Запустила map-reduce задачи для кластера используя
hadoop-mapreduce-examples.jar с параметрами:


```
[student4_1@manager ~]$ export YARN_EXAMPLES=/opt/cloudera/parcels/CDH-5.16.2-1.cdh5.1
6.2.p0.8/lib/hadoop-mapreduce
[student4_1@manager ~]$ yarn jar $YARN_EXAMPLES/hadoop-mapreduce-examples.jar  pi 32 2
0000
```

Лог выполнения:

```
Number of Maps  = 32
Samples per Map = 20000
Wrote input for Map #0
Wrote input for Map #1
Wrote input for Map #2
Wrote input for Map #3
Wrote input for Map #4
Wrote input for Map #5
Wrote input for Map #6
Wrote input for Map #7
Wrote input for Map #8
Wrote input for Map #9
Wrote input for Map #10
Wrote input for Map #11
Wrote input for Map #12
Wrote input for Map #13
Wrote input for Map #14
Wrote input for Map #15
Wrote input for Map #16
Wrote input for Map #17
Wrote input for Map #18
Wrote input for Map #19
Wrote input for Map #20
Wrote input for Map #21
Wrote input for Map #22
Wrote input for Map #23
Wrote input for Map #24
Wrote input for Map #25
Wrote input for Map #26
Wrote input for Map #27
Wrote input for Map #28
Wrote input for Map #29
Wrote input for Map #30
Wrote input for Map #31
Starting Job
20/06/10 13:39:08 INFO client.RMProxy: Connecting to ResourceManager at manager.novalocal/89.208.221.132:8032
20/06/10 13:39:08 INFO input.FileInputFormat: Total input paths to process : 32
20/06/10 13:39:09 INFO mapreduce.JobSubmitter: number of splits:32
20/06/10 13:39:09 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1589223973966_0187
20/06/10 13:39:09 INFO impl.YarnClientImpl: Submitted application application_1589223973966_0187
20/06/10 13:39:09 INFO mapreduce.Job: The url to track the job: http://manager.novalocal:8088/proxy/
application_1589223973966_0187/
20/06/10 13:39:09 INFO mapreduce.Job: Running job: job_1589223973966_0187
20/06/10 13:39:16 INFO mapreduce.Job: Job job_1589223973966_0187 running in uber mode : false
20/06/10 13:39:16 INFO mapreduce.Job:  map 0% reduce 0%
20/06/10 13:39:23 INFO mapreduce.Job:  map 3% reduce 0%
20/06/10 13:39:25 INFO mapreduce.Job:  map 6% reduce 0%
20/06/10 13:39:27 INFO mapreduce.Job:  map 9% reduce 0%
20/06/10 13:39:31 INFO mapreduce.Job:  map 13% reduce 0%
20/06/10 13:39:36 INFO mapreduce.Job:  map 16% reduce 0%
20/06/10 13:39:39 INFO mapreduce.Job:  map 19% reduce 0%
20/06/10 13:39:41 INFO mapreduce.Job:  map 22% reduce 0%
20/06/10 13:39:43 INFO mapreduce.Job:  map 25% reduce 0%
20/06/10 13:39:45 INFO mapreduce.Job:  map 28% reduce 0%
20/06/10 13:39:47 INFO mapreduce.Job:  map 31% reduce 0%
20/06/10 13:39:51 INFO mapreduce.Job:  map 34% reduce 0%
20/06/10 13:39:52 INFO mapreduce.Job:  map 38% reduce 0%
20/06/10 13:39:55 INFO mapreduce.Job:  map 41% reduce 0%
20/06/10 13:39:56 INFO mapreduce.Job:  map 44% reduce 0%
20/06/10 13:39:59 INFO mapreduce.Job:  map 47% reduce 0%
20/06/10 13:40:00 INFO mapreduce.Job:  map 50% reduce 0%
20/06/10 13:40:03 INFO mapreduce.Job:  map 53% reduce 0%
20/06/10 13:40:04 INFO mapreduce.Job:  map 56% reduce 0%
20/06/10 13:40:07 INFO mapreduce.Job:  map 59% reduce 0%
20/06/10 13:40:08 INFO mapreduce.Job:  map 63% reduce 0%
20/06/10 13:40:11 INFO mapreduce.Job:  map 66% reduce 0%
20/06/10 13:40:12 INFO mapreduce.Job:  map 69% reduce 0%
20/06/10 13:40:15 INFO mapreduce.Job:  map 72% reduce 0%
20/06/10 13:40:18 INFO mapreduce.Job:  map 75% reduce 0%
20/06/10 13:40:20 INFO mapreduce.Job:  map 78% reduce 0%
20/06/10 13:40:22 INFO mapreduce.Job:  map 81% reduce 0%
20/06/10 13:40:25 INFO mapreduce.Job:  map 84% reduce 0%
20/06/10 13:40:26 INFO mapreduce.Job:  map 88% reduce 0%
20/06/10 13:40:30 INFO mapreduce.Job:  map 91% reduce 0%
20/06/10 13:40:34 INFO mapreduce.Job:  map 94% reduce 0%
20/06/10 13:40:38 INFO mapreduce.Job:  map 97% reduce 0%
20/06/10 13:40:41 INFO mapreduce.Job:  map 97% reduce 32%
20/06/10 13:40:42 INFO mapreduce.Job:  map 100% reduce 32%
20/06/10 13:40:45 INFO mapreduce.Job:  map 100% reduce 100%
20/06/10 13:40:46 INFO mapreduce.Job: Job job_1589223973966_0187 completed successfully
20/06/10 13:40:46 INFO mapreduce.Job: Counters: 49
        File System Counters
```

```
                FILE: Number of bytes read=265
                FILE: Number of bytes written=4945313
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=8886
                HDFS: Number of bytes written=215
                HDFS: Number of read operations=131
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=3
        Job Counters
                Launched map tasks=32
                Launched reduce tasks=1
                Data-local map tasks=32
                Total time spent by all maps in occupied slots (ms)=114445
                Total time spent by all reduces in occupied slots (ms)=18833
                Total time spent by all map tasks (ms)=114445
                Total time spent by all reduce tasks (ms)=18833
                Total vcore-milliseconds taken by all map tasks=114445
                Total vcore-milliseconds taken by all reduce tasks=18833
                Total megabyte-milliseconds taken by all map tasks=117191680
                Total megabyte-milliseconds taken by all reduce tasks=19284992
        Map-Reduce Framework
                Map input records=32
                Map output records=64
                Map output bytes=576
                Map output materialized bytes=1120
                Input split bytes=5110
                Combine input records=0
                Combine output records=0
                Reduce input groups=2
                Reduce shuffle bytes=1120
                Reduce input records=64
                Reduce output records=0
                Spilled Records=128
                Shuffled Maps =32
                Failed Shuffles=0
                Merged Map outputs=32
                GC time elapsed (ms)=3886
                CPU time spent (ms)=26930
                Physical memory (bytes) snapshot=15257247744
                Virtual memory (bytes) snapshot=92168302592
                Total committed heap usage (bytes)=15680405504
        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=3776
        File Output Format Counters
                Bytes Written=97
Job Finished in 98.443 seconds
Estimated value of Pi is 3.14153125000000000000
```

Отображение выполнения задачи в Cloudera Manager: