



How to find out virtual index from database?

Virtual index can be created in [oracle database](#) which doesn't has any physical body and location. It can create with NOSEGMENT clause for [testing](#) purpose.

```
SQL> create table test11 (a number,b number);

Table created.

SQL> create index v_test11 on test11(a) nosegment;

Index created.

SQL> select index_name,owner from dba_indexes
where index_name='V_TEST11' and owner='SYS';

no rows selected

SQL> select index_owner,index_name,column_name,table_name from dba_ind_columns
2 where index_owner='SYS' and index_name='V_TEST11';

INDEX_OWNER INDEX_NAME COLUMN_NAME TABLE_NAME
SYS V_TEST11 A TEST11

SQL> select index_name from dba_ind_columns
2 minus
3 select index_name from dba_indexes;

INDEX_NAME
-----
AAA_V
V_T1_A
V_TEST11
V_TEST1_A
SQL> select owner,object_id
2 from dba_objects
3 where object_name='V_TEST11';
```



```
OWNER OBJECT_ID
-----
SYS 7718

SQL> select owner,object_id,object_type,status,temporary from dba_objects where
object_name='V_TEST11';

OWNER OBJECT_ID OBJECT_TYPE STATUS T
-----
SYS 7718 INDEX VALID N

SQL> create index test11_b on test11(b);

Index created.

SQL>select object_name,object_id,object_type from dba_objects where object_type='INDEX' and
owner='SYS' and object_name like '%TEST%'

OBJECT_NAM OBJECT_ID OBJECT_TYPE
-----
TEST11_B 7730 INDEX
V_TEST11 7718 INDEX

SQL> select obj#,ts#,file#,block#,type#,flags,property from ind$ where obj# in (7718,7730);

OBJ# TS# FILE# BLOCK# TYPE# FLAGS PROPERTY
7730 0 1 15832 1 0 0
7718 0 0 0 1 4096 0
```

Above query shows that in the IND\$ flags of virtual index is 4096 and for other index is 0. That means we can find out the VIRTUAL INDEX FROM following queries ONLY.

```
SQL> select index_name from dba_ind_columns
2 minus
3 select index_name from dba_indexes;
AND
SQL> select obj#,ts#,file#,block#,type#,flags,property from ind$ where flags=4096
```