
==== >> Recovering a Dropped Table Using RMAN Backup: -

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The Scenario: -

Imagine we accidentally dropped an important table, “*PRODTAB*” from the *TEST* schema. To simulate this scenario, we will:

1. Drop the table.
2. Use RMAN to recover it to its state before it was dropped.

Let’s dive into the details.

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Step-1] Check table “PRODTAB” is present in the database: -

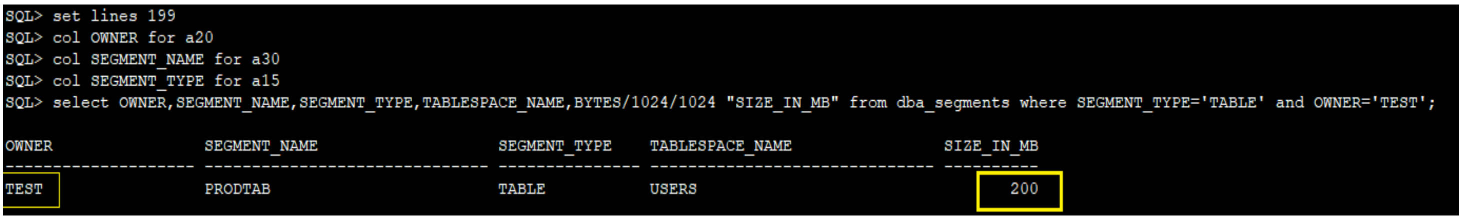
set lines 199

col OWNER for a20

col SEGMENT_NAME for a30

col SEGMENT_TYPE for a15

select OWNER, SEGMENT_NAME, SEGMENT_TYPE, TABLESPACE_NAME, BYTES/1024/1024 "SIZE_IN_MB" from dba_segments where SEGMENT_TYPE='TABLE' and OWNER='TEST';



```
SQL> set lines 199
SQL> col OWNER for a20
SQL> col SEGMENT_NAME for a30
SQL> col SEGMENT_TYPE for a15
SQL> select OWNER,SEGMENT_NAME,SEGMENT_TYPE,TABLESPACE_NAME,BYTES/1024/1024 "SIZE_IN_MB" from dba_segments where SEGMENT_TYPE='TABLE' and OWNER='TEST';

OWNER                SEGMENT_NAME                   SEGMENT_TYPE    TABLESPACE_NAME                SIZE_IN_MB
-------------------- ------------------------------ --------------- ------------------------------ ----------
TEST                 PRODTAB                        TABLE           USERS                                 200
```

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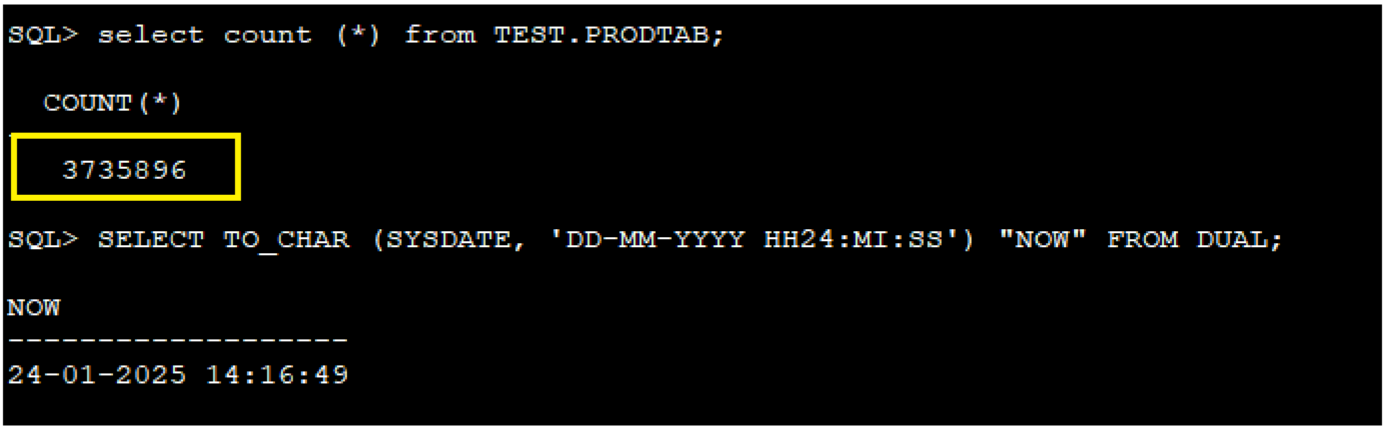
Step-2] Note down the ROW count for crosscheck: -

- select count (*) from TEST.PRODTAB;
- SELECT TO_CHAR (SYSDATE, 'DD-MM-YYYY HH24:MI:SS') "NOW" FROM DUAL;



```
SQL> select count (*) from TEST.PRODTAB;

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

SQL> SELECT TO_CHAR (SYSDATE, 'DD-MM-YYYY HH24:MI:SS') "NOW" FROM DUAL;

NOW
-------------------
24-01-2025 14:16:49
```

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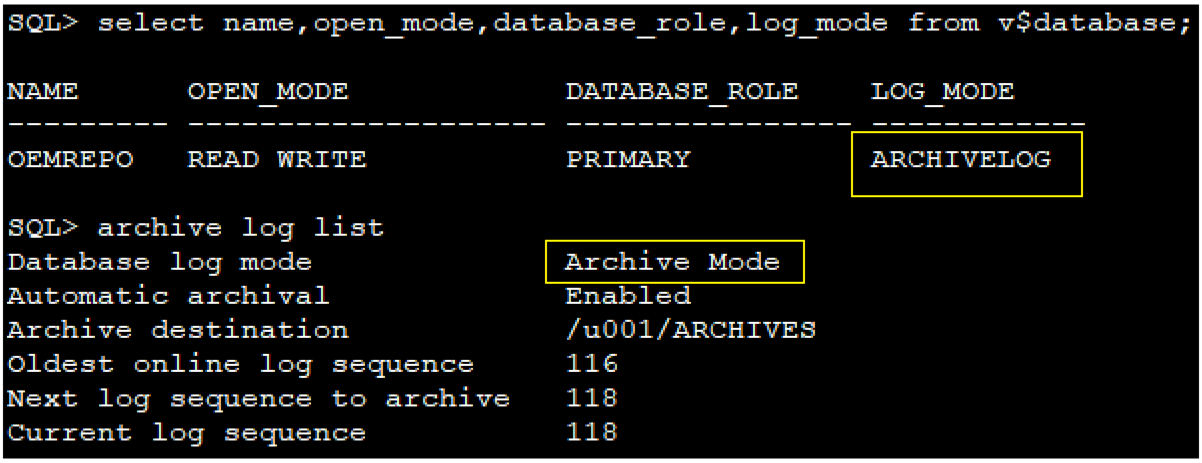
Step-3] Ensure that database in ARCHIVELOG mode and take a whole database backup now: -

- Select log_mode from v$database;
- Archive log list;



```
SQL> select name,open_mode,database_role,log_mode from v$database;

NAME      OPEN_MODE            DATABASE_ROLE    LOG_MODE
--------- -------------------- ---------------- ------------
OEMREPO   READ WRITE           PRIMARY          ARCHIVELOG

SQL> archive log list
Database log mode              Archive Mode
Automatic archival             Enabled
Archive destination            /u001/ARCHIVES
Oldest online log sequence     116
Next log sequence to archive   118
Current log sequence           118
```

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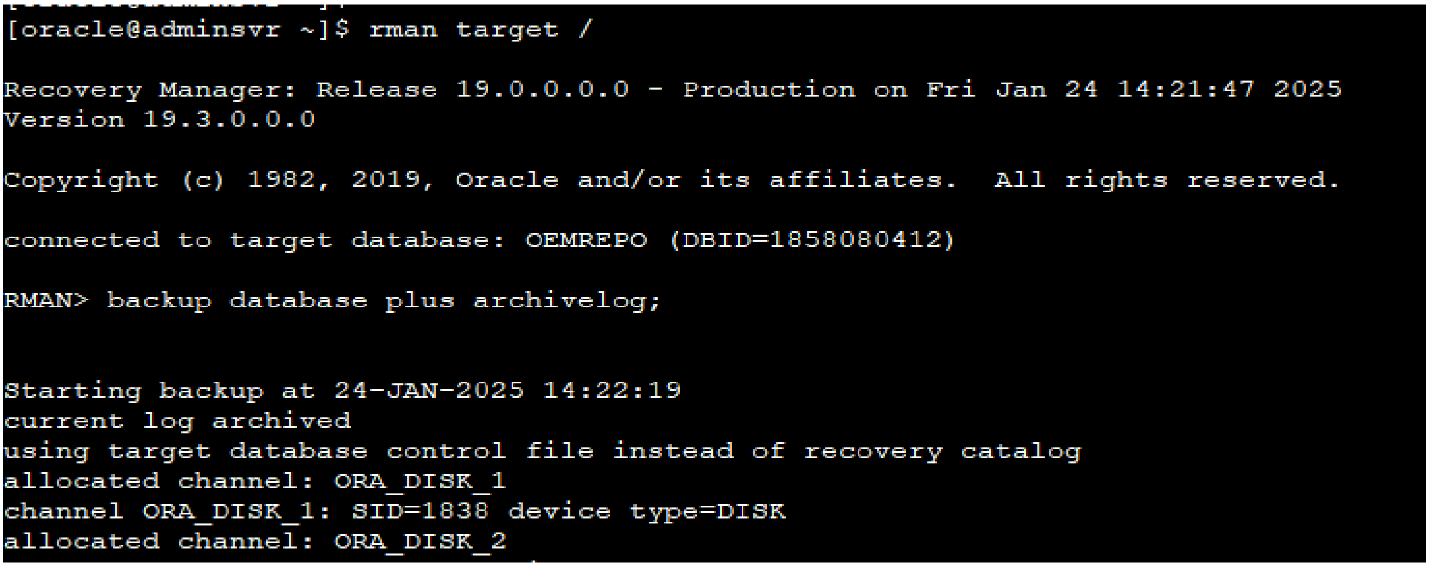
Step-4] Now take a full database backup along with archive logs as well: -

- Rman target /
- RMAN> backup database plus archivelog;



```
[oracle@adminsvr ~]$ rman target /

Recovery Manager: Release 19.0.0.0.0 - Production on Fri Jan 24 14:21:47 2025
Version 19.3.0.0.0

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connected to target database: OEMREPO (DBID=1858080412)

RMAN> backup database plus archivelog;


Starting backup at 24-JAN-2025 14:22:19
current log archived
using target database control file instead of recovery catalog
allocated channel: ORA_DISK_1
channel ORA_DISK_1: SID=1838 device type=DISK
allocated channel: ORA_DISK_2
```

- *-- -To be continue till backup completes-- - - -*
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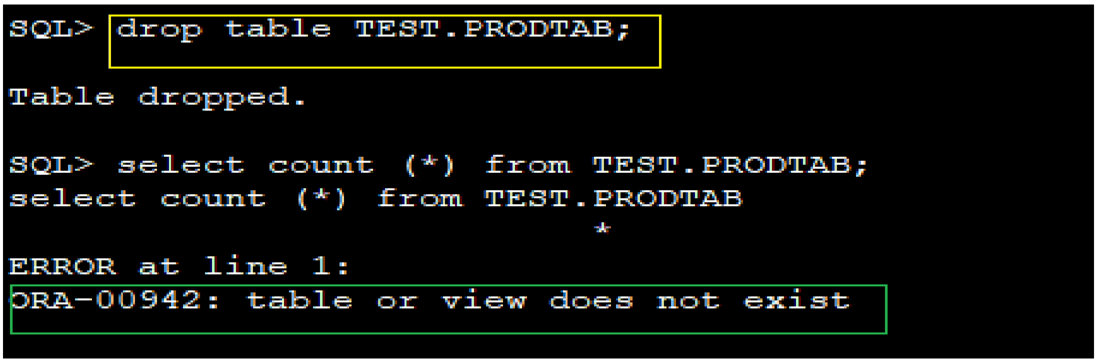
Step 5] Drop the table to invoke the scenario: -

- drop table TEST.PRODTAB;



```
SQL> drop table TEST.PRODTAB;

Table dropped.

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

Step 6] Recover “PRODTAB” table using RMAN: -

- RMAN> recover table "TEST"."PRODTAB" until time "to_date('2025-01-24 14:26:17','yyyy-mm-dd:hh24:mi:ss')" auxiliary destination ' /u001/TESTING_DATA';

RMAN Process: During recovery, RMAN performs the following steps:

- Sets up a temporary auxiliary instance.
- Restores the required datafiles and applies archive logs to reach the specified time.
- Extracts the PRODTAB table and imports it back into the TEST schema of the primary database.

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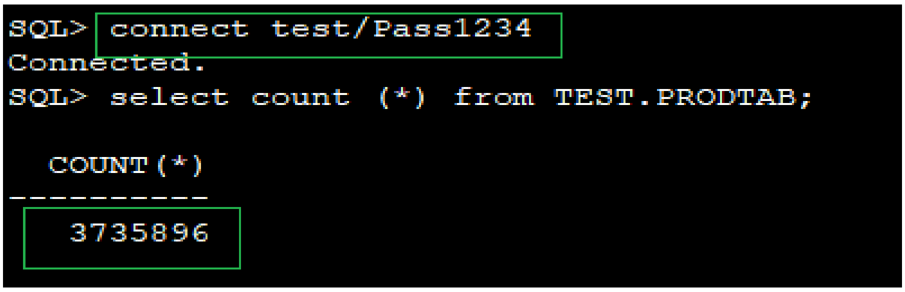
Step-7]- Once the above command completes, verify the recovered table:

- Connect test/Pass1234
- select count (*) from TEST.PRODTAB;



```
SQL> connect test/Pass1234
Connected.
SQL> select count (*) from TEST.PRODTAB;

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

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Step 8] Cleanup: -

After recovery, RMAN automatically removes the auxiliary instance and its associated files. However, we should verify and clean up any remaining files in the auxiliary destination to reclaim disk space:

- rm -rf /u001/TESTING_DATA/*

- *In this way, we have successfully recovered our dropped table.*

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