Meeting 2/13/18

Tuesday, February 13, 2018 9:30 AM

Attendees:
Everyone

Agenda:
Go over what we've done the past 2 weeks

Notes:
Snapper records data from oracle statistics, which are in microseconds. A microsecond is 1 millionth of a second
Tanel Poder (author of snapper) converts data from microseconds to other values like seconds

Hotsos conference is May 5th - 3 weeks!!

Questions:

1) Why is sorting way better than random with respect to CPU?
    a. Random blocks have way more tokens. Have to de-key several tokens instead of one
    b. Takes up more space, IO bound
    c. Use flame graph to see if there are extra calls with compression

2) Why is NORM faster than DENORM?
    a. Oracle is smart
    b. Create a table to test this. Info we have to read by group by hash is small vs big. 32 vs 4 bytes to read hash. Create table with really big things to hash and really small things to hash. Want able to be same size. Same # of blocks. Have to have variable column filling out the rest. Small / big / filler. Number column in the middle to do math. Filler on the end (column you don't need at the end).
    c. Use flame graph on the end

Trying to control tokens for question 1:

- No compress sorted vs no compress random
- Buffer cache? PGA

Make row width the same
Have a column for the variable

Group by big column, do max of other column
Group by little column, do max of big column

col's wide w/ a number column

Col : cardinality of 100, 8 characters wide x 120 characters
Col 3: numbers, all 10s
Dummy col always in the middle, group by column in front so you know you're reading the same amount of data

Future work:
Answer questions 1 & 2
Oracle flame graphs, which may answer the above questions