

# 2중화 환경 1번 노드 오라클 클러스터 파일 유실 시 복구 테스트(Grid)

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# 1. 사전 준비 사항 – 1.1 2번 노드 grid\_home 복사

```
# tar를 이용해 권한을 유지하며 묶고 복사(만약을 대비해 grid_home 미리 복사)  
tar cvfpz grid.tar.gz /u01/app/11.2.0/grid
```

```
# 1번 노드 grid_home으로 복사
```

```
# 권한을 유지하며 압축 풀기  
tar xvpz grid.tar.gz /u01/app/11.2.0/grid
```

- ◆ tar 명령어
- ◆ -c tar 파일 생성(기본사용) -> 풀 때는 -x 옵션 사용
- ◆ -t tar파일의 내용 확인
- ◆ -f tar파일 사용(기본 사용)
- ◆ -p 권한 유지
- ◆ -v 과정 보기
- ◆ -z gzip(gunzip) 사용 옵션
- ◆ -j bzip(bunzip) 사용 옵션

# 1. 사전 준비 사항 – 2.1 1번 노드 crs process 정지

```
# process 조회  
ps -ef |grep d.bin
```

```
# 해당 process가 있다면 kill을 사용해 정지
```

```
[root@rac1 11.2.0]# ps -ef |grep d.bin  
root      22897 15975  0 10:31 pts/7    00:00:00 grep d.bin
```

## 2. grid\_home 복구 작업 – 1.1 관련 hostname 변경

```
$GRID_HOME/cdata/$hostname  
$GRID_HOME/auth/crs/$hostname  
$GRID_HOME/auth/css/$hostname  
$GRID_HOME/auth/evm/$hostname  
$GRID_HOME/auth/ohasd/$hostname  
$GRID_HOME/crf/admin/crf$hostname.cfg  
$GRID_HOME/crf/admin/crf$hostname.ora  
$GRID_HOME/crf/db/$hostname  
$GRID_HOME/crs/init/$hostname  
$GRID_HOME/crs/init/$hostname.pid  
$GRID_HOME/ctss/init/$hostname  
$GRID_HOME/ctss/init/$hostname.pid  
$GRID_HOME/evm/init/$hostname  
$GRID_HOME/evm/init/$hostname.pid  
$GRID_HOME/gipc/init/$hostname  
$GRID_HOME/gipc/init/$hostname.pid  
$GRID_HOME/gpnp/init/$hostname  
$GRID_HOME/gpnp/init/$hostname.pid  
$GRID_HOME/gpnp/$hostname  
$GRID_HOME/log/$hostname  
$GRID_HOME/mdns/init/$hostname  
$GRID_HOME/mdns/init/$hostname.pid  
$GRID_HOME/ohasd/init/$hostname  
$GRID_HOME/ohasd/init/$hostname.pid  
$GRID_HOME/opmn/conf/ons.config.$hostname  
$GRID_HOME/dbs/ab_+ASM1.dat hc_+ASM1.dat
```

## 2. grid\_home 복구 작업 – 1.2 관련 hostname 변경

```
cd /u01/app/11.2.0/grid/cdata/  
mv rac2 rac1  
mv rac2.olr rac1.olr  
cd /u01/app/11.2.0/grid/auth/crs  
mv rac2 rac1  
cd /u01/app/11.2.0/grid/auth/css  
mv rac2 rac1  
cd /u01/app/11.2.0/grid/auth/evm  
mv rac2 rac1  
cd /u01/app/11.2.0/grid/auth/ohasd  
mv rac2 rac1  
cd /u01/app/11.2.0/grid/crf/admin  
mv crfrac2.cfg crfrac1.cfg  
mv crfrac2.ora crfrac1.ora  
cd /u01/app/11.2.0/grid/crf/db  
mv rac2 rac1  
cd /u01/app/11.2.0/grid/crs/init  
mv rac2 rac1  
mv rac2.pid rac1.pid  
cd /u01/app/11.2.0/grid/ctss/init  
mv rac2 rac1  
mv rac2.pid rac1.pid  
cd /u01/app/11.2.0/grid/evm/init  
mv rac2 rac1  
mv rac2.pid rac1.pid
```

```
cd /u01/app/11.2.0/grid/gipc/init  
mv rac2 rac1  
mv rac2.pid rac1.pid  
cd /u01/app/11.2.0/grid/gpnp  
mv rac2 rac1  
cd /u01/app/11.2.0/grid/gpnp/init  
mv rac2 rac1  
mv rac2.pid rac1.pid  
cd /u01/app/11.2.0/grid/log  
mv rac2 rac1  
cd /u01/app/11.2.0/grid/mdns/init  
mv rac2 rac1  
mv rac2.pid rac1.pid  
cd /u01/app/11.2.0/grid/ohasd/init  
mv rac2 rac1  
mv rac2.pid rac1.pid  
cd /u01/app/11.2.0/grid/opmn/conf  
mv ons.config.rac2 ons.config.rac1  
cd /u01/app/11.2.0/grid/opmn/logs  
mv ons.dbg.rac2 ons.dbg.rac1  
mv ons.log.rac2 ons.log.rac1  
cd /u01/app/11.2.0/grid/dbs  
mv ab_+ASM2.dat ab_+ASM1.dat  
mv hc_+ASM2.dat hc_+ASM1.dat
```

## 2. grid\_home 복구 작업 – 2.1 클러스터 가동

```
# root 계정을 이용해 클러스터 가동  
cd /u01/app/11.2.0/grid/bin/  
./crsctl start crs
```

```
[root@rac1 bin]# ./crsctl start crs  
CRS-4123: Oracle High Availability Services has been started.
```

## 2. grid\_home 복구 작업 – 3.1 클러스터 가동 확인

```
# 다른 세션에서 클러스터 확인
while true
do
crsctl stat res -t -init
sleep 3
done
```

```
[oracle@rac1 ~]$ while true
> do
> crsctl stat res -t -init
> sleep 3
> done
```

NAME	TARGET	STATE	SERVER	STATE_DETAILS
Cluster Resources				
ora.asm	1	ONLINE	OFFLINE	
ora.cluster_interconnect.haip	1	ONLINE	OFFLINE	
ora.crf	1	ONLINE	ONLINE	rac1
ora.crsd	1	ONLINE	OFFLINE	
ora.cssd	1	ONLINE	OFFLINE	STARTING
ora.cssdmonitor	1	ONLINE	ONLINE	rac1
ora.ctssd	1	ONLINE	OFFLINE	
ora.diskmon	1	ONLINE	ONLINE	rac1
ora.drivers.acfs	1	ONLINE	ONLINE	rac1
ora.evmd	1	ONLINE	OFFLINE	
ora.gipcd	1	ONLINE	ONLINE	rac1
ora.gpnpd	1	ONLINE	ONLINE	rac1
ora.mdnsd	1	ONLINE	ONLINE	rac1



## 2. grid\_home 복구 작업 – 3.2 클러스터 가동 확인(1번, 2번 노드)

```
# 다른 세션에서 클러스터 확인
while true
do
crsctl stat res -t
sleep 3
done
```

```
[oracle@rac1 ~]$ crsctl stat res -t
-----
NAME                TARGET  STATE        SERVER          STATE_DETAILS
-----
Local Resources
-----
ora.DATA.dg
    ONLINE  ONLINE      rac1
    ONLINE  ONLINE      rac2
ora.EXAM.dg
    ONLINE  ONLINE      rac1
    ONLINE  ONLINE      rac2
ora.EXAM3.dg
    ONLINE  ONLINE      rac1
    ONLINE  ONLINE      rac2
ora.LISTENER.lsnr
    ONLINE  ONLINE      rac1
    ONLINE  ONLINE      rac2
ora.asm
    ONLINE  ONLINE      rac1
    ONLINE  ONLINE      rac2          Started
ora.gsd
    OFFLINE  OFFLINE     rac1
    OFFLINE  OFFLINE     rac2
ora.net1.network
    ONLINE  ONLINE      rac1
    ONLINE  ONLINE      rac2
ora.ons
    ONLINE  UNKNOWN    rac1          CHECK TIMED OUT
    ONLINE  ONLINE     rac2
-----
Cluster Resources
-----
ora.LISTENER_SCAN1.lsnr
    1        ONLINE  ONLINE      rac2
ora.cvu
    1        ONLINE  ONLINE      rac2
ora.oc4j
    1        ONLINE  ONLINE      rac2
ora.orcl.db
    1        ONLINE  ONLINE      rac1          Open
    2        ONLINE  ONLINE      rac2          Open
ora.rac1.vip
    1        ONLINE  ONLINE      rac1
ora.rac2.vip
    1        ONLINE  ONLINE      rac2
ora.scan1.vip
    1        ONLINE  ONLINE      rac2
ora.test.db
    1        ONLINE  ONLINE      rac2          Open
    2        ONLINE  ONLINE      rac1          Open
[oracle@rac1 ~]$
```

### 3. 확인 작업 – 1.1 DB 접속

# 1번 노드에서 DB 접속

```
sqlplus / as sysdba
```

```
select instance_name, status from v$instance ;
```

```
[oracle@rac1 ~]$ sqlplus / as sysdba
SQL*Plus: Release 11.2.0.2.0 Production on Fri Sep 5 10:22:33 2014
Copyright (c) 1982, 2010, Oracle. All rights reserved.

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.2.0 - 64bit Production
With the Partitioning, Real Application Clusters, Automatic Storage Management, OLAP,
Data Mining and Real Application Testing options

SQL>
SQL> select instance_name, status from v$instance ;

INSTANCE_NAME      STATUS
-----
ORCL1              OPEN
```

### 3. 확인 작업 – 1.2 DB 접속

# 2번 노드에서 DB 접속

```
sqlplus / as sysdba
```

```
select instance_name, status from v$instance ;
```

```
[oracle@rac2 ~]$ sqlplus / as sysdba
SQL*Plus: Release 11.2.0.2.0 Production on Fri Sep 5 10:23:58 2014
Copyright (c) 1982, 2010, Oracle. All rights reserved.

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.2.0 - 64bit Production
With the Partitioning, Real Application Clusters, Automatic Storage Management, OLAP,
Data Mining and Real Application Testing options

SQL> select instance_name, status from v$instance ;

INSTANCE_NAME      STATUS
-----
ORCL2              OPEN
```