**Oracle Database 11gR1 to 11gR2 Upgrade**

***Upgrading 11GR1 to 11GR2, PFB steps :-***

* *Install 11gR2 software in a new Oracle home.*
* *Run the pre-upgrade steps in current Oracle (11gR1) version and make the necessary modification  as suggested by pre upgrade utility.*
* *Upgrade Oracle version to 11gR2 using manual upgrade method.*
* *After upgrade process has completed, run the post-upgrade checks.*
* *Recreate the listener using the new Oracle version.*
* *Update the time zone to the appropriate version.*

***Install 11GR2 software only and install it in a new Oracle Home.***  
  
***Preupgrade steps :-*** *Run the utlu112i.sql in 11GR1 oracle home.*  
  
***PFB Output of  utlu112i.sql script***  
*[cognos@rac1 ~]$ sqlplus  
  
SQL\*Plus: Release 11.1.0.6.0 - Production on Sat Oct 6 04:54:58 2012  
  
Copyright (c) 1982, 2007, Oracle.  All rights reserved.  
  
Enter user-name: /as sysdba  
  
Connected to:  
Oracle Database 11g Enterprise Edition Release 11.1.0.6.0 - Production  
With the Partitioning, OLAP, Data Mining and Real Application Testing options*  
**SQL>** **@/u04/app/cognos/product/11.2.0/dbhome\_2/rdbms/admin/utlu112i.sql**  
*Oracle Database 11.2 Pre-Upgrade Information Tool    10-06-2012 04:55:38  
.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Database:  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
--> name:          ORCL  
--> version:       11.1.0.6.0  
--> compatible:    11.1.0.0.0  
--> blocksize:     8192  
--> platform:      Linux IA (32-bit)  
--> timezone file: V4  
.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Tablespaces: [make adjustments in the current environment]  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
--> SYSTEM tablespace is adequate for the upgrade.  
.... minimum required size: 1049 MB  
.... AUTOEXTEND additional space required: 349 MB  
--> SYSAUX tablespace is adequate for the upgrade.  
.... minimum required size: 909 MB  
.... AUTOEXTEND additional space required: 308 MB  
--> UNDOTBS1 tablespace is adequate for the upgrade.  
.... minimum required size: 462 MB  
--> TEMP tablespace is adequate for the upgrade.  
.... minimum required size: 61 MB  
--> EXAMPLE tablespace is adequate for the upgrade.  
.... minimum required size: 78 MB  
.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Flashback: OFF  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Update Parameters: [Update Oracle Database 11.2 init.ora or spfile]  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
WARNING: --> "java\_pool\_size" needs to be increased to at least 64 MB  
.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Renamed Parameters: [Update Oracle Database 11.2 init.ora or spfile]  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
-- No renamed parameters found. No changes are required.  
.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Obsolete/Deprecated Parameters: [Update Oracle Database 11.2 init.ora or spfile]\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
-- No obsolete parameters found. No changes are required  
.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Components: [The following database components will be upgraded or installed]  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
--> Oracle Catalog Views         [upgrade]  VALID  
--> Oracle Packages and Types    [upgrade]  VALID  
--> JServer JAVA Virtual Machine [upgrade]  VALID  
--> Oracle XDK for Java          [upgrade]  VALID  
--> Oracle Workspace Manager     [upgrade]  VALID  
--> OLAP Analytic Workspace      [upgrade]  VALID  
--> OLAP Catalog                 [upgrade]  VALID  
--> EM Repository                [upgrade]  VALID  
--> Oracle Text                  [upgrade]  VALID  
--> Oracle XML Database          [upgrade]  VALID  
--> Oracle Java Packages         [upgrade]  VALID  
--> Oracle interMedia            [upgrade]  VALID  
--> Spatial                      [upgrade]  VALID  
--> Oracle Ultra Search          [upgrade]  VALID  
--> Expression Filter            [upgrade]  VALID  
--> Rule Manager                 [upgrade]  VALID  
--> Oracle Application Express   [upgrade]  VALID  
--> Oracle OLAP API              [upgrade]  VALID  
.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Miscellaneous Warnings  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
WARNING: --> Database is using a timezone file older than version 11.  
.... After the release migration, it is recommended that DBMS\_DST package  
.... be used to upgrade the 11.1.0.6.0 database timezone version  
.... to the latest version which comes with the new release.  
WARNING: --> Database contains schemas with stale optimizer statistics.  
.... Refer to the Upgrade Guide for instructions to update  
.... schema statistics prior to upgrading the database.  
.... Component Schemas with stale statistics:  
....   SYS  
....   SYSMAN  
WARNING: --> EM Database Control Repository exists in the database.  
.... Direct downgrade of EM Database Control is not supported. Refer to the  
.... Upgrade Guide for instructions to save the EM data prior to upgrade.  
WARNING:--> recycle bin in use.  
.... Your recycle bin is turned on and it contains  
.... 33 object(s).  It is REQUIRED  
.... that the recycle bin is empty prior to upgrading  
.... your database.  
.... The command:  PURGE DBA\_RECYCLEBIN  
.... must be executed immediately prior to executing your upgrade.*  
 *. PL/SQL procedure successfully completed.*  
   
**Purge recyclebin of database.**   
 SQL> PURGE DBA\_RECYCLEBIN;  
  
           *DBA Recyclebin purged.*  
  
**Gather Schema and Database statistics**  
 SQL> EXEC DBMS\_STATS.GATHER\_DICTIONARY\_STATS;  
  
           *PL/SQL procedure successfully completed.*  
 SQL> EXEC DBMS\_STATS.GATHER\_SCHEMA\_STATS('SYS');  
  
           *PL/SQL procedure successfully completed.*  
  
 SQL> exit  
  
**Remove Oracle EM database control.**  
  
[cognos@rac1 ~]$ export ORACLE\_SID=orcl  
[cognos@rac1 ~]$ emca -deconfig dbcontrol db -repos drop   
*STARTED EMCA at Mar 7, 2012 12:20:43 PM  
EM Configuration Assistant, Version 11.1.0.5.0 Production  
Copyright (c) 2003, 2005, Oracle. All rights reserved.  
Enter the following information:  
Database SID: orcl  
Listener port number: 1521  
Password for SYS user:  
Password for SYSMAN user:   
Do you wish to continue? [yes(Y)/no(N)]: Y  
Mar 7, 2012 12:20:53 PM oracle.sysman.emcp.EMConfig perform  
INFO: This operation is being logged at E:\app\svijay7\cfgtoollogs\emca\test\emca\_2012\_03\_07\_12\_20\_43.log.  
Mar 7, 2012 12:20:55 PM oracle.sysman.emcp.util.DBControlUtil stopOMS  
INFO: Stopping Database Control (this may take a while) ...  
Mar 7, 2012 12:21:03 PM oracle.sysman.emcp.EMReposConfig invoke  
INFO: Dropping the EM repository (this may take a while) ...  
Mar 7, 2012 12:24:23 PM oracle.sysman.emcp.EMReposConfig invoke  
INFO: Repository successfully dropped  
Enterprise Manager configuration completed successfully  
FINISHED EMCA at Mar 7, 2012 12:24:36 PM*   
  
**Oracle EM successfully removed.**  
  
Shut Down your Oracle 11GR1 Database.  
Copy your init.ora file of 11GR1 database to 11GR2 Oracle home dbs folder  
Edit the Pfile by increasing java pool size to 64 MB, audit\_file\_dest, diagnostic\_dest and db\_recovery\_file\_dest parameters according to the new 11GR2 oracle home.  
  
**Upgrading Database to 11GR2**  
  
Invoke sqlplus from 11GR2 Oracle Home  
  
[cognos@rac1 ~]$ sqlplus*SQL\*Plus: Release 11.2.0.1.0 Production on Sat Oct 6 12:34:14 2012  
  
Copyright (c) 1982, 2009, Oracle.  All rights reserved.*  
  
*Enter user-name: /as sysdba  
Connected to an idle instance.*  
*SQL> startup upgrade pfile='/u04/app/cognos/dbs/initpfile.ora';*  
*ORACLE instance started.  
Total System Global Area 602619904 bytes  
Fixed Size 1334828 bytes  
Variable Size 163578324 bytes  
Database Buffers 432013312 bytes  
Redo Buffers 5693440 bytes  
Database mounted.  
Database opened.*  
**(If you are upgrading this in windows server then you will get below mentioned error)**  
  
*SQL> spool F:\11gr2\_upgrade.log     (remember this log file will be very large, can be in GB's)  
SQL> @/u02/app/cognos/product/11.2.0/dbhome\_2/rdbms/admin/catupgrd.sql*  
*DOC>#######################################################################  
DOC>#######################################################################  
DOC>  
DOC> The first time this script is run, there should be no error messages  
DOC> generated; all normal upgrade error messages are suppressed.  
DOC>  
DOC> If this script is being re-run after correcting some problem, then  
DOC> expect the following error which is not automatically suppressed:  
DOC>  
DOC> ORA-00001: unique constraint (<constraint\_name>) violated  
DOC> possibly in conjunction with  
DOC> ORA-06512: at "<procedure/function name>", line NN  
DOC>  
DOC> These errors will automatically be suppressed by the Database Upgrade  
DOC> Assistant (DBUA) when it re-runs an upgrade.  
DOC>  
DOC>#######################################################################  
DOC>#######################################################################  
DOC>#  
DOC>######################################################################  
DOC>######################################################################  
DOC> The following statement will cause an "ORA-01722: invalid number"  
DOC> error if the user running this script is not SYS. Disconnect*  
*DOC> and reconnect with AS SYSDBA.  
DOC>######################################################################  
DOC>######################################################################  
DOC>#  
no rows selected  
DOC>######################################################################  
DOC>######################################################################  
DOC> The following statement will cause an "ORA-01722: invalid number"  
DOC> error if the database server version is not correct for this script.  
DOC> Shutdown ABORT and use a different script or a different server.  
DOC>######################################################################  
DOC>######################################################################  
DOC>#  
SELECT TO\_NUMBER('MUST\_BE\_11\_2') FROM v$instance  
\*  
ERROR at line 1:  
ORA-01722: invalid number  
Disconnected from Oracle Database 11g Enterprise Edition Release 11.1.0.6.0 - Production  
With the Partitioning, OLAP, Data Mining and Real Application Testing options*  
  
***Steps to recover from this error in windows server***  
***a. Stop all Oracle Services***  
  
C:\Documents and Settings\amit>NET STOP OracleServiceorcl  
*The OracleServiceorcl service is stopping.  
The OracleServiceorcl service was stopped successfully.*  
  
***b. Delete Oracle service using ORADIM binary from which the database is upgraded***  
  
C:\Documents and Settings\amit>oradim -delete -SID orcl  
*Instance deleted.*  
C:\Documents and Settings\amit>ORADIM -NEW -SID orcl -INTPWD sys -STARTMODE manual  
*Instance created.*  
  
**After this again run the below upgrade script :-**  
***@\u02\app\cognos\product\11.2.0\dbhome\_2\rdbms\admin\catupgrd.sql***  
  
***If you are upgrading this in Unix server then you will get below mentioned Output***  
  
*SQL> spool F:\11gr2\_upgrade.log     (remember this log file will be very large, can be in GB's)  
SQL> @/u02/app/cognos/product/11.2.0/dbhome\_2/rdbms/admin/catupgrd.sql*  
  
***It will take more than an hour to finish the upgrade process and database will be in a shutdown stage.***  
  
**Post Upgrade steps*:-***  
 ***Start the database and run the post upgrade utility***  
 *[cognos@rac1 ~]$ sqlplus  
  
SQL\*Plus: Release 11.2.0.1.0 Production on Sat Oct 6 12:34:14 2012  
  
Copyright (c) 1982, 2009, Oracle.  All rights reserved.  
  
Enter user-name: /as sysdba  
Connected to an idle instance.*  
  
*SQL> startup pfile='/u04/initorcl.ora'  
ORACLE instance started.  
  
Total System Global Area 1025298432 bytes  
Fixed Size                  1341000 bytes  
Variable Size             322963896 bytes  
Database Buffers          696254464 bytes  
Redo Buffers                4739072 bytes  
Database mounted.  
Database opened.*  
  
*SQL> @/u02/app/cognos/product/11.2.0/dbhome\_2/rdbms/admin/utlu112s.sql  
.  
Oracle Database 11.2 Post-Upgrade Status Tool 06-10-2012 10:40:44  
.  
Component Status Version HH:MM:SS  
.  
Oracle Server                                                      . VALID 11.2.0.1.0 00:17:39*  
*JServer JAVA Virtual Machine                           . VALID 11.2.0.1.0 00:06:28  
Oracle Workspace Manager                               . VALID 11.2.0.1.0 00:00:45  
OLAP Analytic Workspace                                 . VALID 11.2.0.1.0 00:01:53  
OLAP Catalog                                                    . VALID 11.2.0.1.0 00:01:58  
Oracle OLAP API                                              . VALID 11.2.0.1.0 00:00:29  
Oracle XDK                                                       . VALID 11.2.0.1.0 00:01:11  
Oracle Text                                                        . VALID 11.1.0.6.0 00:00:00  
Oracle XML Database                                      . VALID 11.2.0.1.0 00:03:52  
Oracle Database Java Packages                      . VALID 11.2.0.1.0 00:00:47  
Oracle Multimedia                                            . VALID 11.2.0.1.0 00:09:02  
Spatial                                                               . VALID 11.2.0.1.0 00:05:45  
Oracle Expression Filter                                   . VALID 11.2.0.1.0 00:00:13  
Oracle Rule Manager                                        . VALID 11.2.0.1.0 00:00:10  
Gathering Statistics. 00:04:29  
Total Upgrade Time: 01:34:54  
PL/SQL procedure successfully completed.*   
  
*SQL> select \* from v$version;  
BANNER  
--------------------------------------------------------------------------------  
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production  
PL/SQL Release 11.2.0.1.0 - Production  
CORE 11.2.0.1.0 Production  
TNS for 32-bit Windows: Version 11.2.0.1.0 - Production  
NLSRTL Version 11.2.0.1.0 - Production*  
  
***Run catuppst.sql to perform post-upgrade actions.***

*SQL> @/u02/app/cognos/product/11.2.0/dbhome\_2/rdbms/admin/catuppst.sql  
  
TIMESTAMP  
--------------------------------------------------------------------------------COMP\_TIMESTAMP   POSTUP\_BGN 2012-10-06 12:40:50  
  
  
PL/SQL procedure successfully completed.  
  
  
This script will migrate the Baseline data on a pre-11g database  
to the 11g database.  
  
...                                       ...  
... Completed Moving the Baseline Data    ...  
...                                       ...  
... If there are no Move BL Data messages ...  
... above, then there are no renamed      ...  
... baseline tables in the system.        ...  
...                                       ...  
...                                       ...  
... Completed the Dropping of the         ...  
... Renamed Baseline Tables               ...  
...                                       ...  
... If there are no Drop Table messages   ...  
... above, then there are no renamed      ...  
... baseline tables in the system.        ...  
...                                       ...  
  
PL/SQL procedure successfully completed.  
  
  
0 rows created.  
  
  
Commit complete.  
  
  
Table created.  
  
  
2 rows created.  
  
  
1 row updated.  
  
  
2 rows updated.  
  
  
0 rows updated.  
  
  
Table dropped.  
  
  
Commit complete.  
  
  
0 rows updated.  
  
  
Commit complete.  
  
  
0 rows updated.  
  
  
Commit complete.  
  
  
0 rows updated.  
  
  
Commit complete.  
  
  
0 rows created.  
  
  
Commit complete.  
  
  
0 rows created.  
  
  
Commit complete.  
  
  
PL/SQL procedure successfully completed.*   
 *TIMESTAMP  
--------------------------------------------------------------------------------COMP\_TIMESTAMP POSTUP\_END 2012-10-06 12:41:03*  
 ***Run the utlrp.sql script to recompile any invalid objects.***  
*SQL> @/u02/app/cognos/product/11.2.0/dbhome\_2/rdbms/admin/utlrp.sql  
  
TIMESTAMP  
--------------------------------------------------------------------------------COMP\_TIMESTAMP UTLRP\_BGN  2012-10-06 12:43:14  
  
DOC>   The following PL/SQL block invokes UTL\_RECOMP to recompile invalid  
DOC>   objects in the database. Recompilation time is proportional to the  
DOC>   number of invalid objects in the database, so this command may take  
DOC>   a long time to execute on a database with a large number of invalid  
DOC>   objects.  
DOC>  
DOC>   Use the following queries to track recompilation progress:  
DOC>  
DOC>   1. Query returning the number of invalid objects remaining. This  
DOC>      number should decrease with time.  
DOC>         SELECT COUNT(\*) FROM obj$ WHERE status IN (4, 5, 6);  
DOC>  
DOC>   2. Query returning the number of objects compiled so far. This number  
DOC>      should increase with time.  
DOC>         SELECT COUNT(\*) FROM UTL\_RECOMP\_COMPILED;  
DOC>  
DOC>   This script automatically chooses serial or parallel recompilation  
DOC>   based on the number of CPUs available (parameter cpu\_count) multiplied  
DOC>   by the number of threads per CPU (parameter parallel\_threads\_per\_cpu).  
DOC>   On RAC, this number is added across all RAC nodes.  
DOC>  
DOC>   UTL\_RECOMP uses DBMS\_SCHEDULER to create jobs for parallel  
DOC>   recompilation. Jobs are created without instance affinity so that they  
DOC>   can migrate across RAC nodes. Use the following queries to verify  
DOC>   whether UTL\_RECOMP jobs are being created and run correctly:  
DOC>  
DOC>   1. Query showing jobs created by UTL\_RECOMP  
DOC>         SELECT job\_name FROM dba\_scheduler\_jobs  
DOC>            WHERE job\_name like 'UTL\_RECOMP\_SLAVE\_%';  
DOC>  
DOC>   2. Query showing UTL\_RECOMP jobs that are running  
DOC>         SELECT job\_name FROM dba\_scheduler\_running\_jobs  
DOC>            WHERE job\_name like 'UTL\_RECOMP\_SLAVE\_%';  
DOC>#  
  
PL/SQL procedure successfully completed.  
  
  
TIMESTAMP  
--------------------------------------------------------------------------------COMP\_TIMESTAMP UTLRP\_END  2012-10-06 12:46:49  
  
DOC> The following query reports the number of objects that have compiled  
DOC> with errors (objects that compile with errors have status set to 3 in  
DOC> obj$). If the number is higher than expected, please examine the error  
DOC> messages reported with each object (using SHOW ERRORS) to see if they  
DOC> point to system misconfiguration or resource constraints that must be  
DOC> fixed before attempting to recompile these objects.  
DOC>#  
  
OBJECTS WITH ERRORS  
-------------------  
                  0  
  
DOC> The following query reports the number of errors caught during  
DOC> recompilation. If this number is non-zero, please query the error  
DOC> messages in the table UTL\_RECOMP\_ERRORS to see if any of these errors  
DOC> are due to misconfiguration or resource constraints that must be  
DOC> fixed before objects can compile successfully.  
DOC>#  
  
ERRORS DURING RECOMPILATION  
---------------------------  
                          0  
  
  
PL/SQL procedure successfully completed.  
  
  
PL/SQL procedure successfully completed.*  
*SQL> select count(\*) from dba\_objects where status='INVALID';*  
  
*COUNT(\*)  
----------  
          0*  
  
***Recreate the Listener service***  
 *Recreate the listener service from new oracle home.*  
***Check the Current version of  the Oracle time Zone definitions in Upgraded database***  
  
*SQL> SELECT version FROM v$timezone\_file;  
  
   VERSION  
----------  
         4*  
 *SQL> SELECT PROPERTY\_NAME, SUBSTR(property\_value, 1, 30) value FROM DATABASE\_PROPERTIES WHERE PROPERTY\_NAME LIKE 'DST\_%' ORDER BY PROPERTY\_NAME;*  
 *PROPERTY\_NAME                              VALUE  
------------------------------*  
*------------------------------------------------------------------------------------------------------------------------  
DST\_PRIMARY\_TT\_VERSION             4  
DST\_SECONDARY\_TT\_VERSION       0  
DST\_UPGRADE\_STATE                      NONE*  
  
  
***(if this is LOWER than 11 (for 11.2.0.1 ) or 14 (for 11.2.0.2 and 11.2.0.3) then it is \*recommended\* to upgrade the timezone version)***  
  
*SQL> alter session set "\_with\_subquery"=materialize;  
  
Session altered.  
  
SQL> alter session set "\_simple\_view\_merging"=TRUE;  
  
Session altered.*  
 *SQL> exec DBMS\_DST.BEGIN\_PREPARE(11);*  
 *PL/SQL procedure successfully completed.*  
 *SQL> SELECT PROPERTY\_NAME, SUBSTR(property\_value, 1, 30) value FROM DATABASE\_PROPERTIES WHERE PROPERTY\_NAME LIKE 'DST\_%' ORDER BY PROPERTY\_NAME;  
  
PROPERTY\_NAME                              VALUE  
------------------------------ ------------------------------------------------------------------------------------------------------------------------  
DST\_PRIMARY\_TT\_VERSION             4  
DST\_SECONDARY\_TT\_VERSION      11  
DST\_UPGRADE\_STATE                      PREPARE*  
 *SQL> exit  
Disconnected from Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production  
With the Partitioning, Automatic Storage Management, OLAP, Data Mining  
and Real Application Testing options  
[cognos@rac1 ~]$  
[cognos@rac1 ~]$ sqlplus  
  
SQL\*Plus: Release 11.2.0.1.0 Production on Sat Oct 6 13:03:59 2012  
  
Copyright (c) 1982, 2009, Oracle.  All rights reserved.  
  
Enter user-name: /as sysdba  
  
Connected to:  
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production  
With the Partitioning, Automatic Storage Management, OLAP, Data Mining  
and Real Application Testing options  
  
SQL> shu  immediate  
Database closed.  
Database dismounted.  
ORACLE instance shut down.*  
  
***Update the Database DST version***  
  
*SQL> startup upgrade pfile='/u04/initorcl.ora'  
ORACLE instance started.  
  
Total System Global Area 1025298432 bytes  
Fixed Size                  1341000 bytes  
Variable Size             322963896 bytes  
Database Buffers          696254464 bytes  
Redo Buffers                4739072 bytes  
Database mounted.  
Database opened.  
SQL>  
SQL>  
SQL>  
SQL> create spfile='+AMIT\_R1' from pfile='/u04/initorcl.ora';  
  
File created.  
  
SQL> SELECT PROPERTY\_NAME, SUBSTR(property\_value, 1, 30) value FROM DATABASE\_PROPERTIES WHERE PROPERTY\_NAME LIKE 'DST\_%' ORDER BY PROPERTY\_NAME;*  
*PROPERTY\_NAME                            VALUE  
------------------------------ ------------------------------------------------------------------------------------------------------------------------  
DST\_PRIMARY\_TT\_VERSION            4  
DST\_SECONDARY\_TT\_VERSION     11  
DST\_UPGRADE\_STATE                    PREPARE  
  
SQL> purge dba\_recyclebin;  
  
DBA Recyclebin purged.  
  
SQL> TRUNCATE TABLE SYS.DST$TRIGGER\_TABLE;  
  
Table truncated.  
  
SQL> TRUNCATE TABLE sys.dst$affected\_tables;  
  
Table truncated.  
  
SQL> TRUNCATE TABLE sys.dst$error\_table;  
  
Table truncated.  
  
SQL> alter session set "\_with\_subquery"=materialize;  
  
Session altered.  
  
SQL> alter session set "\_simple\_view\_merging"=TRUE;  
  
Session altered.  
  
SQL> EXEC DBMS\_DST.BEGIN\_UPGRADE(11);  
BEGIN DBMS\_DST.BEGIN\_UPGRADE(11); END;  
  
\*  
ERROR at line 1:  
ORA-56920: a prepare or upgrade window or an on-demand or datapump-job loading of a secondary time zone data file is in an active state  
ORA-06512: at "SYS.DBMS\_SYS\_ERROR", line 79  
ORA-06512: at "SYS.DBMS\_DST", line 1054  
ORA-06512: at line 1  
  
  
SQL> EXEC DBMS\_DST.END\_PREPARE;  
  
PL/SQL procedure successfully completed.  
  
SQL> SELECT PROPERTY\_NAME, SUBSTR(property\_value, 1, 30) value FROM DATABASE\_PROPERTIES WHERE PROPERTY\_NAME LIKE 'DST\_%' ORDER BY PROPERTY\_NAME;  
  
PROPERTY\_NAME                          VALUE  
------------------------------ ------------------------------------------------------------------------------------------------------------------------  
DST\_PRIMARY\_TT\_VERSION         4  
DST\_SECONDARY\_TT\_VERSION   0  
DST\_UPGRADE\_STATE                   NONE  
  
SQL> EXEC DBMS\_DST.BEGIN\_UPGRADE(11);  
  
PL/SQL procedure successfully completed.*  
 *SQL> SELECT PROPERTY\_NAME, SUBSTR(property\_value, 1, 30) value FROM DATABASE\_PROPERTIES WHERE PROPERTY\_NAME LIKE 'DST\_%' ORDER BY PROPERTY\_NAME;  
  
PROPERTY\_NAME                           VALUE  
------------------------------ ------------------------------------------------------------------------------------------------------------------------  
DST\_PRIMARY\_TT\_VERSION         11  
DST\_SECONDARY\_TT\_VERSION   4  
DST\_UPGRADE\_STATE                  UPGRADE*  
***-- Optionally you can check what user tables still need to be updated using DBMS\_DST.UPGRADE\_DATABASE***  
***-- BEGIN\_UPGRADE upgrades system tables that contain TSTZ data and marks user tables (containing TSTZ data) with the UPGRADE\_IN\_PROGRESS property.***  
***-- even if this select gives no rows you still need to do to the rest of the steps***  
***-- it simply gives an indication of how many user objects need to processed in the later steps***

*SQL> SELECT OWNER, TABLE\_NAME, UPGRADE\_IN\_PROGRESS FROM ALL\_TSTZ\_TABLES where UPGRADE\_IN\_PROGRESS='YES';  
  
OWNER                              TABLE\_NAME                                                      UPG  
------------------------------    ------------------------------                                          ---  
SYSMAN                             MGMT\_PROV\_NET\_CONFIG                            YES  
SYSMAN                             MGMT\_PROV\_IP\_RANGE                                 YES  
SYSMAN                             MGMT\_PROV\_SUITE\_INST\_MEMBERS          YES  
SYSMAN                              MGMT\_PROV\_BOOTSERVER                           YES  
SYSMAN                              AQ$\_MGMT\_NOTIFY\_QTABLE\_L                    YES  
SYSMAN                              AQ$\_MGMT\_LOADER\_QTABLE\_S                   YES  
SYSMAN                              AQ$\_MGMT\_LOADER\_QTABLE\_L                   YES  
SYSMAN                              AQ$\_MGMT\_NOTIFY\_QTABLE\_S                     YES  
SYSMAN                              MGMT\_CONFIG\_ACTIVITIES                           YES  
SYSMAN                              MGMT\_PROV\_STAGING\_DIRS                         YES  
SYSMAN                              MGMT\_PROV\_OPERATION                              YES  
  
OWNER                                TABLE\_NAME                                                     UPG  
------------------------------      ------------------------------                                         ---  
SYSMAN                              MGMT\_PROV\_ASSIGNMENT                           YES  
SYSMAN                              MGMT\_PROV\_CLUSTER\_NODES                   YES  
SYSMAN                              MGMT\_PROV\_RPM\_REP                                  YES  
SYSMAN                             MGMT\_PROV\_DEFAULT\_IMAGE                    YES  
IX                                       AQ$\_STREAMS\_QUEUE\_TABLE\_S                         YES  
IX                                      AQ$\_STREAMS\_QUEUE\_TABLE\_L                         YES  
IX                                      AQ$\_ORDERS\_QUEUETABLE\_S                             YES  
IX                                     AQ$\_ORDERS\_QUEUETABLE\_L                             YES  
  
19 rows selected.*  
***These 19 tables need to be upgraded***  
SQL> shu immediate *Database closed.  
Database dismounted.  
ORACLE instance shut down.*  
 *[cognos@rac1 dbs]$ sqlplus  
  
SQL\*Plus: Release 11.2.0.1.0 Production on Sat Oct 6 13:24:53 2012  
  
Copyright (c) 1982, 2009, Oracle.  All rights reserved.  
  
Enter user-name: /as sysdba  
Connected to an idle instance.*SQL> startup *ORACLE instance started.  
  
Total System Global Area 1025298432 bytes  
Fixed Size                  1341000 bytes  
Variable Size             322963896 bytes  
Database Buffers          696254464 bytes  
Redo Buffers                4739072 bytes  
Database mounted.  
Database opened.*  
***Previeous 19 tables will be upgraded now***  
 *SQL>  
SQL> alter session set "\_with\_subquery"=materialize;  
  
Session altered.  
  
SQL> alter session set "\_simple\_view\_merging"=TRUE;  
  
Session altered.*  
 *SQL> set serveroutput on  
SQL> VAR numfail number  
SQL> BEGIN  
  2  DBMS\_DST.UPGRADE\_DATABASE(:numfail,  
  3  parallel => TRUE,  
  4  log\_errors => TRUE,  
  5  log\_errors\_table => 'SYS.DST$ERROR\_TABLE',  
  6  log\_triggers\_table => 'SYS.DST$TRIGGER\_TABLE',  
  7  error\_on\_overlap\_time => FALSE,  
  8  error\_on\_nonexisting\_time => FALSE);  
  9  DBMS\_OUTPUT.PUT\_LINE('Failures:'|| :numfail);  
 10  END;  
 11  /  
Table list: SYSMAN.MGMT\_CONFIG\_ACTIVITIES  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_SUITE\_INST\_MEMBERS  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_STAGING\_DIRS  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_RPM\_REP  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_OPERATION  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_NET\_CONFIG  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_IP\_RANGE  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_DEFAULT\_IMAGE  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_CLUSTER\_NODES  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_BOOTSERVER  
Number of failures: 0  
Table list: SYSMAN.MGMT\_PROV\_ASSIGNMENT  
Number of failures: 0  
Table list: SYSMAN.AQ$\_MGMT\_NOTIFY\_QTABLE\_S  
Number of failures: 0  
Table list: SYSMAN.AQ$\_MGMT\_NOTIFY\_QTABLE\_L  
Number of failures: 0  
Table list: SYSMAN.AQ$\_MGMT\_LOADER\_QTABLE\_S  
Number of failures: 0  
Table list: SYSMAN.AQ$\_MGMT\_LOADER\_QTABLE\_L  
Number of failures: 0  
Table list: IX.AQ$\_STREAMS\_QUEUE\_TABLE\_S  
Number of failures: 0  
Table list: IX.AQ$\_STREAMS\_QUEUE\_TABLE\_L  
Number of failures: 0  
Table list: IX.AQ$\_ORDERS\_QUEUETABLE\_S  
Number of failures: 0  
Table list: IX.AQ$\_ORDERS\_QUEUETABLE\_L  
Number of failures: 0  
Failures:0  
  
PL/SQL procedure successfully completed.*  
***-- if there where no failures then end the upgrade.***  
  
 *SQL> VAR fail number  
SQL> BEGIN  
  2  DBMS\_DST.END\_UPGRADE(:fail);  
  3  DBMS\_OUTPUT.PUT\_LINE('Failures:'|| :fail);  
  4  END;  
  5  /****An upgrade window has been successfully ended.*** *Failures:0  
  
PL/SQL procedure successfully completed.*  
 *SQL> SELECT PROPERTY\_NAME, SUBSTR(property\_value, 1, 30) value FROM DATABASE\_PROPERTIES WHERE PROPERTY\_NAME LIKE 'DST\_%' ORDER BY PROPERTY\_NAME;*

*PROPERTY\_NAME                           VALUE  
------------------------------ ------------------------------------------------------------------------------------------------------------------------  
DST\_PRIMARY\_TT\_VERSION         11  
DST\_SECONDARY\_TT\_VERSION   0  
DST\_UPGRADE\_STATE                  NONE*

*SQL> SELECT \* FROM v$timezone\_file;  
  
FILENAME                 VERSION  
--------------------          ----------  
timezlrg\_11.dat           11  
  
SQL> select \* from v$version;  
  
BANNER  
--------------------------------------------------------------------------------*  
*Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production  
PL/SQL Release 11.2.0.1.0 - Production  
CORE    11.2.0.1.0      Production  
TNS for Linux: Version 11.2.0.1.0 - Production  
NLSRTL Version 11.2.0.1.0 - Production*  
***######################### Upgrade to 11gR2 is complete ##########################***