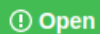


Infinite Loop in spark #4448



zhangjunqiang opened this issue on 25 Dec 2017 · 12 comments



zhangjunqiang commented on 25 Dec 2017 • edited



Issue Description

Recently, I got a problem with dl4j on spark on yarn.

After several epoch (it is random) , a worknode on yarn will enter a infinite loop. like this:

```
org.bytedeco.javacpp.openblas.cblas_sgemm(Native Method)
org.nd4j.linalg.cpu.nativecpu.blas.CpuLevel3.sgemm(CpuLevel3.java:38)
org.nd4j.linalg.api.blas.impl.BaseLevel3.gemm(BaseLevel3.java:84)
org.nd4j.linalg.factory.Nd4j.gemm(Nd4j.java:930)
org.deeplearning4j.nn.layers.recurrent.LSTMHelpers.backpropGradientHelper(LSTMHelpers.java:624)
org.deeplearning4j.nn.layers.recurrent.GruvotSTM.backpropGradientHelper(GruvotSTM.java:102)
org.deeplearning4j.spark.api.worker.ExecuteWorkerPathFlatMapAdapter.call(ExecuteWorkerPathFlatMapAdapter.java:38)
org.datavec.spark.transform.BaseFlatMapFunctionAdaptee.call(BaseFlatMapFunctionAdaptee.java:24)
org.apache.spark.api.java.JavaRDDLike$$anonfun$fn$4$1.apply(JavaRDDLike.scala:153)
org.apache.spark.api.java.JavaRDDLike$$anonfun$fn$4$1.apply(JavaRDDLike.scala:153)
org.apache.spark.rdd.RDD$$anonfun$mapPartitions$1$$anonfun$apply$23.apply(RDD.scala:797)
org.apache.spark.rdd.RDD$$anonfun$mapPartitions$1$$anonfun$apply$23.apply(RDD.scala:797)
org.apache.spark.rdd.MapPartitionsRDD.compute(MapPartitionsRDD.scala:38)
org.apache.spark.rdd.RDD.computeOrReadCheckpoint(RDD.scala:323)
org.apache.spark.rdd.RDD.iterator(RDD.scala:287)
org.apache.spark.rdd.MapPartitionsRDD.compute(MapPartitionsRDD.scala:38)
org.apache.spark.rdd.RDD.computeOrReadCheckpoint(RDD.scala:323)
org.apache.spark.rdd.RDD.iterator(RDD.scala:287)
org.apache.spark.rdd.MapPartitionsRDD.compute(MapPartitionsRDD.scala:38)
org.apache.spark.rdd.RDD.computeOrReadCheckpoint(RDD.scala:323)
org.apache.spark.rdd.RDD.iterator(RDD.scala:287)
org.apache.spark.scheduler.ShuffleMapTask.runTask(ShuffleMapTask.scala:96)
org.apache.spark.scheduler.ShuffleMapTask.runTask(ShuffleMapTask.scala:53)
org.apache.spark.scheduler.Task.run(Task.scala:108)
org.apache.spark.executor.Executor$TaskRunner.run(Executor.scala:335)
java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1142)
java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:617)
```

I don't know what's wrong with my code, Can anyone help me?

Version Information

- Spark Version : 2.2.0
- Spark On Yarn
- My dependency:

```
<dependency>
<groupId>org.deeplearning4j</groupId>
<artifactId>dl4j-spark_2.11</artifactId>
<version>0.9.1_spark_2</version>
</dependency>
```
- Platform:Linux

My Code

```
val lstmLayerSize = 128 val networkConfig = new NeuralNetConfiguration.Builder()
.optimizationAlgo(OptimizationAlgorithm.STOCHASTIC_GRADIENT_DESCENT)
.iterations(1).learningRate(0.001).seed(12345).weightInit(WeightInit.XAVIER)
```

工程中触发了这个 bug，目前处于 wonnot fix 状态

<https://github.com/deeplearning4j/deeplearning4j/issues?utf8=%E2%9C%93&q=label%3A%22Won%27t+Fix%22+>

Filters







label:"Won't Fix"

Labels

Milestones

New issue

Clear current search query, filters, and sorts

2 Open	22 Closed	Author	Labels	Projects	Milestones	Assignee	Sort
 Loading gensim model Won't Fix	6						
#5449 by tvanh was closed on 4 Jun							
 ND4J: linearViewColumnOrder return wrong shape Bug ND4J Won't Fix	2						
#5294 by fralc was closed on 3 Jul							
 H5 field import error on SqueezeNet Bug DL4J Zoo Won't Fix	5						
#5004 by crockpotveggies was closed on 12 May							
 Keras import DL4J Keras Enhancement Epic Java Won't Fix	1						
#4991 opened on 27 Apr by raver119							
 Invalid input name exception in TransferLearningHelper Won't Fix	4						
#4933 by ospavel was closed on 20 Apr							
 Infinite Loop in spark Won't Fix	12						
#4448 opened on 25 Dec 2017 by zhangjunqiang							

deep4j 框架存在某些问题，等待比较稳定的版本之后再使用为好...