

How to Identify the physical location of an Oracle Block?

Identify blocks and its physical location for all rows in a table.

```
set linesize 200
set pagesize 200
set pause on
col name format a35
```

```
select
    row_id,
    --rowid_type,
    name,
    block#,
    object_id,
    datafileID,
    empno,
    ename,
    sal,
    deptno
from
    (SELECT rowid ROW_ID,
    dbms_rowid.rowid_type(rowid) as rowID_Type,
    dbms_rowid.rowid_block_number(rowid) as block#,
    dbms_rowid.rowid_object(rowid) as object_ID,
    dbms_rowid.rowid_relative_fno(rowid) as DataFileID,
    rownum,
    empno,
    ename,
    sal,
    deptno
    from scott.emp a), V$datafile b
where
    datafileID=b.file#
order by
    block#;
```

ROW_ID	NAME	BLOCK#	OBJECT_ID	DATAFILEID	EMPNO	ENAME	SAL	DEPTNO
AAAS4zAAfAAAABOAAA	/u14/oradata/PrimeDG/user04.dbf	78	77363	31	333	Adams		
AAAS4zAAfAAAABPAAO	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	9999	KIRK	6400	50
AAAS4zAAfAAAABPAAA	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7369	SMITH	800	20
AAAS4zAAfAAAABPAAE	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7499	ALLEN	1600	30
AAAS4zAAfAAAABPAA C	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7521	WARD	1250	30
AAAS4zAAfAAAABPAA D	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7566	JONES	3570	20
AAAS4zAAfAAAABPAA E	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7654	MARTIN	1250	30
AAAS4zAAfAAAABPAA F	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7698	BLAKE	3420	30
AAAS4zAAfAAAABPAA G	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7782	CLARK	2940	10
AAAS4zAAfAAAABPAA H	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7788	SCOTT	3600	20
AAAS4zAAfAAAABPAA I	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7839	KING	6000	10
AAAS4zAAfAAAABPAA J	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7844	TURNER	1800	30
AAAS4zAAfAAAABPAA K	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7876	ADAMS	1100	20
AAAS4zAAfAAAABPAA L	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7900	JAMES	950	30
AAAS4zAAfAAAABPAA M	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7902	FORD	3600	20
AAAS4zAAfAAAABPAA N	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	7934	MILLER	1300	10
AAAS4zAAfAAAABOAAB	/u14/oradata/PrimeDG/user04.dbf	78	77363	31	8888	ASHU	4500	30

17 rows selected.

Identify a block for a particular row (or set of rows based on “where” condition)

```

select
  row_id,
  --rowid_type,
  name,
  block#,
  object_id,
  datafileID,
  empno,
  ename,
  sal,
  deptno
from
(SELECT
  rowid ROW_ID,
  dbms_rowid.rowid_type(rowid) as rowID_Type,
  dbms_rowid.rowid_block_number(rowid) as block#,
  dbms_rowid.rowid_object(rowid) as object_ID,
  dbms_rowid.rowid_relative_fno(rowid) as DataFileID,
  rownum,
  empno,
  ename,
  sal,

```

```

deptno
from
  scott.emp a
where
  ename='KING'), V$datafile b
where
  datafileID=b.file#;

```

ROW_ID	NAME	BLOCK#	OBJECT_ID	DATAFILEID	EMPNO	ENAME	SAL	DEPTNO
AAAS4zAAfAAAABOAAA	/u14/oradata/PrimeDG/user04.dbf	78	77363	31	333	Adams		
AAAS4zAAfAAAABPAAO	/u14/oradata/PrimeDG/user04.dbf	79	77363	31	9999	KIRK	6400	50

References:

http://download.oracle.com/docs/cd/B19306_01/server.102/b14200/pseudocolumns008.htm

http://download.oracle.com/docs/cd/B19306_01/server.102/b14200/sql_elements001.htm#i46148

http://psoug.org/reference/dbms_rowid.html

Key words:

BlockID, Block ID, rowid, rownum