How to Swap Voting Disks Across Storage in a Diskgroup (文档 ID 1558007.1)

APPLIES TO:

Oracle Database - Enterprise Edition - Version 11.2.0.1 and later
Oracle Database Cloud Schema Service - Version N/A and later
Oracle Database Exadata Express Cloud Service - Version N/A and later
Gen 1 Exadata Cloud at Customer (Oracle Exadata Database Cloud Machine) - Version N/A and later
Oracle Cloud Infrastructure - Database Service - Version N/A and later
Information in this document applies to any platform.

GOAL

You currently have 5 voting disks that are on Type-1 storage. You want to add 5 disks of Type-2 storage and than remove the Type-1 storage.

```
crsctl query css votedisk;
## STATE File Universal Id File Name Disk group
-- ----- ----------------- --------- ---------
1. ONLINE 0a2ae97910dd4f27bff10ffbb002089f (ORCL:OCRVOTE1) [OCRVOTE]
2. ONLINE 1b4272879f284f56bf1336e0af88d1b1 (ORCL:OCRVOTE2) [OCRVOTE]
3. ONLINE 04c92b5c1a3c4ff5bf1a8521ea809437 (ORCL:OCRVOTE3) [OCRVOTE]
4. ONLINE 679558b631c54f7dbfcb833d9c8321b1 (ORCL:OCRVOTE4) [OCRVOTE]
5. ONLINE 42a672aed6884f4ebff543cc2d1dcc64 (ORCL:OCRVOTE5) [OCRVOTE]
Located 5 voting disk(s).
```

Which steps should you follow?

SOLUTION

Follow these steps:

Find the fail groups using the query below.
Here we can see they are　FG1/2/3/4/5

```
col name format a15;
col path format a25;
col  failgroup format a20;

select dg.name, d.path, d.failgroup, d.failgroup_type
from v$asm_diskgroup dg, v$asm_disk d
where dg.group_number = d.group_number and dg.name = 'OCRVOTE'
order by dg.name, d.path, d.failgroup;

NAME            PATH                      FAILGROUP            FAILGRO
--------------- ------------------------- -------------------- -------
OCRVOTE         ORCL:OCRVOTE1             FG1                  REGULAR
OCRVOTE         ORCL:OCRVOTE2             FG2                  REGULAR
OCRVOTE         ORCL:OCRVOTE3             FG3                  REGULAR
OCRVOTE         ORCL:OCRVOTE4             FG4                  REGULAR
OCRVOTE         ORCL:OCRVOTE5             FG5                  REGULAR
```

From node 1 add each disk to a fail group:

```
sqlplus  " / as sysasm"

ALTER DISKGROUP OCRVOTE ADD FAILGROUP FG1 DISK 'ORCL:OCRVOTE101' FAILGROUP FG2 DISK
'ORCL:OCRVOTE102' FAILGROUP FG3 DISK 'ORCL:OCRVOTE103' FAILGROUP FG4 DISK 'ORCL:OCRVOTE104'
FAILGROUP FG5 DISK 'ORCL:OCRVOTE105';
```

Monitor that the rebalance completed, check gv$asm_operation till it returns no rows.

```
col name format a15;
col path format a25;
col  failgroup format a20;

select dg.name, d.path, d.failgroup, d.failgroup_type
from v$asm_diskgroup dg, v$asm_disk d
where dg.group_number = d.group_number and dg.name = 'OCRVOTE'
order by dg.name, d.failgroup, d.path;


NAME            PATH                      FAILGROUP             FAILGRO
--------------- ------------------------- --------------------- -------
OCRVOTE         ORCL:OCRVOTE1             FG1                   REGULAR
OCRVOTE         ORCL:OCRVOTE101           FG1                   REGULAR
OCRVOTE         ORCL:OCRVOTE102           FG2                   REGULAR
OCRVOTE         ORCL:OCRVOTE2             FG2                   REGULAR
OCRVOTE         ORCL:OCRVOTE103           FG3                   REGULAR
OCRVOTE         ORCL:OCRVOTE3             FG3                   REGULAR
OCRVOTE         ORCL:OCRVOTE104           FG4                   REGULAR
OCRVOTE         ORCL:OCRVOTE4             FG4                   REGULAR
OCRVOTE         ORCL:OCRVOTE105           FG5                   REGULAR
OCRVOTE         ORCL:OCRVOTE5             FG5                   REGULAR
```

The above shows 2 disk for each fail group.

Remove the old disks

```
ALTER DISKGROUP OCRVOTE drop disk
'OCRVOTE1',
'OCRVOTE2',
'OCRVOTE3',
'OCRVOTE4',
'OCRVOTE5';

Diskgroup altered.
```

Monitor that the rebalance completed, check gv$asm_operation till it returns no rows.

```
col name format a15;
col path format a25;
col  failgroup format a20;

select dg.name, d.path, d.failgroup, d.failgroup_type
from v$asm_diskgroup dg, v$asm_disk d
where dg.group_number = d.group_number and dg.name = 'OCRVOTE'
order by dg.name, d.failgroup, d.path;


NAME            PATH                      FAILGROUP             FAILGRO
--------------- ------------------------- --------------------- -------
OCRVOTE         ORCL:OCRVOTE101           FG1                   REGULAR
OCRVOTE         ORCL:OCRVOTE102           FG2                   REGULAR
OCRVOTE         ORCL:OCRVOTE103           FG3                   REGULAR
OCRVOTE         ORCL:OCRVOTE104           FG4                   REGULAR
OCRVOTE         ORCL:OCRVOTE105           FG5                   REGULAR
```

The above shows 1 disk ONLY for each fail group.

REFERENCES

[NOTE:428681.1](#) - OCR / Vote disk Maintenance Operations: (ADD/REMOVE/REPLACE/MOVE)
[NOTE:1187723.1](#) - Primary Note for Automatic Storage Management (ASM)
　　未找到您要查找的产品?