**Oracle Database Administration Services**

SOP\_MOFF Refresh

Submitted to

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**By**



CIS, Wipro Limited

Document Details

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| List of Contributors | Balaji Ankalle |
| Customer Contact Information |  |

Version History

(All revisions made to this document must be listed in chronological order. All revisions must be approved. Review and Approval can be done by an internal source or by the customer)

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| Version | Date of Revision | Description | Author | Reviewed By | Approved By |
| 1.0 | 30/07/2017 | Initail Drafted | Balaji Ankalle | Jitenpansara | Mahesh Kesthwar |
| 1.1 | **10/08/2017** | **Documented Completed** | **Balaji Ankalle** | **Jitenpansara** | **Mahesh Kesthwar** |
| 1.2 | **30/01/2018** | **Update with new format and logo** | **Abhishek Kansal** | **Balaji Ankalle** | **Yogesh Desai** |
| 1.3 | **29/12/2018** | **Updated the content** | **Sreya Puthukudy** | **Jiten Pansara** | **Santosh Badiger** |

Document Distribution List

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| **S.No** | **Name and Company** | **Purpose** |
| **1** | RWEIT-ORACLEDBA | **This document is regarding refresh of MOFF database** |
| **2** |  |  |

**Oracle 12c MOFFQ Refresh**

MOFF Databases are upgraded to 12c with Multitenant architecture. (12.1.0.2)

All the nonproduction databases MOFFS,MOFFD & MOFFQ are part of a single container database. The earlier approach of the database refresh using RMAN backup/restore from production can no longer to be used for the Nonproduction refresh activities.

|  |  |  |
| --- | --- | --- |
| **Server Name** | **Container Name** | **PDB Name** |
| rs277a | MOFFCT | MOFFD |
| MOFFS |
| MOFFQ |

The refresh needs to be completed using PDB cloning.

There are multiple ways a PDB can be cloned depending on the requirement; size of the database and downtime availability.

1. One of the option is to put the Source PDB in read only and clone the PDB to another container database/server using DB LINK.
2. Aother approach is usuage of the Plug/Unplug Method for PDB at Source and Target copying the datafiles manually.

Both of these approaches requires a production downtime for the DB version for which the PDB needs to be kept in read only mode.

Earlier approach of DB restore could still be used by restoring the production container database as a new container database and replugging the database to MOFFCT container DB.

Considering; we have a standby database been configured for MOFF; we can use the approach of PDB cloning from standby.

**Steps to be followed :**

1. Disable replication from production (MOFFCP-rs282a) to Standby (MOFFCDR-rs277a)

alter system set log\_archive\_dest\_state\_2=DEFER;

1. Disable the UC4 jobs/cron scripts for MOFFR standby conversiosn and Read Write conversion; currently these are scheduled in crontab and will be migrated to UC4.

30 5 \* \* \* /oracle/MOFFCF/12.1.0.2/product/scripts/RW\_conversion\_MOFFR.sh

20 2 \* \* \* /oracle/MOFFCF/12.1.0.2/product/scripts/stdby\_conversion\_MOFFR.sh

*Shutdown and Drop the MOFFQ database*

SQL> select name,open\_mode,database\_Role , db\_unique\_name from v$database;

NAME OPEN\_MODE DATABASE\_ROLE DB\_UNIQUE\_NAME

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MOFFCT READ WRITE PRIMARY MOFFCT

SQL> show pdbs;

CON\_ID CON\_NAME OPEN MODE RESTRICTED

---------- ------------------------------ ---------- ----------

2 PDB$SEED READ ONLY NO

3 MOFFQ READ WRITE NO

4 MOFFS READ WRITE NO

5 MOFFD READ WRITE NO

SQL> alter pluggable database MOFFQ close immediate;

SQL> drop pluggable database MOFFQ including datafiles;

*Login to the MOFF DR database;*

NAME OPEN\_MODE DATABASE\_ROLE DB\_UNIQUE\_NAME

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MOFFCP MOUNTED PHYSICAL STANDBY MOFFCDR

SQL> show pdbs;

CON\_ID CON\_NAME OPEN MODE RESTRICTED

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2 PDB$SEED MOUNTED

3 MOFFP MOUNTED

SQL> alter database open read only ;

Database altered.

*Create a Database Link on the Target Container Database :*

SQL> select name,open\_mode,database\_Role , db\_unique\_name from v$database;

NAME OPEN\_MODE DATABASE\_ROLE DB\_UNIQUE\_NAME

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MOFFCT READ WRITE PRIMARY MOFFCT

SQL> show pdbs;

CON\_ID CON\_NAME OPEN MODE RESTRICTED

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2 PDB$SEED READ ONLY NO

4 MOFFS READ WRITE NO

5 MOFFD READ WRITE NO

SQL> create database link DBLINK\_TO\_STCDB connect to system identified by xxxx using MOFFCDR;

*Start the databse cloning (This wil take 12-16 hours)*

SQL> create pluggable database MOFFQ from MOFFP@DBLINK\_TO\_STCDB

  2  file\_name\_convert=('/oracle/MOFFDR/data01','/oracle/MOFFQ/data01','/oracle/MOFFDR/data02','/oracle/MOFFQ/data02','/oracle/MOFFDR/data03','/oracle/MOFFQ/data03','/oracle/MOFFDR/data04','/oracle/MOFFQ/data04','/oracle/MOFFDR/data02/MOFFCDR','/oracle/MOFFQ/data02/MOFFCR','/oracle/MOFFDR/data04/MOFFCDR','/oracle/MOFFQ/data04/MOFFCR','/oracle/MOFFDR/temp','/oracle/MOFFQ/temp');

Pluggable database created.

*Check and resolve in case of PDB Violations if any*

SQL> select name,cause,type,status, message from PDB\_PLUG\_IN\_VIOLATIONS where name='MOFFQ’;

*Disable the JOB queue process and start the database*

SQL> alter session set container=MOFFQ;

SQL> alter system set job\_queue\_process=0 scope=spfile;

SQL> alter pluggable database MOFFQ open;

SQL> BEGIN

DBMS\_SCHEDULER.DISABLE('GENF.GF\_SUBMIT\_JOBS');

END;

The database can be used now for deliving actitivies to update the production references.

Enable jobs for MOFFR standby conversiosn and Read Write conversion;