## How to Recover an Accidentally Dropped Table Using Flashback Option: -

= > If a table is accidentally dropped in Oracle, we can recover it using the Flashback Drop feature. It provides the table resided in the Recycle Bin.

**What is Flashback Drop?**

The Flashback Drop feature in Oracle Database allows us to recover a dropped table from the Recycle Bin. When we drop a table (*without using the PURGE option*), Oracle does not immediately delete it. Instead, it renames the table and moves it to the Recycle Bin, making it possible to restore it later.

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# Prerequisites for Using Flashback Drop: -

1. **Recycle Bin Enabled**: Flashback Drop works only if the Recycle Bin is enabled. This feature is enabled by default in Oracle Database 10g and later.

2. **Table Not Purged**: The table must not have been purged from the Recycle Bin.

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= > **Scenario: -**

We will drop the table "RSDRTAB" from the schema "TEST" and then recover it using the Flashback Drop option.

The steps include:

1. Check Recycle Bin Enabled
2. Dropping the table.
3. Verifying its presence in the Recycle Bin.
4. Recovering the table using Flashback Drop.
5. Validating the recovery.

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1. Check Recycle Bin Enabled: -

   ➢ sqlplus "/ as sysdba"
   ➢ show parameter recyclebin

```
SQL> show parameter recyclebin

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
recyclebin                           string      on
SQL>
```

= > here In our case, recyclebin is enabled.

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= > Before invoking the drop table scenario, first connect to "TEST" schema and check row count of the table.

   ➢ Sqlplus "/ as sysdba"
   ➢ conn test/Pass1234
   ➢ select count (*) from RSDRTAB;

```
SQL> conn test/Pass1234
Connected.
SQL> show user
USER is "TEST"
SQL> select count (*) from RSDRTAB;

  COUNT(*)
----------
   3735896
```

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2.  **Dropping the table: -**  ( Note: - Never drop table in production environment. Here we are dropping it just to invoke the scenario for testing purpose).

> drop table RSDRTAB;

```
SQL> show user
USER is "TEST"
SQL> drop table RSDRTAB;

Table dropped.

SQL> select count (*) from RSDRTAB;
select count (*) from RSDRTAB
                             *
ERROR at line 1:
ORA-00942: table or view does not exist
```

= > *When we drop the table without the PURGE option, Oracle moves it to the **Recycle Bin** instead of permanently*

*deleting it. (here moving in the sense just updating the metadata in data dictionary).*

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3.  Verify the Table in the Recycle Bin: -

> SELECT object_name, original_name, type, droptime FROM recyclebin;      ( or use  show recyclebin)

```
SQL> SELECT object_name, original_name, type, droptime FROM recyclebin;

OBJECT_NAME                      ORIGINAL_NAME         TYPE            DROPTIME
-------------------------------- --------------------- --------------- -------------------
BIN$LG9keLmqWbfgY3MAqMDLNA==$0   PRODTAB               TABLE           2025-01-24:12:38:23
BIN$LHDqW/PQAfrgY3MAqMC4JQ==$0   PRODTAB               TABLE           2025-01-24:14:27:25
BIN$LIUBqVUcPOjgY3MAqMDgwQ==$0   RSDRTAB               TABLE           2025-01-25:14:25:35

SQL>
```

Here:
*   OBJECT_NAME: *System-generated name for the dropped object.*
*   ORIGINAL_NAME: *Original name of the table.*
*   TYPE: *The object type (e.g., TABLE).*
*   DROPTIME: *The time the table was dropped.*

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= > Note that when we drop the table, it will not be moved to FRA or undo tablespace.  it will be in the same TABLESPACE, but only

 The metadata will be changed in the data dictionary – like it will be changing its ORIGINAL NAME with SYSTEM GENERATED NAME.

= > *We **cannot recover a table dropped from the SYSTEM tablespace** using the Flashback Drop option.*

= > We can not perform DDL/DML over an object in the recycle bin, but we can query the data using its system generated name.

```
SQL> conn test/Pass1234
Connected.
SQL>
SQL> show recyclebin
ORIGINAL NAME      RECYCLEBIN NAME                  OBJECT TYPE   DROP TIME
---------------    ------------------------------   -----------   -------------------
PRODTAB            BIN$LHDqW/PQAfrgY3MAqMC4JQ==$0    TABLE         2025-01-24:14:27:25
PRODTAB            BIN$LG9keLmqWbfgY3MAqMDLNA==$0    TABLE         2025-01-24:12:38:23
RSDRTAB            BIN$LIVeQyDuT9TgY3MAqMA03g==$0    TABLE         2025-01-25:14:51:29
SQL>
SQL> delete from "BIN$LIVeQyDuT9TgY3MAqMA03g==$0";
delete from "BIN$LIVeQyDuT9TgY3MAqMA03g==$0"
       *
ERROR at line 1:
ORA-38301: can not perform DDL/DML over objects in Recycle Bin


SQL> select * from "BIN$LIVeQyDuT9TgY3MAqMA03g==$0" where rownum < 3;

  ORDER_ID LINE_ITEM_ID PRODUCT_ID UNIT_PRICE   QUANTITY DISPATCH_ RETURN_DA GIFT_WRAP            CONDITION            SUPPLIER_ID ESTIMATED
---------- ------------ ---------- ---------- ---------- --------- --------- -------------------- -------------------- ----------- ---------
     61118            1        745       4107          2                     None                 New                             05-OCT-18
     61118            2        190        844          1                     None                 New                             05-OCT-18

SQL>
SQL> select count (*) from "BIN$LIVeQyDuT9TgY3MAqMA03g==$0";

  COUNT(*)
----------
   3735896
```

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### 4. Recovering the table using Flashback Drop: -

>> Once confirmed in the Recycle Bin, recover the table using the FLASHBACK TABLE command.

> *FLASHBACK TABLE RSDRTAB TO BEFORE DROP;*

```
SQL> FLASHBACK TABLE RSDRTAB TO BEFORE DROP;

Flashback complete.

SQL> select count (*) from RSDRTAB;

   COUNT (*)
----------
    3735896
```

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# If we want to recover the table under a different name: (optional)

> *FLASHBACK TABLE RSDRTAB TO BEFORE DROP RENAME TO RSDRTAB_BKP;*

```
SQL> FLASHBACK TABLE RSDRTAB TO BEFORE DROP RENAME TO RSDRTAB_BKP;

Flashback complete.

SQL> select count (*) from RSDRTAB_BKP;

   COUNT (*)
----------
    3735896
```

….DONE …………!

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