% reduce 0%
2020-02-15 05:56:04,013 INFO org.apache.hadoop.mapreduce.Job (main): map 94% reduce 0%
2020-02-15 05:56:06,019 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-02-15 05:56:07,030 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 8%
2020-02-15 05:56:08,035 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 46%
2020-02-15 05:56:09,038 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 92%
2020-02-15 05:56:10,040 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-02-15 05:56:10,045 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581746036314 0002 completed successfully
2020-02-15 05:56:10,070 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 56
```

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File System Counters
                FILE: Number of bytes read=4312152
                FILE: Number of bytes written=16415314
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=4455901
                HDFS: Number of bytes written=42861
                HDFS: Number of read operations=118
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=26
                S3: Number of bytes read=1319513061
                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
                Launched map tasks=33
                Launched reduce tasks=13
                Data-local map tasks=20
                Rack-local map tasks=13
                Total time spent by all maps in occupied slots (ms)=38070720
                Total time spent by all reduces in occupied slots (ms)=11844288
                Total time spent by all map tasks (ms)=396570
                Total time spent by all reduce tasks (ms)=61689
                Total vcore-milliseconds taken by all map tasks=396570
                Total vcore-milliseconds taken by all reduce tasks=61689
                Total megabyte-milliseconds taken by all map tasks=1218263040
                Total megabyte-milliseconds taken by all reduce tasks=379017216
        Map-Reduce Framework
                Map input records=85733959
                Map output records=809908
                Map output bytes=12125611
                Map output materialized bytes=4284404
                Input split bytes=4073
                Combine input records=0
                Combine output records=0
                Reduce input groups=999
                Reduce shuffle bytes=4284404
                Reduce input records=809908
                Reduce output records=3297
                Spilled Records=1619816
                Shuffled Maps =429
                Failed Shuffles=0
                Merged Map outputs=429
                GC time elapsed (ms)=12583
                CPU time spent (ms)=263150
                Physical memory (bytes) snapshot=31122657280
                Virtual memory (bytes) snapshot=247682895872
                Total committed heap usage (bytes)=31520718848
        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=1323964889
        File Output Format Counters
                Bytes Written=42861
2020-02-15 05:56:10,123 INFO org.apache.hadoop.yarn.client.RMProxy (main): Connecting to
ResourceManager at ip-172-31-77-138.ec2.internal/172.31.77.138:8032
2020-02-15 05:56:10,242 INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat (main):
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Total input files to process: 13
2020-02-15 05:56:10,296 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): number of
splits:13
2020-02-15 05:56:10,317 INFO org.apache.hadoop.mapreduce.JobSubmitter (main): Submitting
tokens for job: job_1581746036314_0003
2020-02-15 05:56:10,332 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl (main):
Submitted application application_1581746036314_0003
2020-02-15 05:56:10,341 INFO org.apache.hadoop.mapreduce.Job (main): The url to track the
job: http://ip-172-31-77-138.ec2.internal:20888/proxy/application 1581746036314 0003/
2020-02-15 05:56:10,341 INFO org.apache.hadoop.mapreduce.Job (main): Running job:
job 1581746036314 0003
2020-02-15 05:56:16,503 INFO org.apache.hadoop.mapreduce.Job (main): Job
job_1581746036314_0003 running in uber mode : false
2020-02-15 05:56:16,504 INFO org.apache.hadoop.mapreduce.Job (main): map 0% reduce 0%
2020-02-15 05:56:24,562 INFO org.apache.hadoop.mapreduce.Job (main): map 15% reduce 0%
2020-02-15 05:56:26,569 INFO org.apache.hadoop.mapreduce.Job (main): map 38% reduce 0%
2020-02-15 05:56:28,576 INFO org.apache.hadoop.mapreduce.Job (main): map 77% reduce 0%
2020-02-15 05:56:29,579 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 0%
2020-02-15 05:56:30,582 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 8%
2020-02-15 05:56:32,588 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 54%
2020-02-15 05:56:33,591 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 69%
2020-02-15 05:56:35,597 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 92%
2020-02-15 05:56:36,600 INFO org.apache.hadoop.mapreduce.Job (main): map 100% reduce 100%
2020-02-15 05:56:37,606 INFO org.apache.hadoop.mapreduce.Job (main): Job
job 1581746036314 0003 completed successfully
2020-02-15 05:56:37,628 INFO org.apache.hadoop.mapreduce.Job (main): Counters: 56
       File System Counters
               FILE: Number of bytes read=2613
               FILE: Number of bytes written=4423585
               FILE: Number of read operations=0
               FILE: Number of large read operations=0
               FILE: Number of write operations=0
               HDFS: Number of bytes read=44798
               HDFS: Number of bytes written=0
               HDFS: Number of read operations=26
               HDFS: Number of large read operations=0
               HDFS: Number of write operations=0
               S3: Number of bytes read=0
                S3: Number of bytes written=42
               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=13
               Launched reduce tasks=13
               Data-local map tasks=9
               Rack-local map tasks=4
                Total time spent by all maps in occupied slots (ms)=10801728
                Total time spent by all reduces in occupied slots (ms)=14115264
                Total time spent by all map tasks (ms)=112518
                Total time spent by all reduce tasks (ms)=73517
               Total vcore-milliseconds taken by all map tasks=112518
                Total vcore-milliseconds taken by all reduce tasks=73517
                Total megabyte-milliseconds taken by all map tasks=345655296
                Total megabyte-milliseconds taken by all reduce tasks=451688448
       Map-Reduce Framework
               Map input records=3297
               Map output records=3297
               Map output bytes=42861
               Map output materialized bytes=5252
                Input split bytes=1937
                Combine input records=0
                Combine output records=0
               Reduce input groups=1
```

Reduce shuffle bytes=5252 Reduce input records=3297 Reduce output records=1 Spilled Records=6594 Shuffled Maps =169 Failed Shuffles=0 Merged Map outputs=169 GC time elapsed (ms)=7487CPU time spent (ms)=32050 Physical memory (bytes) snapshot=13913632768 Virtual memory (bytes) snapshot=155680055296 Total committed heap usage (bytes)=13334740992 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=42861 File Output Format Counters Bytes Written=42