How do you apply a Patchset,PSU or CPU in a Data Guard Physical Standby configuration (Doc ID 278641.1)

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APPLIES TO:

Oracle Database - Enterprise Edition - Version 10.1.0.2 to 19.6.0.0.0 [Release 10.1 to 19]
Oracle Database Cloud Schema Service - Version N/A and later
Gen 1 Exadata Cloud at Customer (Oracle Exadata Database Cloud Machine) - Version N/A and later
Oracle Cloud Infrastructure - Database Service - Version N/A and later
Oracle Database Exadata Express Cloud Service - Version N/A and later
Information in this document applies to any platform.

GOAL

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To apply an Interim Patchset for example the 10.2.0.4 Patchset or January 2010 10.2.0.4 RDBMS PSU, to both the Primary and Standby Sites.

For Dg configuration with Logical Standby Refer, "Upgrading Oracle Database with a Logical Standby Database In Place (Doc ID 437276.1)".

The process of applying the Patchset/PSU/CPU to a Primary and Standby site are same, however post upgrade/patch changes are not applied directly on standby due to the nature of Physical standby(mount/open read only).

SOLUTION

> **NOTE: In the images and/or the document content below, the user information and environment data used represents fictitious data from the Oracle sample schema(s), Public Documentation delivered with an Oracle database product or other training material. Any similarity to actual environments, actual persons, living or dead, is purely coincidental and not intended in any manner.**

For the purposes of this document, the following fictitious environment is used as an example to describe the procedure:

Primary Database:
DB_NAME: plb_prm

Standby Database:
DB_UNIQUE_NAME: plb_std

Listener Name: lsnrplb
Oracle Home Location: /u01/oracle/product/10.2.0/db_plb

****

OVERALL STEPS

1. Disable REDO transport on Primary.

2. Shutdown the standby site and apply interim patchsets to the RDBMS binaries as per the README. This includes Patchset/Patchset Update(PSU)/Critical Patch Update (CPU). Post upgrade changes must come via REDO transport(catpatch.sql etc) against the standby rdbms itself. Start the standby site to mount only, do not restart managed recovery.

3. Shutdown the primary site, apply the Patchset/PSU/CPU patch to the RDBMS binaries and patch the RDBMS itself using the instructions in the README (run catpatch/catbundle/catcpu etc).

NOTE: The latest Patchsets for Oracle 11gR2 (11.2.0) require to be installed into a new ORACLE_HOME. So mind to reset your Environment and copy corresponding Files (like SPFILE, Network Files,..) to the new ORACLE_HOME, too. Follow the Database Upgrade Guide for further Details.

4. Start the primary site, re-enable log shipping to the standby.

5. At the standby site start the MRP(managed recovery). RDBMS changes implemented in the Primary Site through catpatch/catbundle/catcpu will also be applied to the standby.

NOTE: Step 5. should be done immediately after upgrading the Database Binaries on the Standby Database. It is to ensure the Data Dictionary (CATPROC)-Version matches the Version of the Database Binaries. If this does not match (eg. when you upgrade the Standby Database Binaries first and perform a Role Change on the Standby before you upgrade the Primary) you may run into severe Problems. Having different Patchlevels in a Data Guard Physical Standby Database Environment is not supported anyway, see
Mixed Oracle Version support with Data Guard Redo Transport Services (Doc ID 785347.1)
for further Details and Reference.

6. Checks to perform to ensure the patch has been applied successfully at the primary and standby sites.

The Interim Patchset application in detail - in this case 10.2.0.4 PSU 3 or Patch 9119284

NOTE: If you are using Oracle Restart (starting from 11.2.0.x) you have to use the SRVCTL-Commands like shown for RAC Databases to stop/start the Database and Services.

1. Disable REDO Transport on Primary

1.1 Disable log shipping using DGMGRL.

If DG broker in place it is mandatory to disable log shipping via DG broker.

```
DGMGRL> connect /
Connected.
DGMGRL> show database verbose plb_prm
Database
Name: plb_prm
Role: PRIMARY
Enabled: YES
Intended State: ONLINE
```

```
Instance(s):
plb
Properties:
InitialConnectIdentifier = 'plb_prm_dgmgrl'
..
.
Current status for "plb_prm":
SUCCESS

DGMGRL> edit database plb_prm set state='LOG-TRANSPORT-OFF';
Succeeded.
```

1.2 If DG broker not in place

Disable the log_archive_destination used to ship archives from the primary to the standby site using sqlplus.

```
SQL> alter system set log_archive_dest_state_X=defer scope=both sid='*'
```

From 11.2 onwards by default SID=* to disable REDO transport in all the nodes. But in 10G explicitly mention SID=*

2. Apply the patch at the Standby Site

2.1 If the standby is a RAC environment, then the patch application would occur across all nodes.

2.1.1 Non RAC Environment,

Shutdown ALL processes running from Standby ORACLE_HOME. This will include all listeners, database instances, ASM instances etc running from the home to patched.

```
$ lsnrctl stop lsnrplb

LSNRCTL for Linux: Version 10.2.0.4.0 - Production on 04-FEB-2010 08:41:29
Copyright (c) 1991, 2007, Oracle. All rights reserved.
Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=<host>)(PORT=1666)))
The command completed successfully

$ sqlplus / as sysdba

SQL*Plus: Release 10.2.0.4.0 - Production on Thu Feb 4 08:42:02 2010
Copyright (c) 1982, 2007, Oracle. All Rights Reserved.
Connected to:
Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> shutdown immediate

ORA-01109: database not open
Database dismounted.
ORACLE instance shut down.
```

2.1.2 RAC Environment, all the RAC services that are running from the ORACLE_HOME to be patched.

In this case the RAC database is called plb and the listener name for the listener running from the ORACLE_HOME to patched is lsnrplb.

```
$ srvctl stop database -d plb_std
$ srvctl stop listener -n <host> -l lsnrplb_<host>
$ srvctl stop listener -n <host> -l lsnrplb_<host>
```

2.2 The release of OPatch that is supplied with 10.2.0.4 will not be able to apply a PSU as seen through the errors below.

```
$ pwd
/home/oracle/patches/9119284
```

```
$ which opatch
/<path>/db_plb/OPatch/opatch

$ opatch apply

Invoking OPatch 10.2.0.4.2
Oracle Interim Patch Installer version 10.2.0.4.2
Copyright (c) 2007, Oracle Corporation. All rights reserved.
Oracle Home : /u01/oracle/product/10.2.0/db_plb
Central Inventory : /u01/oraInventory
from : /etc/oraInst.loc
OPatch version : 10.2.0.4.2
OUI version : 10.2.0.4.0
OUI location : /u01/oracle/product/10.2.0/db_plb/oui
Log file location : /u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/opatch2010-02-04_08-
45-30AM.log

ApplySession failed: Patch ID is null.
System intact, OPatch will not attempt to restore the system

OPatch failed with error code 73
```

2.2.1 To overcome the patch issue apply the latest copy of OPatch to the home via Patch 6880880.

If you already have a later release of OPatch then it is not necessary to perform this step.

Download Patch 6880880 and following the install instructions in the README

```
$ mv /u01/oracle/product/10.2.0/db_plb/OPatch /u01/oracle/product/10.2.0/db_plb/OPatch_10204
$ pwd
/home/oracle/patches
$ ls
9119284 OPatch

$ cp -rp OPatch/ /u01/oracle/product/10.2.0/db_plb/
```

2.3 Once the new release of OPatch is in place apply the patch to the Standby Site

Please Note: In the Standby Site only the patching of the binaries is performed, there is no need to run the catupgrade/catcpu/catbundle.sql script as this will be performed through redo apply at the Standby Site.

The example below is applying the patch to a Single Instance Standby Site and its applying PSU Patch 9119284.

```
$ opatch apply

Invoking OPatch 11.2.0.1.1
Oracle Interim Patch Installer version 11.2.0.1.1
Copyright (c) 2009, Oracle Corporation. All rights reserved.
Oracle Home : /u01/oracle/product/10.2.0/db_plb
Central Inventory : /u01/oraInventory
from : /etc/oraInst.loc
OPatch version : 11.2.0.1.1
OUI version : 10.2.0.4.0
OUI location : /u01/oracle/product/10.2.0/db_plb/oui
Log file location : /u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/opatch2010-02-04_08-
57-57AM.log
Patch history file: /u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/opatch_history.txt

ApplySession applying interim patch '9119284' to OH '/u01/oracle/product/10.2.0/db_plb'
Running prerequisite checks...
Provide your email address to be informed of security issues, install and
initiate Oracle Configuration Manager. Easier for you if you use your My
Oracle Support Email address/User Name.
Visit http://www.oracle.com/support/policies.html for details.
Email address/User Name:
You have not provided an email address for notification of security issues.
Do you wish to remain uninformed of security issues ([Y]es, [N]o) [N]: Y
OPatch detected non-cluster Oracle Home from the inventory and will patch the local system
only.
```

```
Please shutdown Oracle instances running out of this ORACLE_HOME on the local system.
(Oracle Home = '/u01/oracle/product/10.2.0/db_plb')
Is the local system ready for patching? [y|n]
y
User Responded with: Y
Backing up files and inventory (not for auto-rollback) for the Oracle Home
Backing up files affected by the patch '9119284' for restore. This might take a while...
Backing up files affected by the patch '9119284' for rollback. This might take a while...
Execution of 'sh /home/oracle/patches/9119284/custom/scripts/pre -apply 9119284 ':
Return Code = 0
Patching component oracle.rdbms.rsf, 10.2.0.4.0...
Updating archive file "/u01/oracle/product/10.2.0/db_plb/lib/libgeneric10.a" with
"lib/libgeneric10.a/qcodfdef.o"
..
.
Updating jar file "/u01/oracle/product/10.2.0/db_plb/rdbms/jlib/qsma.jar" with
"/rdbms/jlib/qsma.jar/oracle/qsma/QsmaFileManager.class"
Copying file to "/u01/oracle/product/10.2.0/db_plb/rdbms/lib/env_rdbms.mk"
..
.
Running make for target idgmgrl
Running make for target ioracle
Running make for target client_sharedlib
Running make for target itnslsnr
Running make for target iwrap
Running make for target genplusso
ApplySession adding interim patch '9119284' to inventory

Verifying the update...
Inventory check OK: Patch ID 9119284 is registered in Oracle Home inventory with proper meta-
data.
Files check OK: Files from Patch ID 9119284 are present in Oracle Home.
-------------------------------------------------------------------------------

*******************************************************************************
*******************************************************************************
** ATTENTION **
** **
** Please note that the Patch Set Update Installation (PSU Deinstallation) **
** is not complete until all the Post Installation (Post Deinstallation) **
** instructions noted in the Readme accompanying this PSU, have been **
** successfully completed. **
** **
*******************************************************************************
*******************************************************************************
-------------------------------------------------------------------------------

Execution of 'sh /home/oracle/patches/9119284/custom/scripts/post -apply 9119284 ':

Return Code = 0
The local system has been patched and can be restarted.

OPatch succeeded.
```

2.4 Start the Standby Site database to mount and restart the listener(s).

2.4.1 If the environment is a single instance (non-RAC standby)

Start the listener:

```
$ lsnrctl start lsnrplb
LSNRCTL for Linux: Version 10.2.0.4.0 - Production on 04-FEB-2010 09:06:02
Copyright (c) 1991, 2007, Oracle. All rights reserved.
Starting /u01/oracle/product/10.2.0/db_plb/bin/tnslsnr: please wait...
TNSLSNR for Linux: Version 10.2.0.4.0 - Production
System parameter file is /u01/oracle/product/10.2.0/db_plb/network/admin/listener.ora
Log messages written to /u01/oracle/product/10.2.0/db_plb/network/log/lsnrplb.log
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=<host>)(PORT=1666)))
Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=<host>)(PORT=1666)))
STATUS of the LISTENER
----------------------
Alias lsnrplb
```

```
Version TNSLSNR for Linux: Version 10.2.0.4.0 - Production
Start Date 04-FEB-2010 09:06:02
Uptime 0 days 0 hr. 0 min. 0 sec
Trace Level off
Security ON: Local OS Authentication
SNMP OFF
Listener Parameter File /u01/oracle/product/10.2.0/db_plb/network/admin/listener.ora
Listener Log File /u01/oracle/product/10.2.0/db_plb/network/log/lsnrplb.log
Listening Endpoints Summary...
(DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=<host>)(PORT=1666)))
Services Summary...
Service "plb_std_DGMGRL" has 1 instance(s).
Instance "plb_std", status UNKNOWN, has 1 handler(s) for this service...
The command completed successfully
```

Start the database:

```
$ sqlplus / as sysdba

SQL*Plus: Release 10.2.0.4.0 - Production on Thu Feb 4 15:12:24 2010
Copyright (c) 1982, 2007, Oracle. All Rights Reserved.
Connected to:
Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> startup mount
ORACLE instance started.
Total System Global Area 268435456 bytes
Fixed Size 1266968 bytes
Variable Size 138414824 bytes
Database Buffers 125829120 bytes
Redo Buffers 2924544 bytes
Database mounted.
```

If DG Broker in place, then change the state=APPLY-OFF via DG broker to avoid DG broker starting the MRP automatically.

2.4.2 If this is a RAC standby

```
$ srvctl start listener -n <host> -l lsnrplb_<host>
$ srvctl start listener -n <host> -l lsnrplb_<host>
$ srvctl start database -d plb_std -o mount
```

3. Apply the Patch to the Primary.

Please Note: the primary site may also require that Opatch be upgraded in the same way as it was in the Standby Site via Patch 6880880.

Change to the patch directory at the Primary Site and apply the PSU here

```
$ cd 9119284/
$ pwd
/home/oracle/patches/9119284
```

3.1 Stop all processes running from the home being patched.

This will include listeners and databases etc.

3.1.1 If this is a single instance Primary (non-RAC)

```
$ lsnrctl stop lsnrplb

LSNRCTL for Linux: Version 10.2.0.4.0 - Production on 04-FEB-2010 09:06:28
Copyright (c) 1991, 2007, Oracle. All rights reserved.
Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=<host>)(PORT=1666)))
The command completed successfully

$ sqlplus / as sysdba
```

```
SQL*Plus: Release 10.2.0.4.0 - Production on Thu Feb 4 09:06:36 2010
Copyright (c) 1982, 2007, Oracle. All Rights Reserved.
Connected to:
Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> shutdown immediate
Database closed.
Database dismounted.
ORACLE instance shut down.

SQL> exit
Disconnected from Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
```

3.1.2 For RAC Priamry

```
$ srvctl stop listener -n <host> -l lsnrplb_<host>
$ srvctl stop listener -n <host> -l lsnrplb_<host>
$ srvctl stop database -d plb
```

3.2 Apply the patch to the Primary Site binaries.

As per the standby site this example is applying Patchset Update 9119284 to a single instance Primary Site.

```
$ opatch apply

Invoking OPatch 11.2.0.1.1
Oracle Interim Patch Installer version 11.2.0.1.1
Copyright (c) 2009, Oracle Corporation. All rights reserved.
Oracle Home : /u01/oracle/product/10.2.0/db_plb
Central Inventory : /u01/oraInventory
from : /etc/oraInst.loc
OPatch version : 11.2.0.1.1
OUI version : 10.2.0.4.0
OUI location : /u01/oracle/product/10.2.0/db_plb/oui
Log file location : /u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/opatch2010-02-04_09-
10-28AM.log
Patch history file: /u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/opatch_history.txt


ApplySession applying interim patch '9119284' to OH '/u01/oracle/product/10.2.0/db_plb'
Running prerequisite checks...
Provide your email address to be informed of security issues, install and
initiate Oracle Configuration Manager. Easier for you if you use your My
Oracle Support Email address/User Name.
Visit http://www.oracle.com/support/policies.html for details.
Email address/User Name:
You have not provided an email address for notification of security issues.

Do you wish to remain uninformed of security issues ([Y]es, [N]o) [N]: Y

OPatch detected non-cluster Oracle Home from the inventory and will patch the local system
only.
Please shutdown Oracle instances running out of this ORACLE_HOME on the local system.
(Oracle Home = '/u01/oracle/product/10.2.0/db_plb')
Is the local system ready for patching? [y|n]
y
User Responded with: Y
Backing up files and inventory (not for auto-rollback) for the Oracle Home
Backing up files affected by the patch '9119284' for restore. This might take a while...
Backing up files affected by the patch '9119284' for rollback. This might take a while...
Execution of 'sh /home/oracle/patches/9119284/custom/scripts/pre -apply 9119284 ':
Return Code = 0
Patching component oracle.rdbms.rsf, 10.2.0.4.0...
Updating archive file "/u01/oracle/product/10.2.0/db_plb/lib/libgeneric10.a" with
"lib/libgeneric10.a/qcodfdef.o"
..
.
Updating jar file "/u01/oracle/product/10.2.0/db_plb/rdbms/jlib/qsma.jar" with
"/rdbms/jlib/qsma.jar/oracle/qsma/QsmaFileManager.class"
```

```
..
.
Running make for target client_sharedlib
Running make for target idgmgrl
Running make for target ioracle
Running make for target client_sharedlib
Running make for target itnslsnr
Running make for target iwrap
Running make for target genplusso
ApplySession adding interim patch '9119284' to inventory
Verifying the update...
Inventory check OK: Patch ID 9119284 is registered in Oracle Home inventory with proper meta-
data.
Files check OK: Files from Patch ID 9119284 are present in Oracle Home.
--------------------------------------------------------------------------------
********************************************************************************
********************************************************************************
** ATTENTION **
** **
** Please note that the Patch Set Update Installation (PSU Deinstallation) **
** is not complete until all the Post Installation (Post Deinstallation) **
** instructions noted in the Readme accompanying this PSU, have been **
** successfully completed. **
** **
********************************************************************************
********************************************************************************
--------------------------------------------------------------------------------

Execution of 'sh /home/oracle/patches/9119284/custom/scripts/post -apply 9119284 ':
Return Code = 0
The local system has been patched and can be restarted.

OPatch succeeded.
```

3.3 Upgrade/Patch the RDBMS and dictionary objects.

In a RAC environment this is performed from once instance only with the remaining cluster instances down and not running. The example below once again shows patch application to a single instance (non-RAC) Primary Site and is applying PSU 9119284.

Change to the $ORACLE_HOME/rdbms/admin directory where the patch has been applied and perform the following.

```
$ cd $ORACLE_HOME/rdbms/admin
$ sqlplus / as sysdba

SQL*Plus: Release 10.2.0.4.0 - Production on Thu Feb 4 09:25:09 2010
Copyright (c) 1982, 2007, Oracle. All Rights Reserved.
Connected to:
Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> startup restrict   ===========> Follow the README to know the mode that the database has
to be opened.

ORACLE instance started.
Total System Global Area 268435456 bytes
Fixed Size 1266968 bytes
Variable Size 138414824 bytes
Database Buffers 125829120 bytes
Redo Buffers 2924544 bytes
Database mounted.
Database opened.

SQL> @catbundle psu apply
PL/SQL procedure successfully completed.
..
.
SQL> COMMIT;
Commit complete.
SQL> SPOOL off
SQL> SET echo off
```

```
Check the following log file for errors:
/u01/oracle/product/10.2.0/db_plb/cfgtoollogs/catbundle/catbundle_PSU_PLB_APPLY_2010Feb04_09_2
```

> Note: If this was a normal Patchset you would run:
>
> SQL>@catupgrade
>
> If this were a Critical Patch Update you would run:
>
> SQL>@catcpu

4. Re-establish the Data Guard environment at the Primary Site.

4.1.1 In a Single Instance Primary restart processes running from the patched ORACLE_HOME.

This will include the listener, database instances, ASM instance and any other processes that were previously running from this ORACLE_HOME.

```
$ lsnrctl start lsnrplb

LSNRCTL for Linux: Version 10.2.0.4.0 - Production on 04-FEB-2010 09:45:43
Copyright (c) 1991, 2007, Oracle. All rights reserved.
Starting /u01/oracle/product/10.2.0/db_plb/bin/tnslsnr: please wait...
TNSLSNR for Linux: Version 10.2.0.4.0 - Production
System parameter file is /u01/oracle/product/10.2.0/db_plb/network/admin/listener.ora
Log messages written to /u01/oracle/product/10.2.0/db_plb/network/log/lsnrplb.log
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=<host>)(PORT=1666)))
Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=<host>)(PORT=1666)))
STATUS of the LISTENER
----------------------
Alias lsnrplb
Version TNSLSNR for Linux: Version 10.2.0.4.0 - Production
Start Date 04-FEB-2010 09:45:43
Uptime 0 days 0 hr. 0 min. 0 sec
Trace Level off
Security ON: Local OS Authentication
SNMP OFF
Listener Parameter File /u01/oracle/product/10.2.0/db_plb/network/admin/listener.ora
Listener Log File /u01/oracle/product/10.2.0/db_plb/network/log/lsnrplb.log
Listening Endpoints Summary...
(DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=<host>)(PORT=1666)))
Services Summary...
Service "plb_prm_DGMGRL" has 1 instance(s).
Instance "plb", status UNKNOWN, has 1 handler(s) for this service...
The command completed successfull
```

4.1.2 If this were a RAC environment restart the listeners on each node running from the ORACLE_HOME being patched using srvctl.

```
$ srvctl start listener -n <host> -l lsnrplb_<host>
$ srvctl start listener -n <host> -l lsnrplb_<host>
```

4.1.3. Force the Primary to register its services with the listener.

```
$ sqlplus / as sysdba

SQL*Plus: Release 10.2.0.4.0 - Production on Thu Feb 4 09:45:50 2010
Copyright (c) 1982, 2007, Oracle. All Rights Reserved.
Connected to:
Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> alter system register;
```

```
System altered.
```

4.2.1 In a single instance (non-RAC) disable restricted session to allow end user connectivity.

```
SQL> alter system disable restricted session;
System altered.
SQL> exit

Disconnected from Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
```

4.2.2 In a RAC Primary Site restart the primary site and all its instances

```
$ srvctl stop database -d plb
$ srvctl start database -d plb
```

If there are additional RAC services used to connect to this database these will need to be restarted using srvctl

```
$ srvctl start service -d plb
```

4.3 Re-enable log shipping to the Standby Site.

This will allow the RDBMS changes made through running catupgrade/catbundle/catcpu can be applied to the standby.

4.3.1 If you are using a Data Guard Broker configuration

```
$ dgmgrl

DGMGRL for Linux: Version 10.2.0.4.0 - Production
Copyright (c) 2000, 2005, Oracle. All rights reserved.
Welcome to DGMGRL, type "help" for information.

DGMGRL> connect /
Connected.

DGMGRL> edit database plb_prm set state='ONLINE';
Succeeded.
DGMGRL> exit
```

4.3.2 If you are using sqlplus re-enable the archive destination used to ship archives from the Primary Site to the Standby Site

```
SQL> alter system set log_archive_dest_state_X=enable scope=both sid='*'
```

Where X is the number of the destination used for shipping redo to the standby site.

5. The Primary will then resume shipping and media recovery will continue at the Standby site and apply the changes made through the patch application at the Primary Site.

From the alert log at the Standby you will see logs generated during the running of the cat scripts shipped and applied to the standby:

```
Thu Feb 4 09:45:57 2010
RFS[1]: Archived Log:
'/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_79_5pmz52s2_.arc'
RFS[1]: Archived Log:
'/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_76_5pmz55l4_.arc'
RFS[1]: Archived Log:
'/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_77_5pmz55oo_.arc'
RFS[1]: Archived Log:
'/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_78_5pmz561c_.arc'
Thu Feb 4 09:46:24 2010
Media Recovery Log
/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_76_5pmz55l4_.arc
Media Recovery Log
/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_77_5pmz55oo_.arc
```

```
Media Recovery Log
/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_78_5pmz561c_.arc
Thu Feb 4 09:46:44 2010
Media Recovery Log
/oradata/flash_recovery_area/PLB_STD/archivelog/2010_02_04/o1_mf_1_79_5pmz52s2_.arc
Media Recovery Waiting for thread 1 sequence 80
```

6. To check the patch has been applied successfully at the primary and standby sites perform.

In this case it was the PSU Patch 9119284.

Please Note: Currently (10.2.0.4 PSU's) do not update the header information for tools like sqlplus nor the versioning information for the database. These will remain at 10.2.0.4.0 and NOT updated to 10.2.0.4.3 for example after the application of the PSU. You will only be able to see the PSU's application through the inventory or looking at the version

```
$ opatch lsinventory

Invoking OPatch 11.2.0.1.1
Oracle Interim Patch Installer version 11.2.0.1.1
Copyright (c) 2009, Oracle Corporation. All rights reserved.
Oracle Home : /u01/oracle/product/10.2.0/db_plb
Central Inventory : /u01/oraInventory
from : /etc/oraInst.loc
OPatch version : 11.2.0.1.1
OUI version : 10.2.0.4.0
OUI location : /u01/oracle/product/10.2.0/db_plb/oui
Log file location : /u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/opatch2010-02-04_10-
01-18AM.log
Patch history file: /u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/opatch_history.txt
Lsinventory Output file location :
/u01/oracle/product/10.2.0/db_plb/cfgtoollogs/opatch/lsinv/lsinventory2010-02-04_10-01-
18AM.txt
--------------------------------------------------------------------------------
Installed Top-level Products (2):
Oracle Database 10g 10.2.0.1.0
Oracle Database 10g Release 2 Patch Set 3 10.2.0.4.0
There are 2 products installed in this Oracle Home.
Interim patches (1) :
Patch 9119284 : applied on Thu Feb 04 10:15:51 EST 2010
Unique Patch ID: 11999265
Created on 17 Dec 2009, 03:32:08 hrs PST8PDT
Bugs fixed:
6418420, 7835247, 7207654, 7592346, 6724797, 7936993, 7331867, 9093300
..
.
7523787, 6029179, 5231155, 6455659
--------------------------------------------------------------------------------

OPatch succeeded.
```

In the case of a PSU examine the registry history view.

```
SQL> select ACTION_TIME,ACTION,NAMESPACE,VERSION,BUNDLE_SERIES,ID from registry$history;
ACTION_TIME
---------------------------------------------------------------------------
ACTION NAMESPACE
--------------------------- ------------------------------
VERSION BUNDLE_SERIES ID
--------------------------- ------------------------------ ----------
04-FEB-10 09.26.25.026334 AM
APPLY SERVER
10.2.0.4 PSU 3
```

Community Discussion

Still have questions? Consider posting a discussion in the [High Availability Data Guard, Sharding and Global Data Services (MOSC) Community](#)

Didn't find what you are looking for?