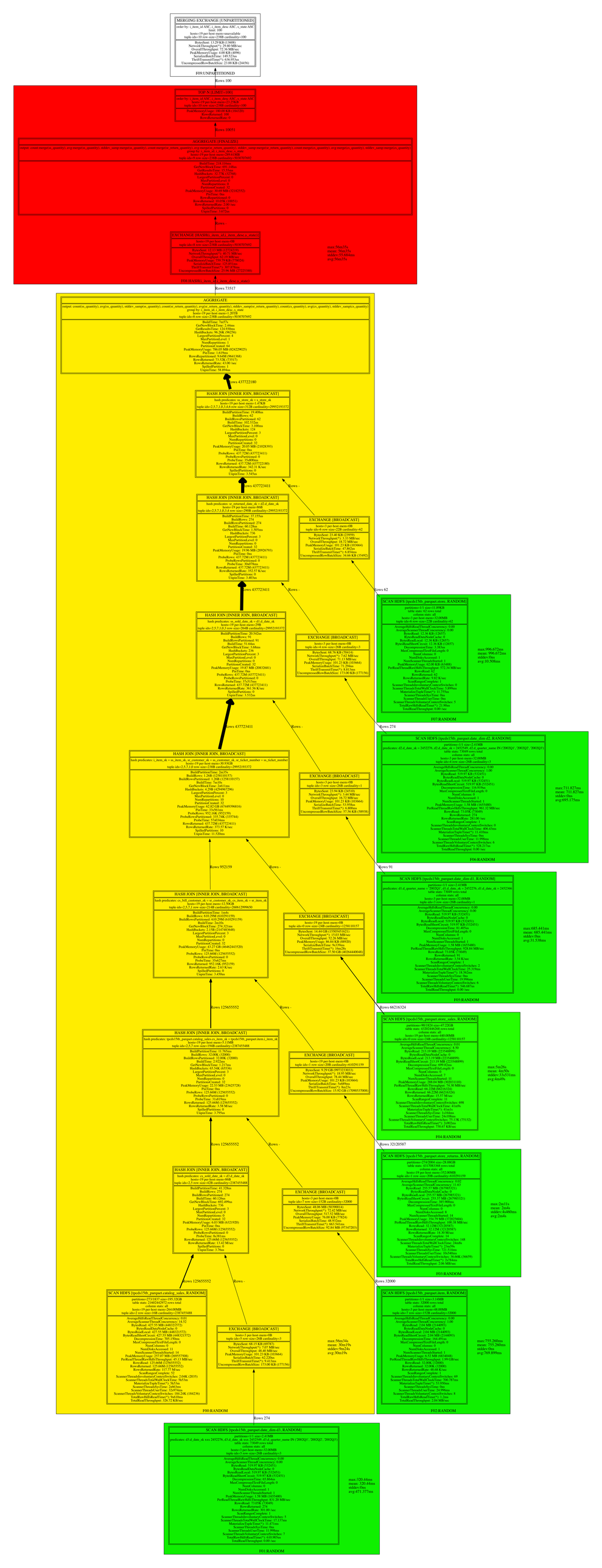
MERGING EXCHANGE [UNPARTITIONED]
order by: i_item_id ASC, i_item_desc ASC, s_state ASC
limit: 100
hosts=19 per host-mem=unavailable
tuple-ids=10 row-size=238B cardinality=100
ByteSent: 1.29 KB (1.969)
NetworkThroughput(*): 29.00 MB/sec
OverallThroughput: 72.36 MB/sec
PeakMemoryUsage: 4.00 KB (4096)
PerHostPeakMem: 4.00 KB
TotalNetworkWaitTime(*): 15.253us
UncompressedRowBatchSize: 20.88 KB (24456)
F09:UNPARTITIONED
Rows 100
TOP-N [LIMIT=100]
order by: i_item_id ASC, i_item_desc ASC, s_state ASC
mem-estimate=2.00MB mem-reservation=2.00MB
tuple-ids=10 row-size=238B cardinality=100
PeakMemoryUsage: 18.05 KB (18482)
PerHostPeakMem: 18.05 KB
RowsReturned/Rate: 0
Rows 10051
AGGREGATE [FINALIZE]
output: count(store_sales.ss_quantity), avg(store_sales.ss_quantity), stddev_samp(store_sales.ss_quantity), count(store_returns.sr_return_quantity), avg(store_returns.sr_return_quantity), stddev_samp(store_returns.sr_return_quantity), count(store_sales.ss_quantity), avg(store_sales.ss_quantity), stddev_samp(store_sales.ss_quantity)
group by: i_item_id, i_item_desc, s_state
hosts=19 per host-mem=1.41MB
tuple-ids=9 row-size=238B cardinality=5030705092
BuildTime: 218.104ms
GetNewBlockTime: 69.148ms
BuildBuckets: 32.77K (32768)
HashBuckets: 32.77K (32768)
LargestPartitionPercent: 0
MaxPartitionLevel: 0
NumRepartitions: 0
PartitionsCreated: 32
PeakMemoryUsage: 30.69 MB (32182532)
PinTime: 0ns
RowsRepartitioned: 0
RowsReturned: 10.05K (10051)
RowsReturnedRate: 0 per sec
SpilledPartitions: 0
UnpinTime: 3.072us
Rows -
EXCHANGE [HASH(i_item_id,i_item_desc,s_state)]
hosts=19 per host-mem=0B
tuple-ids=9 row-size=238B cardinality=5030705092
ByteSent: 12.13 MB (12724192)
NetworkThroughput(*): 40.13 MB/sec
OverallThroughput: 62.19 MB/sec
PeakMemoryUsage: 0 B (0) (PeakMem=0)
TotalNetworkWaitTime: 125.831ms
Thrift TransmitTime(*): 307.878ms
UncompressedRowBatchSize: 28.96 MB (37225588)
max:56m23s
mean: 56m35s
stddev:55.684ms
avg:56m35s
F08:HASH(i_item_id,i_item_desc,s_state)
Rows 73517
AGGREGATE
output: count(cs_quantity), avg(cs_quantity), stddev_samp(cs_quantity), count(sr_return_quantity), avg(sr_return_quantity), stddev_samp(sr_return_quantity), count(cs_quantity), avg(cs_quantity), stddev_samp(cs_quantity)
group by: i_item_id, i_item_desc, s_state
hosts=19 per host-mem=1.20TB
tuple-ids=8 row-size=238B cardinality=5030705092
BuildTime: 5ms57s
GetNewBlockTime: 2.44ms
HashBuckets: 32.77K (32768)
LargestPartitionPercent: 3
MaxPartitionLevel: 1
NumRepartitions: 1
PartitionsCreated: 32
PeakMemoryUsage: 766.65 MB (824229023)
PinTime: 1.413ms
RowsRepartitioned: 9.68M (9613680)
RowsReturned: 73.52K (73517)
RowsReturnedRate: 0 /sec
SpilledPartitions: 4
UnpinTime: 58.894ms
Rows 437722180
HASH JOIN [INNER JOIN, BROADCAST]
hash predicates: sr_item_sk = cs_item_sk
hosts=19 per host-mem=1.47KB
tuple-ids=2,5,7,0,3,4,8 row-size=132B cardinality=29952193372
BuildPartitionTime: 19.408ns
BuildRows: 62
BuildRowsPartitioned: 62
BuildRowsRate: 0 /sec
GetNewBlockTime: 3.208ns
HashBuckets: 124
LargestPartitionPercent: 3
MaxPartitionLevel: 0
NumRepartitions: 0
PartitionsCreated: 32
PeakMemoryUsage: 20.05 MB (21028393)
PinTime: 0ns
ProbeRows: 437.72M (437723411)
ProbeRowsPartitioned: 0
ProbeRowsRate: 0 /sec
RowsReturned: 437.72M (437722180)
RowsReturnedRate: 342.31 K/sec
SpilledPartitions: 0
UnpinTime: 1.547ms
Rows 437723411
Rows -
EXCHANGE [BROADCAST]
hosts=1 per host-mem=0B
tuple-ids=6 row-size=22B cardinality=62
ByteSent: 21.40 KB (21959)
NetworkThroughput(*): 3.33 MB/sec
OverallThroughput: 101.23 KB/sec
PeakMemoryUsage: 101.23 KB (103664)
SerializeBatchTime: 47.862us
ThriftTransmitTime(*): 6.854ms
UncompressedRowBatchSize: 34.66 KB (35492)
Rows 62
SCAN HDFS [tpcds15tb_parquet.store, RANDOM]
partitions=1/1 size=11.89KB
table stats: 62 rows total
column stats: all
hosts=19 per host-mem=32.00MB
tuple-ids=0 row-size=22B cardinality=62
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 0.00
BytesRead: 12.36 KB (12657)
BytesReadDataNodeCache: 0
BytesReadLocal: 12.36 KB (12657)
BytesReadShortCircuit: 12.36 KB (12657)
DecompressionTime: 8.181us
MaxCompressedTextFileLength: 0
NodeCount: 1
NonDataNodeScans: 1
NumDisksAccessed: 1
NumScannerThreadsStarted: 1
PeakMemoryUsage: 34.00 KB (34820)
PerReadThreadRawHdfsThroughput: 572.34 MB/sec
RowsRead: 62
RowsReturned: 62
RowsReturnedRate: 0 /sec
ScanRangesComplete: 1
ScannerThreadsInvoluntaryContextSwitches: 0
ScannerThreadsTotalWallClockTime: 5.899ms
MaterializeTupleTime(*): 11.755us
ScannerThreadsSysTime: 0ns
ScannerThreadsUserTime: 0ns
ScannerThreadsVoluntaryContextSwitches: 5
TotalRawHdfsReadTime(*): 21.00us
TotalReadThroughput: 0.00 /sec
max:996.672us
mean: 990.672us
stddev:0ns
avg:10.508ms
F07:RANDOM
Rows 274
SCAN HDFS [tpcds15tb_parquet.date_dim d2, RANDOM]
partitions=1/1 size=2.45MB
predicates: d2.d_date_sk = 2452276, d2.d_date_sk IS NOT NULL, d2.d_quarter_name IN ('2002Q1', '2002Q2', '2002Q3')
table stats: 73049 rows total
column stats: all
hosts=1 per host-mem=32.00MB
tuple-ids=3 row-size=19B cardinality=3
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 0.00
BytesRead: 519.97 KB (532451)
BytesReadDataNodeCache: 0
BytesReadLocal: 519.97 KB (532451)
BytesReadShortCircuit: 519.97 KB (532451)
DecompressionTime: 81.487us
MaxCompressedTextFileLength: 0
NodeCount: 1
NonDataNodeScans: 1
NumScannerThreadsStarted: 1
PeakMemoryUsage: 33.88 MB (1655488)
PerReadThreadRawHdfsThroughput: 928.84 MB/sec
RowsRead: 73.05K (73049)
RowsReturned: 91
RowsReturnedRate: 0 /sec
ScanRangesComplete: 1
ScannerThreadsInvoluntaryContextSwitches: 2
ScannerThreadsTotalWallClockTime: 406.414ms
MaterializeTupleTime(*): 11.430us
ScannerThreadsSysTime: 0ns
ScannerThreadsUserTime: 1.998ms
ScannerThreadsVoluntaryContextSwitches: 6
TotalRawHdfsReadTime(*): 528.217us
TotalReadThroughput: 0.00 /sec
max:711.827ms
mean: 711.827ms
stddev:0ns
avg:695.175ms
F06:RANDOM
Rows 91
SCAN HDFS [tpcds15tb_parquet.date_dim d1, RANDOM]
partitions=1/1 size=2.45MB
predicates: d1.d_quarter_name = '2002Q1', d1.d_date_sk = 2452366, d1.d_date_sk IS NOT NULL
table stats: 73049 rows total
column stats: all
hosts=1 per host-mem=32.00MB
tuple-ids=1 row-size=19B cardinality=1
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 0.00
BytesRead: 519.97 KB (532451)
BytesReadDataNodeCache: 0
BytesReadLocal: 519.97 KB (532451)
BytesReadShortCircuit: 519.97 KB (532451)
DecompressionTime: 81.487us
MaxCompressedTextFileLength: 0
NodeCount: 1
NonDataNodeScans: 1
NumScannerThreadsStarted: 1
PeakMemoryUsage: 33.88 MB (1655488)
PerReadThreadRawHdfsThroughput: 928.84 MB/sec
RowsRead: 73.05K (73049)
RowsReturned: 91
RowsReturnedRate: 0 /sec
ScanRangesComplete: 1
ScannerThreadsInvoluntaryContextSwitches: 2
ScannerThreadsTotalWallClockTime: 406.414ms
MaterializeTupleTime(*): 18.562ms
ScannerThreadsSysTime: 0ns
ScannerThreadsUserTime: 19.996ms
ScannerThreadsVoluntaryContextSwitches: 6
TotalRawHdfsReadTime(*): 540.687us
TotalReadThroughput: 0.00 /sec
max:685.441ms
mean: 685.441ms
stddev:0ns
avg:31.538ms
F05:RANDOM
Rows 66216324
SCAN HDFS [tpcds15tb_parquet.store_sales, RANDOM]
partitions=901824 size=477.22GB
table stats: 8352164628 rows total
column stats: all
hosts=19 per host-mem=32.00MB
tuple-ids=0 row-size=20B cardinality=2785135527
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 8.50
BytesRead: 213.19 MB (223548899)
BytesReadDataNodeCache: 0
BytesReadLocal: 211.19 MB (221448899)
BytesReadShortCircuit: 211.19 MB (221448899)
DecompressionTime: 1.212ms
MaxCompressedTextFileLength: 0
NodeCount: 19
NonDataNodeScans: 0
NumScannerThreadsStarted: 19
PeakMemoryUsage: 384.75 MB (403468492)
PerReadThreadRawHdfsThroughput: 1.74 GB/sec
RowsRead: 66.22M (66216324)
RowsReturned: 66.22M (66216324)
RowsReturnedRate: 15.67 M/sec
ScanRangesComplete: 1
ScannerThreadsInvoluntaryContextSwitches: 698
ScannerThreadsTotalWallClockTime: 4.16s
MaterializeTupleTime(*): 414ms
ScannerThreadsSysTime: 1s160ms
ScannerThreadsVoluntaryContextSwitches: 6
ScannerThreadsUserTime: 6m26s 75.13K (75132)
TotalRawHdfsReadTime(*): 2.092ms
TotalReadThroughput: 758.67 KB/sec
max:5m26s
mean: 4m30s
stddev:33s513ms
avg:4m49s
F04:RANDOM
Rows 32120587
SCAN HDFS [tpcds15tb_parquet.store_returns, RANDOM]
partitions=274/2004 size=28.88GB
table stats: 833306368 rows total
column stats: all
hosts=19 per host-mem=357.00MB
tuple-ids=11 row-size=20B cardinality=455029159
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 11.63
BytesRead: 5.42 MB (5683200)
BytesReadDataNodeCache: 0
BytesReadLocal: 255.57 MB (267983321)
BytesReadShortCircuit: 255.57 MB (267983321)
DecompressionTime: 367.980us
MaxCompressedTextFileLength: 0
NodeCount: 19
NonDataNodeScans: 0
NumScannerThreadsStarted: 19
PeakMemoryUsage: 354.79 MB (372025604)
PerReadThreadRawHdfsThroughput: 1.34 GB/sec
RowsRead: 32.12M (32120587)
RowsReturned: 32.12M (32120587)
RowsReturnedRate: 31.50 M/sec
ScanRangesComplete: 53
ScannerThreadsInvoluntaryContextSwitches: 148
ScannerThreadsTotalWallClockTime: 3.04s
MaterializeTupleTime(*): 23ms59s
ScannerThreadsSysTime: 721.111ms
ScannerThreadsUserTime: 10s540ms
ScannerThreadsVoluntaryContextSwitches: 1,068
TotalRawHdfsReadTime(*): 2.676ms
TotalReadThroughput: 2.06 MB/sec
max:2611s
mean: 2m44s
stddev:4s460ms
avg:2m6s
F03:RANDOM
Rows 32000
SCAN HDFS [tpcds15tb_parquet.item, RANDOM]
partitions=1/1 size=3.14MB
table stats: 32000 rows total
column stats: all
hosts=1 per host-mem=48.00MB
tuple-ids=7 row-size=132B cardinality=32000
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 1.00
BytesRead: 2.04 MB (2144093)
BytesReadDataNodeCache: 0
BytesReadLocal: 2.04 MB (2144093)
BytesReadShortCircuit: 2.04 MB (2144093)
DecompressionTime: 184.491us
MaxCompressedTextFileLength: 0
NodeCount: 1
NonDataNodeScans: 1
NumScannerThreadsStarted: 1
PeakMemoryUsage: 6.52 MB (6834048)
PerReadThreadRawHdfsThroughput: 1.99 GB/sec
RowsRead: 32.00K (32000)
RowsReturned: 32.00K (32000)
RowsReturnedRate: 48.08 K/sec
ScanRangesComplete: 1
ScannerThreadsInvoluntaryContextSwitches: 69
ScannerThreadsTotalWallClockTime: 701.787ms
MaterializeTupleTime(*): 53.959ms
ScannerThreadsSysTime: 0ns
ScannerThreadsUserTime: 24.998ms
ScannerThreadsVoluntaryContextSwitches: 8
TotalRawHdfsReadTime(*): 1.05ms
TotalReadThroughput: 2.04 MB/sec
max:755.200ms
mean: 755.200ms
stddev:0ns
avg:769.899ms
F02:RANDOM
Rows 125655552
Rows -
HASH JOIN [INNER JOIN, BROADCAST]
hash predicates: cs_sold_date_sk = d3.d_date_sk
hosts=19 per host-mem=3.11MB
tuple-ids=2,5 row-size=42B cardinality=2387455488
BuildPartitionTime: 41.328us
BuildRows: 274
BuildRowsPartitioned: 274
BuildRowsRate: 0 /sec
GetNewBlockTime: 692.499ns
HashBuckets: 1.02K (1024)
LargestPartitionPercent: 3
MaxPartitionLevel: 0
NumRepartitions: 0
PartitionsCreated: 32
PeakMemoryUsage: 1.38 MB (1431920)
PinTime: 0ns
ProbeRows: 125.66M (125655552)
ProbeRowsPartitioned: 0
ProbeRowsRate: 0 /sec
RowsReturned: 125.66M (125655552)
RowsReturnedRate: 3.58 M/sec
SpilledPartitions: 0
UnpinTime: 3.76us
Rows 125655552
Rows -
EXCHANGE [BROADCAST]
hosts=1 per host-mem=0B
tuple-ids=3 row-size=32B cardinality=32000
ByteSent: 48.06 MB (50390016)
NetworkThroughput(*): 21.82 MB/sec
OverallThroughput: 76.00 MB/sec
PeakMemoryUsage: 56.00 KB (57424)
SerializeBatchTime: 48.932ms
ThriftTransmitTime(*): 683.341ms
UncompressedRowBatchSize: 92.84 MB (97347203)
Rows 32000
SCAN HDFS [tpcds15tb_parquet.catalog_sales, RANDOM]
partitions=2753/1837 size=895.32GB
table stats: 2160324972 rows total
column stats: all
hosts=19 per host-mem=384.00MB
tuple-ids=2 row-size=16B cardinality=2387455488
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 14.52
BytesRead: 1.43 GB (1534955152)
BytesReadDataNodeCache: 0
BytesReadLocal: 427.55 MB (448321572)
BytesReadShortCircuit: 427.55 MB (448321572)
DecompressionTime: 705.150ms
MaxCompressedTextFileLength: 0
NodeCount: 19
NonDataNodeScans: 11
NumScannerThreadsStarted: 19
PeakMemoryUsage: 257.07 MB (269557508)
PerReadThreadRawHdfsThroughput: 1.03 MB/sec
RowsRead: 125.66M (125655552)
RowsReturned: 125.66M (125655552)
RowsReturnedRate: 317.77 M/sec
ScanRangesComplete: 52
ScannerThreadsInvoluntaryContextSwitches: 2,048 (2035)
ScannerThreadsTotalWallClockTime: 5h53m
MaterializeTupleTime(*): 3h53m
ScannerThreadsSysTime: 2m6.96s
ScannerThreadsUserTime: 32m774ms
ScannerThreadsVoluntaryContextSwitches: 1,184 (184236)
TotalRawHdfsReadTime(*): 9m419ms
TotalReadThroughput: 526.72 KB/sec
F00:RANDOM
Rows 274
EXCHANGE [BROADCAST]
hosts=3 per host-mem=0B
tuple-ids=5 row-size=28B cardinality=3
NetworkThroughput(*): 7.07 MB/sec
OverallThroughput: 10.23 KB/sec
PeakMemoryUsage: 10.23 KB (10464)
SerializeBatchTime: 62.226us
ThriftTransmitTime(*): 9.43 ms
UncompressedRowBatchSize: 173.00 B (177156)
max:56m34s
mean: 30m19s
stddev:9m24s
avg:30m19s
SCAN HDFS [tpcds15tb_parquet.date_dim d3, RANDOM]
partitions=1/1 size=2.45MB
predicates: d3.d_date_sk IS NOT NULL, d3.d_date_sk = 2452365, d3.d_quarter_name IN ('2002Q1', '2002Q2', '2002Q3')
table stats: 73049 rows total
column stats: all
hosts=1 per host-mem=32.00MB
tuple-ids=5 row-size=19B cardinality=3
AvgScanRangeBytesRead: 0 /sec
AvgScannerThreadConcurrency: 0.00
BytesRead: 519.97 KB (532451)
BytesReadDataNodeCache: 0
BytesReadLocal: 519.97 KB (532451)
BytesReadShortCircuit: 519.97 KB (532451)
DecompressionTime: 85.884us
MaxCompressedTextFileLength: 0
NodeCount: 1
NonDataNodeScans: 1
NumScannerThreadsStarted: 1
PeakMemoryUsage: 33.88 MB (1655488)
PerReadThreadRawHdfsThroughput: 911.13 MB/sec
RowsRead: 73.05K (73049)
RowsReturned: 274
RowsReturnedRate: 301.00 /sec
ScanRangesComplete: 1
ScannerThreadsInvoluntaryContextSwitches: 5
ScannerThreadsTotalWallClockTime: 12.337ms
MaterializeTupleTime(*): 11.473us
ScannerThreadsSysTime: 0ns
ScannerThreadsUserTime: 11.998us
ScannerThreadsVoluntaryContextSwitches: 1
TotalRawHdfsReadTime(*): 570.467us
TotalReadThroughput: 0.00 /sec
max:320.44ms
mean: 320.44ms
stddev:0ns
avg:471.377ms
F01:RANDOM