

❁ 36. RAC 환경에서 실수로 테이블 스페이스를 drop 했을 때 복구 방법

실수로 테이블 스페이스를 drop 하게 되면 time base 불완전 복구를 해야 한다. time base 불완전 복구를 할 때 먼저 테이블 스페이스가 drop 되기 전의 control file 백업본을 복원을 먼저 하고 복구를 해야 한다.

실습

1. ts22 테이블 스페이스를 생성한다.

(sql 1)

```
create tablespace ts22 datafile size 10m;
```

2. control file을 생성하는 스크립트를 생성한다.

```
alter database backup controlfile to trace as '/home/oracle/c22.sql';
```

3. rman으로 전체 백업을 수행한다.

(1번 노드 rman)

```
configure controlfile autobackup on;
```

```
backup database include current controlfile;
```

=> +FRA/racdb/autobackup/2024_03_25/s_1164557099.456.1164557101

```
RMAN> backup database include current controlfile;

Starting backup at 2024/03/25:16:03:05
allocated channel: ORA_DISK_1
channel ORA_DISK_1: SID=368 instance=racdb1 device type=DISK
channel ORA_DISK_1: starting full datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
input datafile file number=00001 name=+DATA/racdb/datafile/system.256.1164291499
input datafile file number=00002 name=+DATA/racdb/datafile/sysaux.257.1150862573
input datafile file number=00003 name=+DATA/racdb/datafile/undotbs1.258.1164291565
input datafile file number=00005 name=+DATA/racdb/datafile/undotbs2.264.1150862657
input datafile file number=00006 name=+DATA/racdb/datafile/undotbs3.268.1164205143
input datafile file number=00007 name=+DATA/racdb/datafile/undotbs4.269.1164205155
input datafile file number=00008 name=+DATA/racdb/datafile/ts01.270.1164291165
input datafile file number=00009 name=+DATA/racdb/datafile/ts51.276.1164551409
input datafile file number=00010 name=+DATA/racdb/datafile/ts52.275.1164551411
input datafile file number=00011 name=+DATA/racdb/datafile/ts22.277.1164556793
input datafile file number=00004 name=+DATA/racdb/datafile/users.259.1150862573
channel ORA_DISK_1: starting piece 1 at 2024/03/25:16:03:07
channel ORA_DISK_1: finished piece 1 at 2024/03/25:16:04:52
piece handle=+FRA/racdb/backupset/2024_03_25/nnndf0_tag20240325t160306_0.454.1164556999 tag=TAG2024
0325T160306 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:01:45
channel ORA_DISK_1: starting full datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
including current control file in backup set
channel ORA_DISK_1: starting piece 1 at 2024/03/25:16:04:55
channel ORA_DISK_1: finished piece 1 at 2024/03/25:16:04:58
piece handle=+FRA/racdb/backupset/2024_03_25/ncnnf0_tag20240325t160306_0.455.1164557095 tag=TAG2024
0325T160306 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:00:03
Finished backup at 2024/03/25:16:04:58

Starting Control File and SPFILE Autobackup at 2024/03/25:16:04:58
piece handle=+FRA/racdb/autobackup/2024_03_25/s_1164557099.456.1164557101 comment=NONE
Finished Control File and SPFILE Autobackup at 2024/03/25:16:05:06
```

4. 로그 스위치를 5번 정도 일으킨다.

(sql 1)

@logsw (5번 실행)

5. ts22 테이블 스페이스를 drop 한다.

```
drop tablespace ts22 including contents and datafiles;
```

6. (복구) alert log file을 열어서 drop 된 시간을 확인한다.

(1번 노드)

trace

```
vi alert*
-----
(G) -> 맨 아래로 내려가기
-----
=> 2024/03/25:16:06:03
=> 10초 전: 2024/03/25:16:05:53
```

```
Archived Log entry 83 added for thread 1 sequence 7 ID 0x45453483 dest 1:
Mon Mar 25 16:06:03 2024
drop tablespace ts22 including contents and datafiles
Deleted Oracle managed file +DATA/racdb/datafile/ts22.277.1164556793
Completed: drop tablespace ts22 including contents and datafiles
```

```
7. (복구) 양쪽 인스턴스를 shutdown immediate로 내린다.
(sql 1)
shutdown immediate

(sql 2)
shutdown immediate

8. (복구) 한쪽 인스턴스만 startup nomount를 한다.
(sql 1)
startup nomount

9. (복구) ts22 테이블 스페이스를 인식하고 있는 옛날 control file을 복원한다.
(1번 노드 rman)
restore controlfile from '+FRA/racdb/autobackup/2024_03_25/s_1164557099.456.1164557101';

10. (복구) alter database mount로 한쪽 인스턴스를 mount로 올린다.
alter database mount;

11. (복구) ts22 테이블 스페이스가 drop 되기 10초 전으로 불완전 복구를 시도한다.
run {set until time='2024/03/25:16:05:53';
      restore database;
      recover database;}

12. (복구) resetlogs 옵션을 써서 db를 올린다.
alter database open resetlogs;

13. (복구) ts22 테이블 스페이스가 복구되었는지 확인한다.
(sql 1)
@tablespace
```

```
+DATA/racdb/datafile/ts51.276.1164551409

TABLESPACE_NAME
-----
FILE_NAME
-----
TS52
+DATA/racdb/datafile/ts52.275.1164551411

TS22
+DATA/racdb/datafile/ts22.277.1164557743
-----
11 rows selected.
```

```
14. (복구) 다른 인스턴스를 올린다.
(sql 2)
startup
```

15. full backup을 수행한다.
(1번 노드 rman)
backup database;

문제. (RAC 이수자 평가 3번 문제)
영문 이니셜로 테이블 스페이스를 생성하고 drop 한 다음에 위와 같이 복구하시오.

(sql 1)
create tablespace psh datafile size 10m;

(1번 노드 rman)
configure controlfile autobackup on;
backup database include current controlfile;

=> +FRA/racdb/autobackup/2024_03_25/s_1164558539.383.1164558543

```
channel ORA_DISK_1: starting piece 1 at 2024/03/25:16:27:50
channel ORA_DISK_1: finished piece 1 at 2024/03/25:16:28:55
piece handle=+FRA/racdb/backupset/2024_03_25/nnndf0_tag20240325t162729_0.381.1164558451 t
0325T162729 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:01:25
channel ORA_DISK_1: starting full datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
including current control file in backup set
channel ORA_DISK_1: starting piece 1 at 2024/03/25:16:28:58
channel ORA_DISK_1: finished piece 1 at 2024/03/25:16:28:59
piece handle=+FRA/racdb/backupset/2024_03_25/ncnnf0_tag20240325t162729_0.384.1164558539 t
0325T162729 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:00:01
Finished backup at 2024/03/25:16:28:59

Starting Control File and SPFILE Autobackup at 2024/03/25:16:28:59
piece handle=+FRA/racdb/autobackup/2024_03_25/s_1164558539.383.1164558543 comment=NONE
Finished Control File and SPFILE Autobackup at 2024/03/25:16:29:06
RMAN> AC
```

(sql 1)
@logsw (5번 실행)

drop tablespace psh including contents and datafiles;

(1번 노드)
trace
vi alert*

(G) -> 맨 아래로 내려가기

=>2024/03/25:16:29:45 (10초 전 시간)

```
Archived Log entry 192 added for thread 1 sequence 5 ID 0x454523e4 dest 1:
Mon Mar 25 16:29:55 2024
drop tablespace psh including contents and datafiles
Deleted Oracle managed file +DATA/racdb/datafile/psh.278.1164558267
Completed: drop tablespace psh including contents and datafiles
```

(sql 1)
shutdown immediate

(sql 2)
shutdown immediate

(sql 1)

```
startup nomount
```

```
(1번 노드 rman)
```

```
restore controlfile from '+FRA/racdb/autobackup/2024_03_25/s_1164558539.383.1164558543';
```

```
alter database mount;
```

```
run {set until time='2024/03/25:16:29:45';  
      restore database;  
      recover database;}
```

```
alter database open resetlogs;
```

```
(sql 1)
```

```
@tablespace
```

```
cli TS52  
cli +DATA/racdb/datafile/ts52.275.1164551411  
cli  
cli TS22  
cli +DATA/racdb/datafile/ts22.277.1164557743  
cli  
cli PSH  
fo +DATA/racdb/datafile/psh.278.1164558267  
ote  
ring 12 rows selected.
```

```
(sql 2)
```

```
startup
```

```
(1번 노드 rman)
```

```
backup database;
```