

Understanding DBMS_XPLAN.DISPLAY in Oracle SQL

1. Overview

The SQL command:

```
SELECT * FROM TABLE(DBMS_XPLAN.DISPLAY);
```

is used to display the execution plan of the most recently executed SQL statement in Oracle.

2. Breaking Down the Command

- `SELECT * FROM ...`: Retrieves all columns from the table function.
- `TABLE(DBMS_XPLAN.DISPLAY)`: Converts the output of `DBMS_XPLAN.DISPLAY` into a table format.
- `DBMS_XPLAN.DISPLAY`: A function that retrieves execution plans from `PLAN_TABLE`.

3. How It Works

1. **Run an EXPLAIN PLAN for a Query**:

```
EXPLAIN PLAN FOR
```

```
SELECT * FROM employees WHERE department_id = 10;
```

2. **Retrieve the Execution Plan**:

```
SELECT * FROM TABLE(DBMS_XPLAN.DISPLAY);
```

4. Sample Output

```
-----
```

Id	Operation	Name	Rows	Bytes	Cost (%CPU)	Time

0	SELECT STATEMENT				2 (100)	
1	TABLE ACCESS FULL	EMPLOYEES	10	260	2 (50)	00:00:01

```
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```

5. Customizing DBMS_XPLAN.DISPLAY

You can pass parameters for more details:

```
SELECT * FROM TABLE(DBMS_XPLAN.DISPLAY('PLAN_TABLE', NULL, 'ALL'));
```

- `PLAN_TABLE`: Specifies the table storing the execution plan.
- `NULL`: Uses the last `EXPLAIN PLAN`.
- `ALL`: Provides detailed execution information.

6. Summary

- `DBMS_XPLAN.DISPLAY` helps analyze SQL execution plans.
- It shows **how Oracle processes a query** (index scans, full table scans, etc.).
- It is **used after** an `EXPLAIN PLAN` statement.
- Helps in **performance tuning and query optimization**.