

Oracle官方文档SQL Language Reference阅读笔记 Conditions

Conditions

A condition specifies a combination of one or more expressions and logical (Boolean) operators and returns a value of TRUE, FALSE, or UNKNOWN.

About SQL Conditions

Comparison Conditions : compare one expression with another.

Floating-Point Conditions : let you determine whether an expression is infinite or is the undefined result of an operation.

eg :

expr is (not) nan

expr is (not) infinite

Logical Conditions : combines the result of two component conditions to produce a single result based on them or to invert the result of a single condition.

eg :

not

and

or

Model Conditions : can be used only in the MODEL clause of a SELECT statement.

eg :

is any condition

eg : set sales for each product for year 2000 to 0.

select country, prod, year, s from sales_view_ref model partition by (country) dimension by (prod, year) measures (sales s)

ignore nav unique dimension rules upset sequential order (s[ANY, 2000] = 0) order by country, prod, year;

eg :

is present condition : to test whether the cell referenced is present prior to the execution of the model_clause.

eg : If sales of the Mouse Pad for year 1999 exists, then sales of the Mouse Pad for year 2000 is set to sales of the Mouse Pad for year 1999. Otherwise, sales of the Mouse Pad for year 2000 is set to 0.

select country, prod, year, s from sales_view_ref model partition by (country) dimension by (prod, year) measures (sales s)

ignore nav unique dimension rules upset sequential order (s['Mouse Pad', 2000] = case when s['Mouse Pad', 1999] is present then s['Mouse Pad', 1999] else 0 end) order by country, prod, year;

Multiset Conditions : test various aspects of nested tables.

eg :

is a set condition : test whether a specified nested table is composed of unique elements.

eg : selects from the table customers_demo those rows in which the cust_address_ntab nested table column contains unique elements.

select customer_id, cust_address_ntab from customers_demo where cust_address_ntab is a set;

eg :

is empty condition : to test whether a specified nested table is empty.

eg : selects from the sample table pm.print_media those rows in which the add_textdocs_ntab nested table column is not empty.

select product_id, to_char(ad_finaltext) from print_media where ad_textdocs_ntab is not empty;

eg :

member condition : a membership condition that tests whether an element is a member of a nested table.

eg : selects from the table customers_demo those rows in which the cust_address_ntab nested table column contains the values specified in the where clause.

select customer_id, cust_address_ntab from customers_demo where cust_address_typ('8768 N State Rd 37', 47404, 'Bloomington', 'IN', 'US') member of cust_address_ntab;

submultiset condition : tests whether a specified nested table is a submultiset of another specified nested table.

eg : selects from the customers_demo table those rows in which the cust_address_ntab nested table is a submultiset of the cust_address2_ntab nested table.

select customer_id, cust_address_ntab from customers_demo where cust_address_ntab submultiset of cust_address2_ntab;

Pattern-matching Conditions : compare character data.

like condition : specify a test involving pattern matching.

When you use LIKE to search an indexed column for a pattern, Oracle can use the index to improve performance of a query if the leading character in the pattern is not % or _. In this case, Oracle can scan the index by this leading character. If the first character in the pattern is % or _, then the index cannot improve performance because Oracle cannot scan the index.

escape example : searches for employees with the pattern A_B in their name :

```
select last_name from employees where last_name like '%A\_B%' escape '\';
```

regexp_like condition : similiar to the like conditon, except it performs regular expression matching instead of the simple pattern matching performed by like.

eg : returns the first and last names for those employees with a first name of Steven or Stephen (where first_name begins with Ste and ends with en and in between is either v or ph).

```
select first_name, last_name from employees where regexp_like (first_name, '^Ste(v|ph)en$');
```

eg : returns the last name for those employees with a double vowel in their last name (where last_name contains two adjacent occurences of either a,e,i,o,u, regardless of case).

```
select last_name from employees where regexp_like (last_name, '([aeiou])\1', 'i');
```

Range Conditions : test for inclusion in a range.

eg :

(not) between x and y

Null Conditions : test for nulls

eg :

is (not) null

XML Conditions : determines whether a specified XML resource can be found in a specified path.

equals_path condition : determines whether a resource in the Oracle XML database can be found in the database at a specified path.

eg : queries the resource_view view to find the paths to the resources in the sample schema oe. The equal_path condition causes the query to return only the specified path.

```
select any_path from resource_view where equals_path(res, '/sys/schemas/OE/www.oracle.com') = 1;
```

under_path condition : determines whether resources specified in a column can be found under a particular path specified path_string in the Oracle XML database repository.

eg : queries the resource_view view to find the paths to the resources in the sample schema oe. It returns the path of the XML schema that was created in XMLType Table Examples.

```
select any_path from resource_view where under_path (res, '/sys/schemas/OE/www.oracle.com') = 1;
```

Compound Conditions : specifies a combination of other conditions.

EXISTS Conditions : tests for existence of rows in a subquery.

eg :

```
select department_id from departments d where exists (select * from employees e where d.department_id=e.department_id);
```

In Conditions : a membership condition which tests a value for membership in a list of values or subquery.

IS OF type Conditions : to test object instances based on their specific type information.

eg : uses the is of type condition to restrict the query to specific subtypes.

```
select * from persons p where value(p) is of type (employee_t);
```

```
select * from persons p where value(p) is of (only part_time_emp_t);
```

