

Program to implement wordcount using PIG

Commands :

A = load '/pig_data/test.txt';

B = foreach A generate flatten(TOKENIZE((chararray)\$0)) as word;

C = group B by word;

D = foreach C generate group, COUNT(B);

dump D;

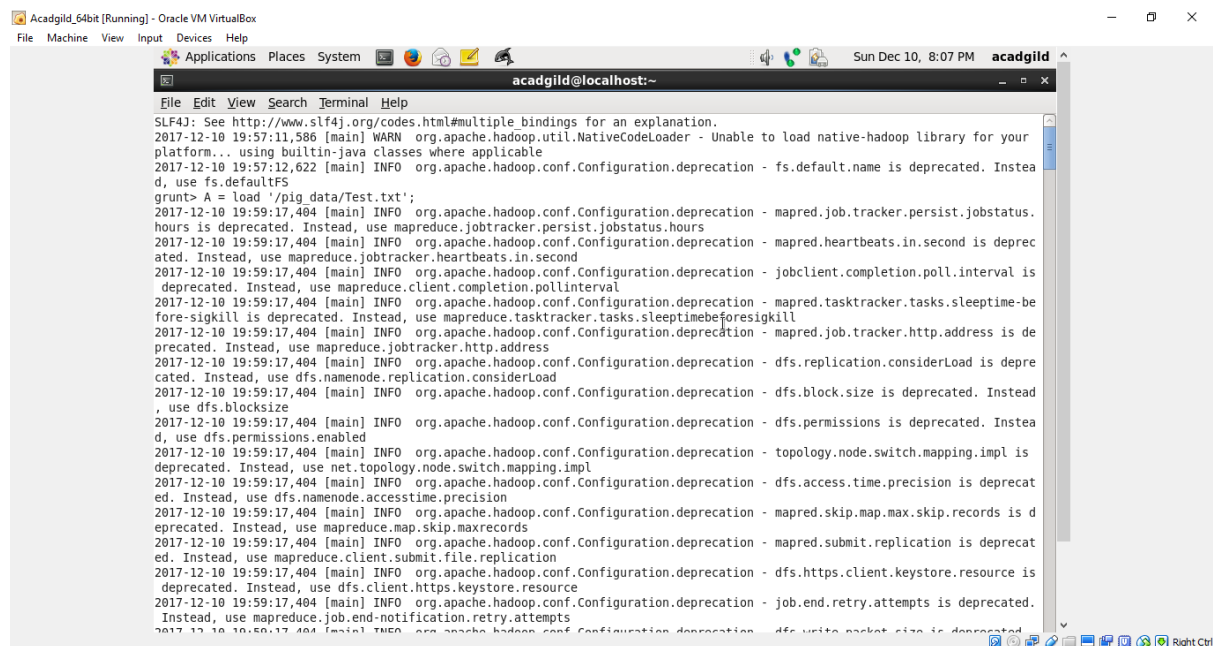
Content of input file :

Sample file to demonstrate word count program in pig

Sample file to demonstrate word count program in pig

Just a sample

Command execution and output:



The screenshot shows a terminal window titled 'Acadgild_64bit [Running] - Oracle VM VirtualBox'. The terminal is running a Pig script. The first command is 'grunt> A = load '/pig_data/Test.txt';'. The output shows a series of deprecation warnings from the Hadoop configuration, such as 'fs.default.name is deprecated' and 'mapred.job.tracker.persist.jobstatus.hours is deprecated'. The second command is 'grunt> B = foreach A generate flatten(TOKENIZE((chararray)\$0)) as word;'. The output shows more deprecation warnings. The third command is 'grunt> C = group B by word;'. The output shows more deprecation warnings. The fourth command is 'grunt> D = foreach C generate group, COUNT(B);'. The output shows more deprecation warnings. The final command is 'grunt> dump D;'. The output shows the result of the word count, which is a list of words and their counts, such as 'a 1', 'b 1', 'c 1', etc.

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Acadgild_64bit [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
ecated. Instead, use mapreduce.tasktracker.local.dir.minspacekil
grunt> B = foreach A generate flatten(TOKENIZE ((chararray$0)) as word;
grunt> C = group B by word;
grunt> D = foreach C generate group, COUNT(B);
grunt> dump D;
2017-12-10 20:02:19,839 [main] INFO org.apache.pig.tools.pigstats.ScriptState - Pig features used in the script: GROUP BY
2017-12-10 20:02:19,912 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instea
d, use fs.defaultFS
2017-12-10 20:02:19,918 [main] INFO org.apache.pig.data.SchemaTupleBackend - Key [pig.schematuple] was not set... will not g
enerate code.
2017-12-10 20:02:19,978 [main] INFO org.apache.pig.newplan.logical.optimizer.LogicalPlanOptimizer - {RULES_ENABLED=[AddForEa
ch, ColumnMapKeyPrune, ConstantCalculator, GroupByConstParallelSetter, LimitOptimizer, LoadTypeCastInserter, MergeFilter, Mer
geForEach, PartitionFilterOptimizer, PredicatePushdownOptimizer, PushDownForEachFlatten, PushUpFilter, SplitFilter, StreamTyp
eCastInserter]}
2017-12-10 20:02:20,132 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MRCompiler - File concatena
tion threshold: 100 optimistic? false
2017-12-10 20:02:20,166 [main] INFO org.apache.pig.backend.hadoop.executionengine.util.CombinerOptimizerUtil - Choosing to m
ove algebraic foreach to combiner
2017-12-10 20:02:20,244 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MultiQueryOptimizer - MR pl
an size before optimization: 1
2017-12-10 20:02:20,244 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MultiQueryOptimizer - MR pl
an size after optimization: 1
2017-12-10 20:02:20,300 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instea
d, use fs.defaultFS
2017-12-10 20:02:20,555 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-12-10 20:02:20,712 [main] INFO org.apache.pig.tools.pigstats.mapreduce.MRScriptState - Pig script settings are added to
the job
2017-12-10 20:02:20,719 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.JobControlCompiler - mapred
.job.reduce.markreset.buffer.percent is not set, set to default 0.3
2017-12-10 20:02:20,721 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.JobControlCompiler - Reduce
phase detected, estimating # of required reducers.
2017-12-10 20:02:20,721 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.JobControlCompiler - Using
reducer estimator: org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.InputSizeReducerEstimator
2017-12-10 20:02:20,738 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.InputSizeReducerEstimator -
BytesPerReducer=1000000000 maxReducers=999 totalInputFileSize=122
2017-12-10 20:02:20,743 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.JobControlCompiler - Settin
g Parallelism to 1
2017-12-10 20:02:20,743 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.JobControlCompiler - This j
acadauld@localhost:~ Desktop
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Acadgild_64bit [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
2017-12-10 20:03:08,222 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-12-10 20:03:08,234 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalAp
plicationStatus=SUCCEEDED. Redirecting to job history server
2017-12-10 20:03:08,404 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-12-10 20:03:08,419 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalAp
plicationStatus=SUCCEEDED. Redirecting to job history server
2017-12-10 20:03:08,565 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-12-10 20:03:08,580 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalAp
plicationStatus=SUCCEEDED. Redirecting to job history server
2017-12-10 20:03:08,690 [main] WARN org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Unable
to retrieve job to compute warning aggregation.
2017-12-10 20:03:08,692 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success
!
2017-12-10 20:03:08,742 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instea
d, use fs.defaultFS
2017-12-10 20:03:08,742 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is depre
cated. Instead, use mapreduce.job.counters.max
2017-12-10 20:03:08,743 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated.
Instead, use dfs.bytes-per-checksum
2017-12-10 20:03:08,744 [main] INFO org.apache.pig.data.SchemaTupleBackend - Key [pig.schematuple] was not set... will not g
enerate code.
2017-12-10 20:03:08,803 [main] INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input paths to process : 1
2017-12-10 20:03:08,803 [main] INFO org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to pro
cess : 1
(a,1)
(in,2)
(to,2)
(pig,2)
(Just,1)
(file,2)
(word,2)
(count,2)
(sample,2)
(sample,1)
(program,2)
(demonstrate,2)
grunt>
acadauld@localhost:~ Desktop
```