

Oracle使用hash分区优化分析函数查询Oracle认证考试 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/584/2021_2022_Oracle_E4_BD_BF_E7_c102_584565.htm 在ORACLE中的分析函数都是基于某几个字段划分计算窗口，然后在窗口内进行聚合，排名，等等计算。我想如果我们数据表的hash分区字段与分析函数中的partition by 字段一致的时候，应该可以大大加快分析函数的运行效率。因为每个分区上的数据可以单独进行运算。互不干涉，下面试验来验证我的想法. 第一步：创建一个分区表和普通表，表结构与DBA_OBJECTS一致： create table t_partition_hash(object_name varchar2(128),subobject_name varchar2(30),object_id number,data_object_id number,object_type varchar2(19),created date,last_ddl_time date,timestamp varchar2(19),status varchar2(7),temporary varchar2(1),generated varchar2(1),secondary varchar2(1))partition by hash(object_type)(partition t_hash_p1 tablespace USERS,partition t_hash_p2 tablespace USERS,partition t_hash_p3 tablespace USERS,partition t_hash_p4 tablespace USERS,partition t_hash_p5 tablespace USERS,partition t_hash_p6 tablespace USERS,partition t_hash_p7 tablespace USERS,partition t_hash_p8 tablespace USERS). create table t_big_hash(object_name varchar2(128),subobject_name varchar2(30),object_id number,data_object_id number,object_type varchar2(19),created date,last_ddl_time date,timestamp varchar2(19),status varchar2(7),temporary varchar2(1),generated varchar2(1),secondary varchar2(1)). 第二步：准备数据，

从dba_object中把数据插入到两个表。总共插入数据1610880。
insert into t_partition_hash 0select * from dba_objects. insert into
t_partition_hash 0select * from dba_objects. 第三步：本采
用RANK函数对两个表进行查询。 begininsert into t_rank0select
object_id, rank() over (partition by object_type order by object_id)
r_object_id,rank() over (partition by object_type order by
subobject_name) r_subobject_name ,rank() over (partition by
object_type order by created) r_created,rank() over (partition by
object_type order by last_ddl_time) r_last_ddl_time ,rank() over
(partition by object_type order by status) r_object_typefrom
t_partition_hash.end. 使用hash分区表总共执行5次的运行时间
分别为：46.156s,33.39s,40.516s 34.875s 38.938s. begininsert into
t_rank0select object_id, rank() over (partition by object_type order
by object_id) r_object_id,rank() over (partition by object_type
order by subobject_name) r_subobject_name ,rank() over (partition
by object_type order by created) r_created,rank() over (partition by
object_type order by last_ddl_time) r_last_ddl_time ,rank() over
(partition by object_type order by status) r_object_typefrom
t_big_table.end. 使用非分区表执行5次的执行时间分别为
：141.954s , 89.656s , 77.906s , 98.5s , 75.906s. 由此可见采用有
效的HASH分区表可以有效提升分析函数在oracle中的执行效
率。我相信随着数据量的增加，将会有更明显的效果，回头
再测试一个项目中遇到的类似问题。 更多优质资料尽在百考
试题论坛 百考试题在线题库 oracle认证更多详细资料 100Test
下载频道开通，各类考试题目直接下载。详细请访问
www.100test.com