



INDEX_DESC Hint instead of MAX

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Especially in huge datawarehouse systems, it is very often time consuming to find the maximum value of a specific item. That's one of the reason, why such data will be prepared in cubes. To ask for such information in a cube means, that the server system does not calculate the figure after the users request - it is already calculated.

Let us say we have a 100 billion record table with customer information. This table holds the customer name, surname and a contract identification number.

Customer table	
Name	Name of customer
Surname	Surname of customer
Contract_id	Number of the contract
And so on	

Now you want to get the last contract number in the customer table. A unique index customer_ind is set on the contract_id.

With the SQL statement `SELECT MAX(contract_id) from customer` you will get the information. The Oracle explain plans presents a `INDEX FULL_SCAN` search. This statement is very time consuming. But there will be a trick.

Thinking of the index on the column `contract_id`, you can use the optimizer hint `INDEX_DESC` to advise the optimizer to use the index in a descending order. That means, that the highest entry of the `contract_id` will be selected with the first record access.

So, a `SELECT /*+ INDEX_DESC(customer customer_ind) */ contract_id FROM customer WHERE rownum < 2` will return the maximum number of the `contract_id`.

This statement returns the results in milliseconds.

Try it.