**DATAGUARD OUT OF SYNC**

**10.102.117.11/12 - Primary Database/DC1**

**10.102.217.11/12 – Standby Database/DC2**

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1. Connect to the Primary database/DC1 (10.102.117.11):-

* [oracle@cdc1aodbdb1 ~]$ ps -ef|grep pmon

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Export the oracle sid using below command

* export ORACLE\_SID=AMSPRD1

connect the SQL prompt and check the status of database.

* sqlplus / as sysdba
* select name, open\_mode, database\_role from v$database;

A screenshot of a computer screen

Description automatically generated

2. Now, Connect to the Standby database(DC2)/ 10.102.217.11:-

* [oracle@cdc1aodbdb1 ~]$ ps -ef|grep pmon

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Description automatically generated

Export oracle\_sid to connect the instance.

* export ORACLE\_SID=AMSPRDSTBY1

Now, connect and check the status of database on standby (DC2).

* sqlplus / as sysdba
* select name, open\_mode, database\_role from v$database;

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Here, We can able to check the Log gap between DC1 and DC2 using below command on DC2.

Command: -

SELECT ARCH.THREAD# "Thread", ARCH.SEQUENCE# "Last Sequence Received", APPL.SEQUENCE# "Last Sequence Applied", (ARCH.SEQUENCE# - APPL.SEQUENCE#) "Difference"

FROM

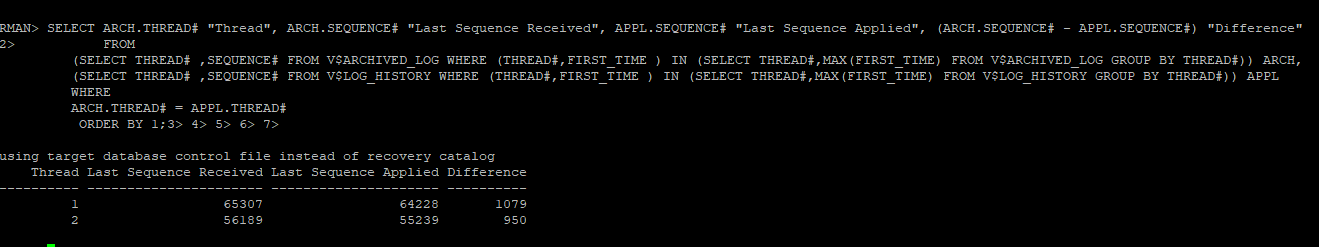
(SELECT THREAD# ,SEQUENCE# FROM V$ARCHIVED\_LOG WHERE (THREAD#,FIRST\_TIME ) IN (SELECT THREAD#,MAX(FIRST\_TIME) FROM V$ARCHIVED\_LOG GROUP BY THREAD#)) ARCH,

(SELECT THREAD# ,SEQUENCE# FROM V$LOG\_HISTORY WHERE (THREAD#,FIRST\_TIME ) IN (SELECT THREAD#,MAX(FIRST\_TIME) FROM V$LOG\_HISTORY GROUP BY THREAD#)) APPL

WHERE

ARCH.THREAD# = APPL.THREAD#

ORDER BY 1;



We observed there is a huge log gap between DC1 and DC2. So, it is out of sync.

* In Thread 1, we observed that there is huge log gap i.e. “1079”
* In Thread 2 also we observed that huge log gap i.e. “950”

Now, our aim is to resolve this log gap and synchronize the DC1 and DC2 as per oracle method using “service name”.

As per “Service Name” method to resolve this problem: -

Connect node 1 on DC1 as per below steps:

* [oracle@cdc1aodbdb1 ~]$ ps -ef|grep pmon
* export ORACLE\_SID=AMSPRD1
* sqlplus / as sysdba
* select name, open\_mode, database\_role from v$database;

We have already discussed this connecting process with the above steps.

Similarly, we are connecting to instance 2 on DC1 i.e. 10.102.117.12

* [oracle@cdc1aodbdb2 ~]$ ps -ef|grep pmon
* export ORACLE\_SID=AMSPRD2
* sqlplus / as sysdba
* select instance\_name, open\_mode, database\_role from v$database, v$instance;

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Now, we connected node 2 on DC1:

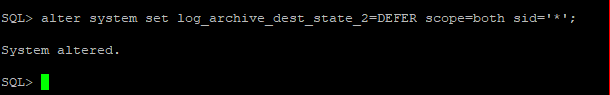
Here, we must do “DEFER” the log\_archive\_dest\_state\_2 parameter on both the nodes on DC1.

Command:-

On node 1/10.102.117.11:

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* alter system set log\_archive\_dest\_state\_2=DEFER scope=both sid='\*';

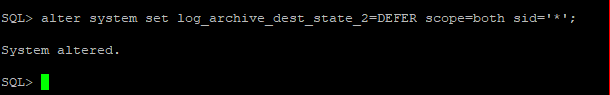


On node 2/10.102.117.12:

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Connect node 2 and “DEFER” the log\_archive\_dest\_state\_2 parameter on DC1.

* alter system set log\_archive\_dest\_state\_2=DEFER scope=both sid='\*';



**On Standby Database: -**

Now connect to the standby database/DC2 node 1 and node 2 (10.102.217.11/12):

**Node\_01/10.102.217.12: -**

Export oracle sid to connect the node\_2

* [oracle@cdc2aodbdb1 ~]$ ps -ef|grep pmon
* export ORACLE\_SID= AMSPRDSTBY2
* sqlplus / as sysdba
* select instance\_name, open\_mode, database\_role from v$database, v$instance;

After connection of standby/DC1 database, do follow the below steps.

* Down the database on both nodes (node1 and Node 2)
* Start the database with nomount state on only one node, either node 1 or node 2.

Note: Before down the database “Disable“ MRP on standby/DC2

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Down the MRP on standby database using below command:

* alter database recover managed standby database cancel;

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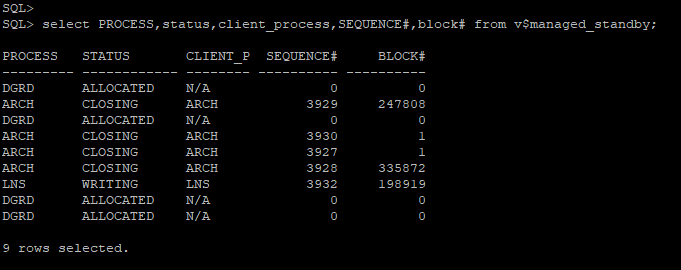
Description automatically generated

After dawn the MRP weather check it’s status up or not.

* Set lines 200 pages 200

col block# for 9999999

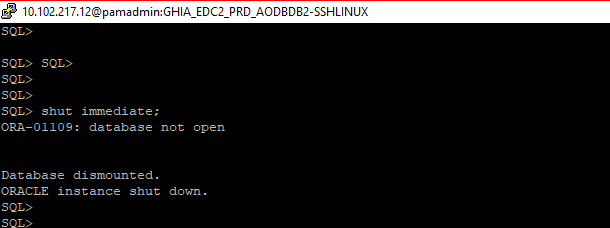
select PROCESS, status, client\_process, SEQUENCE#, block# from v$managed\_standby;



Now, here MRP is showing down state.

Down the database on node\_02:

* shut immediate;



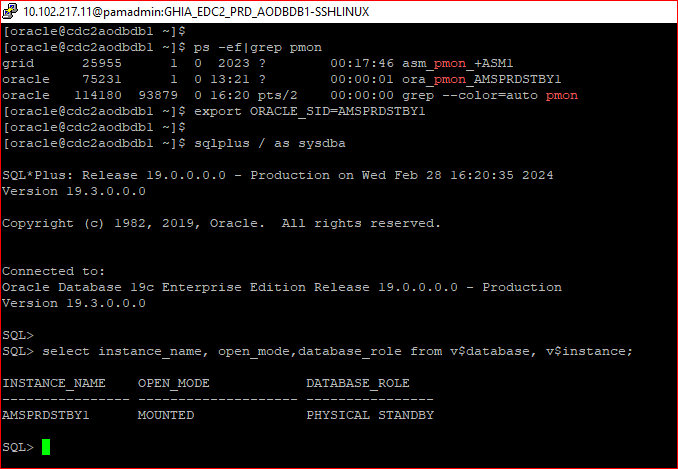
**NODE\_1/10.102.217.11:-**

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Now, connect node\_01 on DC2 / 10.102.217.11:-

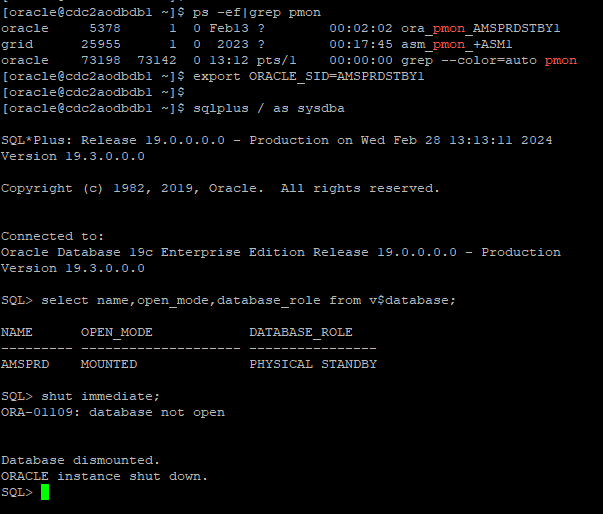
Export oracle sid to connect the node\_1

* [oracle@cdc2aodbdb1 ~]$ ps -ef|grep pmon
* export ORACLE\_SID= AMSPRDSTBY1
* sqlplus / as sysdba
* select instance\_name, open\_mode, database\_role from v$database, v$instance;



Down the database node\_1

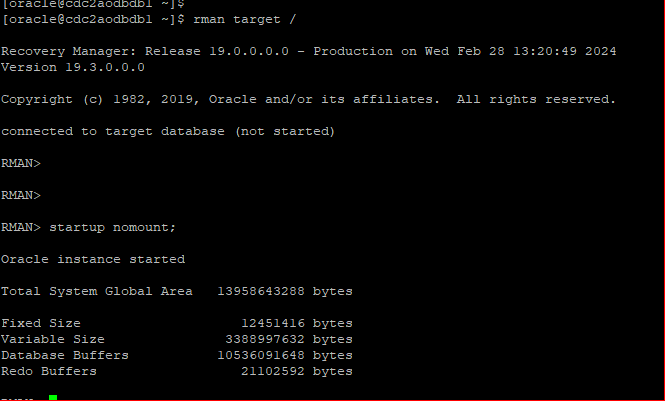
* shut immediate;



Both the nodes are down state, now we can up the database with nomount state only one node 1.

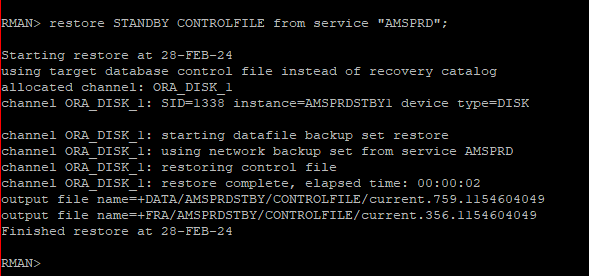
Connect rman and up the database with nomount state.

* rman target /
* startup nomount.



Restore standby control file from using primary database service name as show in below steps.

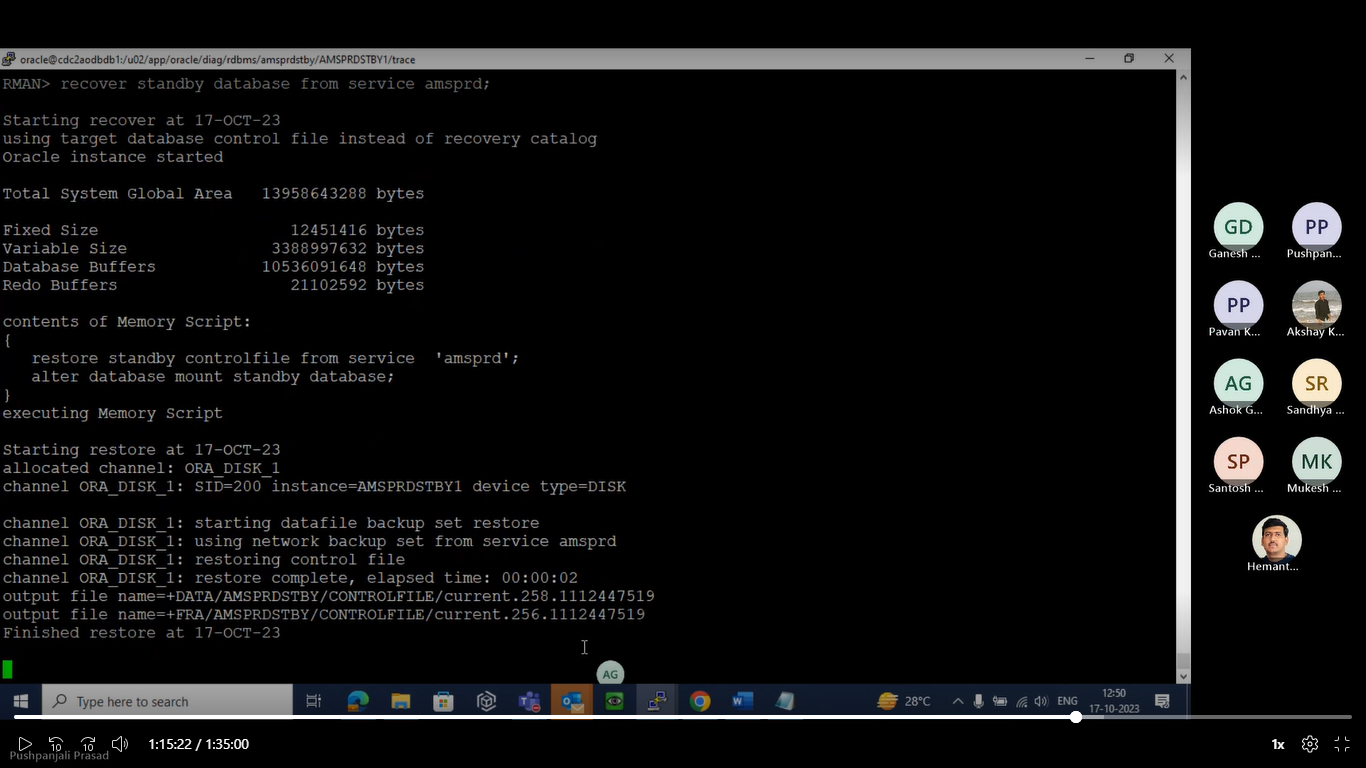
* restore standby controlfile from service “AMSPRD”



Here, standby control file was restored by using primary db service name.

Similarly, we will do recovery process using the same as primary service name.

* alter database mount;
* recover standby database from service AMSPRD;



After completion of recover process follow the below steps.

* Enable the MRP on standby side.
* Up the node 2 on standby database/DC2.
* On primary database, enable log\_archive\_dest\_state\_2 parameter on both nodes.

Enabling MRP on node 1;-

* alter database recover managed standby database disconnect from session;

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Description automatically generated

Here, check once MRP status.

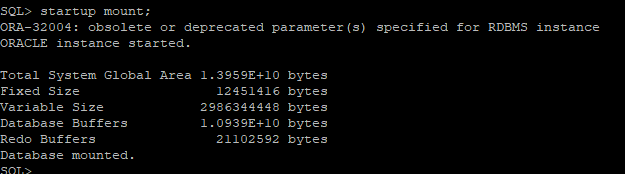
col block# for 9999999

select PROCESS, status, client\_process, SEQUENCE#, block# from v$managed\_standby;

On standby, Up the node 2:

To up the node follow below steps.

* export ORACLE\_SID= AMSPRDSTBY2
* sqlplus / as sysdba
* startup mount;



Now, check the status of node:

Select instance\_name, status, database\_role from v$database, v$instance;

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On standby side both nodes and MRP also up and running.

We have to check log gap between DC1 and DC2:

* SELECT ARCH.THREAD# "Thread", ARCH.SEQUENCE# "Last Sequence Received", APPL.SEQUENCE# "Last Sequence Applied", (ARCH.SEQUENCE# - APPL.SEQUENCE#) "Difference"

FROM

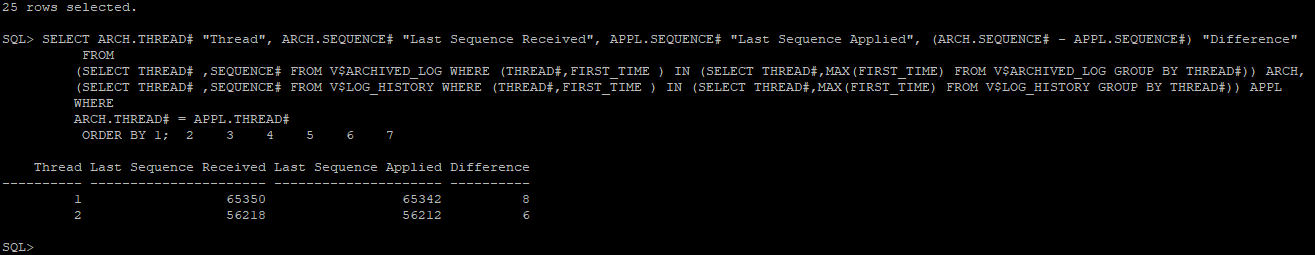
(SELECT THREAD# ,SEQUENCE# FROM V$ARCHIVED\_LOG WHERE (THREAD#,FIRST\_TIME ) IN (SELECT THREAD#,MAX(FIRST\_TIME) FROM V$ARCHIVED\_LOG GROUP BY THREAD#)) ARCH,

(SELECT THREAD# ,SEQUENCE# FROM V$LOG\_HISTORY WHERE (THREAD#,FIRST\_TIME ) IN (SELECT THREAD#,MAX(FIRST\_TIME) FROM V$LOG\_HISTORY GROUP BY THREAD#)) APPL

WHERE

ARCH.THREAD# = APPL.THREAD#

ORDER BY 1;



So, finally we have resolved the huge log gap between DC1 and DC2. The logs will be shipping.