Ejercicio 2 - tema 7
Almacenamiento en data files

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I. Objetivo

El objetivo es poner en práctica las tareas de administración que permitan el almacenamiento de datos de una tabla en un tablespace y data file específico configurado previamente

II. Desarrollo

A. sentencias

```
whenever sqlerror exit rollback
set serveroutput on
connect sys/system2 as sysdba
--A
SELECT
  FILE_NAME,
  FILE_ID,
  TRUNC((BYTES/(1024*1024)),2) SIZE_MB
FROM DBA_DATA_FILES WHERE TABLESPACE_NAME ='
  STORE_TBS_MULTIPLE';
--B
SELECT
       TRUNC((SUM(DF.BYTES)-NVL(SUM(S.BYTES),0))
  /(1024*1024),2) MB_LIBRES,
       (SUM(DF.BLOCKS)-NVL(SUM(S.BLOCKS),0))
  BLOQUES_DISPONIBLES
FROM DBA_DATA_FILES DF
    LEFT JOIN DBA_SEGMENTS S
        ON S.TABLESPACE_NAME = DF.TABLESPACE_NAME
WHERE DF.TABLESPACE_NAME='STORE_TBS_MULTIPLE';
--C
--CREATE USER VRA_TBS_MULTIPLE IDENTIFIED BY
  VRA_TBS_MULTIPLE
  --quota unlimited on store_tbs_multiple
  --default tablespace store_tbs_multiple;
--D
declare
  v_count number;
  v_username varchar2(30) := 'VRA_TBS_MULTIPLE';
  v_table varchar2(30) := 'VRA_TBS_MULTIPLE';
begin
  --Verificar si la table existe
  select count(*) into v_count
  from all_tables
  where table_name = v_table
  and owner = v_username;

  if v_count > 0 then
    execute immediate 'drop table '||v_username||'
  .'||v_table;
  end if;
  execute immediate 'create table '||v_username||'
  .'||v_table||' (
    str char(1024 byte)
  ) segment creation immediate';
end;
/
--E
SELECT DF.FILE_NAME,
       DF.FILE_ID,
       COUNT(DE.SEGMENT_NAME) NUMERO_EXTENSIONES,
       SUM(DE.BYTES/(1024*1024)) TOTAL_MB,
       SUM(DE.BLOCKS) BLOQUES_RESERVADOS
    FROM DBA_SEGMENTS DS
JOIN DBA_DATA_FILES DF
    ON DS.HEADER_FILE = DF.FILE_ID
JOIN DBA_DATA_FILES DF
    ON DS.HEADER_FILE = DF.FILE_ID
JOIN DBA_EXTENTS DE
    ON DS.SEGMENT_NAME = DE.SEGMENT_NAME
WHERE DS.SEGMENT_NAME like '%VRA_TBS_MULTIPLE%'
GROUP BY DF.FILE_NAME, DF.FILE_ID;
--F
declare
  v_count number := 0;
begin
  while v_count < 512 loop
  insert into VRA_TBS_MULTIPLE.VRA_TBS_MULTIPLE(
  str) values('$');
  v_count := v_count + 1;
  end loop;
  commit;
end;
/
--G
SELECT DF.FILE_NAME,
       DF.FILE_ID,
       COUNT(DE.SEGMENT_NAME) NUMERO_EXTENSIONES,
       SUM(DE.BYTES/(1024*1024)) TOTAL_MB,
       SUM(DE.BLOCKS) BLOQUES_RESERVADOS
    FROM DBA_SEGMENTS DS
JOIN DBA_DATA_FILES DF
    ON DS.HEADER_FILE = DF.FILE_ID
JOIN DBA_DATA_FILES DF
    ON DS.HEADER_FILE = DF.FILE_ID
JOIN DBA_EXTENTS DE
    ON DS.SEGMENT_NAME = DE.SEGMENT_NAME
WHERE DS.SEGMENT_NAME like '%VRA_TBS_MULTIPLE%'
GROUP BY DF.FILE_NAME, DF.FILE_ID;
--H
declare
  v_count number := 0;
begin
  while v_count < 512*5 loop
  insert into VRA_TBS_MULTIPLE.VRA_TBS_MULTIPLE(
  str) values('$');
  v_count := v_count + 1;
  end loop;
  commit;
end;
/
SELECT DF.FILE_NAME,
       DF.FILE_ID,
       COUNT(DE.SEGMENT_NAME) NUMERO_EXTENSIONES,
       SUM(DE.BYTES/(1024*1024)) TOTAL_MB,
       SUM(DE.BLOCKS) BLOQUES_RESERVADOS
    FROM DBA_SEGMENTS DS
JOIN DBA_DATA_FILES DF
    ON DS.HEADER_FILE = DF.FILE_ID
JOIN DBA_DATA_FILES DF
    ON DS.HEADER_FILE = DF.FILE_ID
JOIN DBA_EXTENTS DE
    ON DS.SEGMENT_NAME = DE.SEGMENT_NAME
WHERE DS.SEGMENT_NAME like '%VRA_TBS_MULTIPLE%'
GROUP BY DF.FILE_NAME, DF.FILE_ID;
--I
SELECT
       TRUNC((SUM(DF.BYTES)-NVL(SUM(S.BYTES),0))
```

```
    /(1024*1024),2) MB_LIBRES,
111         (SUM(DF.BLOCKS)-NVL(SUM(S.BLOCKS),0))
    BLOQUES_DISPONIBLES
112 FROM DBA_DATA_FILES DF
113     LEFT JOIN DBA_SEGMENTS S
114         ON S.TABLESPACE_NAME = DF.TABLESPACE_NAME
115 WHERE DF.TABLESPACE_NAME='STORE_TBS_MULTIPLE';
116
117 whenever sqlerror continue
```

Código 1. s-00-datafile.sql

	FILE_NAME	FILE_ID	SIZE_MB
1	/u01/app/oracle/oradata/VRABDA2/store_tbs_multiple_01.dbf	6	10
2	/u02/app/oracle/oradata/VRABDA2/store_tbs_multiple_02.dbf	7	10
3	/u03/app/oracle/oradata/VRABDA2/store_tbs_multiple_03.dbf	8	10

Figure 1. Salida punto A

	MB_LIBRES	BLOQUES_DISPONIBLES
1	135.93	17400

Figure 2. Salida punto B

captura_1.png

Figure 3. Salida punto E

III. Conclusiones

Se encontro una forma eficiente de consultar los segmentos creados en una tabla, el unico incoveniente es que estos dependen de que sean creados con el nombre de la tabla para su busqueda.