### **14 View & Materialized\_View**

**View:**

* **Views** are the virtual tables. Views will not get stored in physical memory instead it returns original and updated data from the table every time it is accessed.
* **I**f we make any changes in the original table, it will also get reflected in the views table.
* To create view user should have (**create view**) privilege.
* Create view v1 as select \* from t1;
* If source table is deleted or column modified view cannot show the table data or modified column. Again we should create view.
* Create or replace view view\_t1 as select \* from t1;

**To create view with multiple tables:**

* To create view with multiple tables all the expression must have same datatype as corresponding expression.
* create or replace view view\_t1 as

select SNO,ENAME,SAL from t1

union all

select SNO,GMAIL,MOBILE from t2;

**To drop view:**

* drop view view\_t1;

### **Materialized View:**

* **Materialized views** is a table. It contain data.
* **This is a table refresh between two databases.**
* the result of the query is stored in physical memory and the stored result of the query reduces the need for repeated computations and helps to enhance the query performance.
* Even the source table is deleted we can see data in it.
* To create MVIEWS Job queue process should set on both source & target.
* To create MVIEWS require’s.
* Source database server time and target server time should be same.
* Listener – source
* TNS – target
* Db Link – target
* Mv – target
* User must have **Create materialized view privilege, Create db link privilege , Create table privilege.**

**Materialized views are 2 types:**

1. **complete refresh**
2. **Fast refresh**

**Complete refresh:**

* complete refresh willtruncate the existing MV and refresh the data based on time interval.
* Create materialized view mv\_mouli refresh complete with rowid Start with sysdate next sysdate +2/1440 as select \* from t1@ LINK\_MV;
* **+2/1400** in a day 1440 minutes. For every 2 minutes this will refresh the data.

**Fast refresh:**

* It will refresh only modified data.
* Source table must have primary key column.
* Source table must have materialized view logs.
* create materialized view mv1 refresh fast with primary key start with sysdate next sysdate +10/1440 as select \* from t1@LINK\_1;

**Materialized view logs**:

* When any changes occur in source table that information is logged in materialized view logs.
* create materialized view log on t1;
* This will create 2 tables like MLOG$\_T1, RUPD$\_T1.
* When the fast MVIEW created. During the refresh interval that MVIEW check these two tables and if any changes then it will refresh only that changes.

**To immediate refresh of mv:**

* exec dbms\_snapshot.refresh(‘MV1’);

**To change refresh time interval:**

* alter materialized view MV1 refresh complete start with sysdate next sysdate +5/1440;
* alter materialized view mv\_mouli refresh fast start with sysdate next sysdate +1/1440;

**Job queue process: do in source / target sides**

* This process helps to run the scheduled jobs.
* By default from 11g its value is 1000.
* We can disable this by setting value to 0 and no jobs will work.
* This parameter helps to auto refresh the materialized view.
* Show parameter job;
* Set job\_queue\_processes to some value.
* alter system set job\_queue\_processes= 100 scope=both;