Dinesh Dilli (ext)

From:	Hendro Hartono <hendro.hartono@atos.net>
Sent:	Thursday, February 9, 2023 12:18 PM
To:	DLSGO-TCC2-SG-DBA-Support; GMIN-TCC2-ORACLE
Cc:	Bala Muthusami
Subject:	RE: About datapatch execution after 19c Database Release Update (RU) patching activity for Oracle 19c database

Hi All,

This is for Oracle Database patching activity for any Database Release Update (RU) patching activity.

Any Oracle Database Release Update (RU) patch released by Oracle vendor, typically it takes averagely 1 month for SCB DBA team to test and release it out for download after the official date Oracle vendor released the RU patch to public.

We can check for it within this URL ::
http://confluence.global.standardchartered.com/display/DBENG/Release+Process

Any Oracle 19c Database Release Update (RU) patch and other required one-off patches details including the patching steps, we can look for SCB owned document within this URL ::
https://confluence.global.standardchartered.com/display/OracleDBA/Oracle+DBA+Wiki

Then search for "DBENG", you will see word document for each released Oracle 19c Database RU patch, example as below :

In order to save time with the actual Oracle 19c Database Release Update (RU) patching (along with any one-off patches to be applied as per SCB DBA Engineering team's standards), here are couple of things that can be done as preparation ::

PREPARATION
----
1. Download first all the required patch files and stage it in target database server
2. Do patch conflict and patch space precheck for each patches to be applied in target database server
3. Prepare all required commands to apply each of patches before actual change request's start date and time

PATCHING ACTIVITY
----

4. Apply accordingly all required patches against GI Home (If target database server is Oracle RAC or Oracle Restart setup) and Oracle Home
5. Post patch installation, do following before doing actual "datapatch" execution

    NOTE: CDB and ALL PDBs should be in **OPEN** state.

    1. Perform datapatch prerequisites check

        ```
        $ORACLE_HOME/OPatch/datapatch -prereq
        ```

    2. Perform sanity checks

        It will show you what are the things that potentially might fail the actual datapatch execution such as PDB$SEED's stale statistics, invalid SYS/SYSTEM owned objects, any INVALID dictionary or database components, etc.

        ```
        $ORACLE_HOME/OPatch/datapatch -sanity_checks
        ```

    3. Perform recompilation (**IMPORTANT** for Multitenant database) for CDB and its PDBs

        ```
        $ORACLE_HOME/perl/bin/perl $ORACLE_HOME/rdbms/admin/catcon.pl -n 1 -e -b
        utlrp -d $ORACLE_HOME/rdbms/admin utlrp.sql
        ```

6. Perform datapatch execution
7. Database health check
8. Application UVT

Hope this helps. Thank you.

Best regards,
Hendro Hartono

From: Hendro Hartono
Sent: Monday, January 16, 2023 11:55 AM
To: DLSGO-TCC2-SG-DBA-Support <dlsgo-tcc2-sg-dba-support@atos.net>; GMIN-TCC2-ORACLE <gmin-tcc2-oracle@atos.net>
Cc: Bala Muthusami <balasubramanian.muthusami@atos.net>
Subject: About datapatch execution after 19c Database Release Update (RU) patching activity for Oracle 19c database

Hi Team,

This is regarding the "datapatch" execution after we applied any 19c Database Release Update (RU) patches for 19c Oracle Home with the target CDB and its underlying hosted PDBs need to be in OPEN state.

Time to time we have observed that for certain PDB that is much bigger in term of size, it takes significant time to complete the "datapatch" execution which is important to have CDB and its PDBs have the proper SQL * PL/SQL changes in place as part of the patches applied.

Here are couple of execution that we can perform before executing the actual "datapatch" command in order to eliminate any potential issues and/or speed up the execution :

NOTE: CDB and ALL PDBs should be in **OPEN** state.

1. Perform datapatch prerequisites check

   ```
   $ORACLE_HOME/OPatch/datapatch -prereq
   ```

2. Perform sanity checks

   It will show you what are the things that potentially might fail the actual datapatch execution such as PDB$SEED's stale statistics, invalid SYS/SYSTEM owned objects, any INVALID dictionary or database components, etc.

   ```
   $ORACLE_HOME/OPatch/datapatch -sanity_checks
   ```

3. Perform recompilation (**IMPORTANT** for Multitenant database) for CDB and its PDBs

   ```
   $ORACLE_HOME/perl/bin/perl $ORACLE_HOME/rdbms/admin/catcon.pl -n 1 -e -b utlrp -d $ORACLE_HOME/rdbms/admin utlrp.sql
   ```

Welcome for any other idea or suggestion.

Thank you.

Best regards,

Hendro Hartono

Planned On Leave : 20 – 25 January 2023