Oracle官方文档SQL Language Reference阅读笔记 Pseudocolumns

Pseudocolumns :

Hierarchical Query Pseudocolumns : only valid in hierarchical queries.

connect_by_iscycle pseudocolumn : returns 1 if the current row has a child which is also its ancestor. Otherwise it returns 0.

connect_by_isleaf pseudocolumn : returns 1 if the current row is a leaf of the tree defined by the CONNECT BY condition. Otherwise it returns 0. This information indicates whether a given row can be further expanded to show more of the hierarchy.

eg :

select last_name, connect_by_isleaf, level, sys_connect_by_path (last_name, '/') from employees where level <= 3 and department_id = 80 start with employee_id = 100 connect by prior employee_id = manager_id and level <= 4;

level pseudocolumn : returns 1 for a root row, 2 for a child row, and so on.

Sequence Pseudocolumns : A sequence is a schema object that can generate unique sequential values. These values are often used for primary and unique keys.

eg :

select employees_seq.nextval from dual;

insert into employees values (employees_seq.nextval, 'John', 'Doe', 'jdoe', '555-1212', TO_DATE(SYSDATE), 'PU_CLERK', 2500, null, null, 30);

insert into orders (order_id, order_date, custom_id) values (orders_seq.nextval, TO_DATE(SYSDATE), 106);

Version Query Pseudocolumns : Valid only in Oracle Flashback Version Query.

VERSIONS_STARTTIME :

VERSIONS_STARTSCN :

VERSIONS_ENDTIME :

VERSIONS_ENDSCN :

VERSIONS_XID :

VERSIONS_OPERATION : I, U D

COLUMN_VALUE Pseudocolumns : When you refer to an XMLTable construct without the COLUMNS clause, or when you use the TABLE function to refer to a scalar nested table type, the database returns a virtual table with a single column.

eg :

select * from xmltable('<a>123');

select column_value from (XMLTable('<a>123'));

eg :

create type phone as table of number;

create type phone_list as table of phone;

select t.column_value from table(phone(1,2,3)) t;

eg :

In a nested type, you can use the COLUMN_VALUE pseudocolumn in both the select list and the TABLE function.

select t.column_value from table(phone_list(phone(1,2,3))) p, table(p.column_value) t;

OBJECT_ID Pseudocolumns :returns the object identifier of a column of an object table or view.

OBJECT_VALUE Pseudocolumns :returns system-generated names for the columns of an object table, XMLTable, object view, or XMLType view.

ORA_ROWSCN Pseudocolumns : returns the conservative upper bond system change number(SCN) of the most recent change to the row.

eg :

select ORA_ROWSCN, last_name from employees where employee_id = 188;

select SCN_TO_TIMESTAMP(ORA_ROWSCN), last_name from employees where employee_id=188;

ROWID Pseudocolumns : returns the address of the row.

It contains information necessary to locate a row :

The data object number of the object

the data block in the datafile in which the row resides

The position of the row in the data block

The datafile in which the row resides. The file number is relative to the tablespace.

eg :

select rowid, last_name, from employees where department_id = 20;

ROWNUM Pseudocolumns : returns a number indicating the order in which Oracle selects the row from a table or set of joined rows.

eg : Use ROWNUM to limit the number of rows returned by a query

select * from employees where ROWNUM < 10;

select * from employees where ROWNUM < 10 order by last_name;

select * from employees where ROWNUM > 1;

update my_table set column1 = ROWNUM;

XMLDATA Pseudocolumns : lets you access the underlying LOB or object relational column to specify additional storage clause parameters, constraints, indexes, and so forth.

eg :

create table xml_lob_tab of XMLTYPE;

alter table xml_lob_tab modify lob(xmldata) (storage (buffer_pool default) cache;

alter table xwarehouse add (unique (xmldata."WarehouseId"));