Upgrade Database TIMEZONE Version

How to Upgrade DB TimeZone before IMPDP command?

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Issue:

```
-- Import with mismatch DST TZ version.


-- While importing Data pump terminated with this error:


ORA-39002: invalid operation


ORA-39405: Oracle Data Pump does not support importing from a source database with TSTZ

version 37 into a target database with TSTZ version 32.
```

Action Plan: Need Database Downtime

Pre-requisites:

Step 1: Data collection

```
SQL>  SELECT * FROM v$timezone_file;
```

```
FILENAME                 VERSION      CON_ID

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

timezlrg_32.dat       32            0  <------- 32



SQL>



SQL> SELECT DBMS_DST.get_latest_timezone_version FROM   dual;



GET_LATEST_TIMEZONE_VERSION

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

                     32  <------



SQL>
```

Step 2: Download Latest OPatch and DSTV36 UPDATE Patch

```
Download latest OPatch and copy to ORACLE_HOME/

Opatch Version Patch:https://updates.oracle.com/download/6880880.html

DST V37 Patch:https://updates.oracle.com/download/32327201.html
```

Step 3: Update OPatch version

```
[oracle@dg1 ~]$ cd $ORACLE_HOME/

[oracle@dg1 1900]$ cd OPatch/

[oracle@dg1 OPatch]$ ./opatch version

OPatch Version: 12.2.0.1.25
```

```
OPatch succeeded.

[oracle@dg1 OPatch]$



[oracle@dg1 1900]$ cd /oracle/1900

[oracle@dg1 1900]$ ls -ltr *.zip

-rw-r--r--. 1 oracle oinstall 121981878 Aug 14 20:51 p6880880_190000_Linux-x86-64.zip  <---
-- OPatch Patch file

[oracle@dg1 1900]$



[oracle@dg1 1900]$ ls -ld OPatch

drwxr-x---. 15 oracle oinstall 4096 Apr 20 17:45 OPatch

[oracle@dg1 1900]$
```

Backup of Current OPatch:

```
[oracle@dg1 1900]$ mv OPatch OPatch_bkp
```

Unzip Latest OPatch:

```
[oracle@dg1 1900]$ unzip p6880880_190000_Linux-x86-64.zip

Archive:  p6880880_190000_Linux-x86-64.zip

   creating: OPatch/

  inflating: OPatch/README.txt

  inflating: OPatch/datapatch

  inflating: OPatch/emdpatch.pl

  inflating: OPatch/operr_readme.txt

   creating: OPatch/scripts/

  inflating: OPatch/scripts/opatch_wls.bat

  inflating: OPatch/scripts/opatch_jvm_discovery

  inflating: OPatch/scripts/viewAliasInfo.sh

  inflating: OPatch/scripts/opatch_jvm_discovery.bat
```

```
  inflating: OPatch/scripts/casfile

  inflating: OPatch/scripts/viewAliasInfo.cmd

  inflating: OPatch/scripts/opatch_wls

  inflating: OPatch/datapatch.bat

  inflating: OPatch/opatch

   creating: OPatch/private/

  inflating: OPatch/private/commons-compress-1.19.jar

   creating: OPatch/ocm/

   creating: OPatch/ocm/lib/

   creating: OPatch/ocm/bin/

   creating: OPatch/ocm/doc/

 extracting: OPatch/ocm/generic.zip

 extracting: OPatch/version.txt

   creating: OPatch/jlib/

  inflating: OPatch/jlib/opatchsdk.jar

  inflating: OPatch/jlib/oracle.opatch.classpath.windows.jar

  inflating: OPatch/jlib/oracle.opatch.classpath.unix.jar

  inflating: OPatch/jlib/oracle.opatchcore.classpath.windows.jar

  inflating: OPatch/jlib/oracle.opatchcore.classpath.jar

  inflating: OPatch/jlib/opatch.jar

  inflating: OPatch/jlib/opatch-external.jar

  inflating: OPatch/jlib/oracle.opatchcore.classpath.unix.jar

  inflating: OPatch/jlib/glcm_tools.jar

  inflating: OPatch/jlib/oracle.opatch.classpath.jar

   creating: OPatch/auto/

   creating: OPatch/auto/dbtmp/

  inflating: OPatch/auto/dbtmp/README.txt
```

```
  creating: OPatch/auto/core/

  creating: OPatch/auto/core/bin/

 inflating: OPatch/auto/core/bin/patchingWallet.sh

 inflating: OPatch/auto/core/bin/oplan.sh

 inflating: OPatch/auto/core/bin/opatchautoCopy.sh

 inflating: OPatch/auto/core/bin/opatchauto.sh

 inflating: OPatch/auto/core/bin/opatchautoEnv.sh

  creating: OPatch/auto/core/modules/

 inflating: OPatch/auto/core/modules/com.oracle.glcm.patch.opatchauto-binary_12.2.1.25.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.validation-rules_13.9.1.0.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.oplancore.core_12.2.1.25.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.product-driver_13.9.1.0.jar

  creating: OPatch/auto/core/modules/features/

 inflating: OPatch/auto/core/modules/features/oracle.glcm.opatchauto.core.binary.classpath.jar

 inflating: OPatch/auto/core/modules/features/oracle.glcm.osys.core.classpath.jar

 inflating: OPatch/auto/core/modules/features/oracle.glcm.opatchauto.core.classpath.jar

 inflating: OPatch/auto/core/modules/features/oracle.glcm.oplan.core.classpath.jar

 inflating: OPatch/auto/core/modules/features/opatchauto-binary-classpath.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.patch.opatchauto-actions_12.2.1.25.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.utils_13.9.1.0.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.bundle_13.9.1.0.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.patch.opatchauto_12.2.1.25.jar

 inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.model_13.9.1.0.jar

  creating: OPatch/auto/core/modules/legacyoui/

 inflating: OPatch/auto/core/modules/legacyoui/jackson-databind-2.10.2.jar
```

```
  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.oui-common_12.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.comdev_7.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/common-logging-config.jar

  inflating: OPatch/auto/core/modules/legacyoui/slf4j-api-1.7.28.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.dependency_1.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/org.eclipse.jgit.ssh.apache-
5.6.0.201912101111-r.jar

  inflating: OPatch/auto/core/modules/legacyoui/slf4j-jdk14-1.7.28.jar

  inflating: OPatch/auto/core/modules/legacyoui/jackson-module-jaxb-annotations-2.10.2.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.wizard_7.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.xmldh_3.4.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/sshd-common-2.5.1.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.gdr_1.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.glcm.encryption_2.7.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/jersey-core-1.12.jar

  inflating: OPatch/auto/core/modules/legacyoui/jersey-client-1.12.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.repo-common_1.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/jaxb-runtime-2.3.2.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.rest_1.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/jackson-core-2.10.2.jar

  inflating: OPatch/auto/core/modules/legacyoui/sshd-sftp-2.5.1.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.cie.gdr-schema_1.8.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/jackson-annotations-2.10.2.jar

  inflating: OPatch/auto/core/modules/legacyoui/jaxb-xjc-2.3.2.jar

  inflating: OPatch/auto/core/modules/legacyoui/legacyoui.classpath.jar

  inflating: OPatch/auto/core/modules/legacyoui/com.oracle.glcm.common-logging_1.6.5.0.jar

  inflating: OPatch/auto/core/modules/legacyoui/sshd-core-2.5.1.jar
```

```
  inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.patch-sdk_13.9.1.0.jar

  inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.automation_13.9.1.0.jar

  inflating: OPatch/auto/core/modules/com.oracle.glcm.osyscore.validation_13.9.1.0.jar

   creating: OPatch/auto/private/

  inflating: OPatch/auto/private/commons-cli-1.4.jar

   creating: OPatch/auto/dbsessioninfo/

  inflating: OPatch/auto/dbsessioninfo/README.txt

   creating: OPatch/auto/database/

   creating: OPatch/auto/database/bin/

  inflating: OPatch/auto/database/bin/OPatchAutoDB.pl

  inflating: OPatch/auto/database/bin/OPatchAutoRHP.pl

  inflating: OPatch/auto/database/bin/OPatchAutoBinary.pl

   creating: OPatch/auto/database/bin/module/

  inflating: OPatch/auto/database/bin/module/ClassPathLib.pm

  inflating: OPatch/auto/database/bin/module/OPatchAuto11CommandOptions.pm

  inflating: OPatch/auto/database/bin/module/OPatchAutoBinaryCommandOptions.pm

  inflating: OPatch/auto/database/bin/module/CommandOptions.pm

  inflating: OPatch/auto/database/bin/module/OPatchAutoCommandOptions.pm

  inflating: OPatch/auto/database/bin/module/DBValidationUtil.pm

  inflating: OPatch/auto/database/bin/module/ExportPath.pm

  inflating: OPatch/auto/database/bin/module/BootStrapCommandOptions.pm

  inflating: OPatch/auto/database/bin/module/DBUtilServices.pm

  inflating: OPatch/auto/database/bin/OPatchAuto11.pl

  inflating: OPatch/auto/database/bin/RemoteCommandExecution.pl

  inflating: OPatch/auto/database/bin/ZipUnzip.pl

  inflating: OPatch/auto/database/bin/detecthas.pl

  inflating: OPatch/auto/database/bin/chgchown.pl
```

```
  inflating: OPatch/auto/database/bin/opatchauto.properties

  inflating: OPatch/auto/database/bin/remotevalidation.sh

  inflating: OPatch/auto/database/bin/BootStrapping.pl

  inflating: OPatch/auto/database/bin/opatchautoBinaryMultinodes.pl

  inflating: OPatch/auto/database/bin/OPatchAutoHelper.pl

  inflating: OPatch/auto/database/bin/CleanUp.pl

  inflating: OPatch/auto/database/bin/opatchauto11.sh

  inflating: OPatch/auto/database/bin/RemoteHostExecutor.pl

  inflating: OPatch/auto/database/bin/RootSessionValidation.pl

  inflating: OPatch/auto/database/bin/PatchLevelReport.pl

  inflating: OPatch/auto/database/bin/VerifyCommand.pl

   creating: OPatch/auto/database/modules/

  inflating: OPatch/auto/database/modules/oracle.glcm.opatchauto.db.utils.classpath.jar

  inflating: OPatch/auto/database/modules/oracle.glcm.opatchauto.db.helper.classpath.jar

  inflating: OPatch/auto/database/modules/oracle.glcm.opatchauto.rhp.classpath.jar

  inflating: OPatch/auto/database/modules/oracle.oplan.db.classpath.jar

  inflating:
OPatch/auto/database/modules/oracle.glcm.opatchauto.db.systemmodel.classpath.jar

   creating: OPatch/auto/database/modules/utils/

  inflating: OPatch/auto/database/modules/utils/com.oracle.glcm.patch.db-
systeminfogenerator_12.2.1.25.jar

   creating: OPatch/auto/database/modules/rhp/

  inflating: OPatch/auto/database/modules/rhp/com.oracle.glcm.patch.opatchauto-
rhp_12.2.1.25.jar

  inflating: OPatch/auto/database/modules/com.oracle.glcm.patch.opatchautodb-
actions_12.2.1.25.jar

   creating: OPatch/auto/database/modules/helper/

  inflating: OPatch/auto/database/modules/helper/com.oracle.glcm.patch.db-comp-
helper_12.2.1.25.jar
```

```
  inflating: OPatch/auto/database/modules/oplan_db.jar

  creating: OPatch/auto/database/modules/systemmodels/

  inflating: OPatch/auto/database/modules/systemmodels/com.oracle.glcm.patch.db-comp-
model_12.2.1.25.jar

  inflating: OPatch/auto/database/modules/systemmodels/com.oracle.glcm.patch.db-comp-patch-
sdk_12.2.1.25.jar

  inflating: OPatch/auto/database/modules/systemmodels/com.oracle.glcm.patch.db-comp-
automation_12.2.1.25.jar

  inflating: OPatch/auto/database/modules/systemmodels/com.oracle.glcm.patch.db-comp-
productdriver_12.2.1.25.jar

  inflating: OPatch/opatchauto

  creating: OPatch/opatchprereqs/

  creating: OPatch/opatchprereqs/opatch/

  inflating: OPatch/opatchprereqs/opatch/opatch_prereq.xml

  inflating: OPatch/opatchprereqs/opatch/runtime_prereq.xml

  inflating: OPatch/opatchprereqs/opatch/rulemap.xml

  creating: OPatch/opatchprereqs/oui/

  inflating: OPatch/opatchprereqs/oui/knowledgesrc.xml

  inflating: OPatch/opatchprereqs/prerequisite.properties

  creating: OPatch/docs/

  inflating: OPatch/docs/Users_Guide.txt

  inflating: OPatch/docs/FAQ

  inflating: OPatch/docs/Prereq_Users_Guide.txt

  inflating: OPatch/docs/cversion.txt

  creating: OPatch/oracle_common/

  creating: OPatch/oracle_common/modules/

  inflating: OPatch/oracle_common/modules/common-logging-config.jar

  inflating: OPatch/oracle_common/modules/com.oracle.glcm.common-logging_1.6.5.0.jar
```

```
  inflating: OPatch/opatch.bat

  inflating: OPatch/operr

  inflating: OPatch/opatch_env.sh

  inflating: OPatch/operr.bat

   creating: OPatch/jre/

  inflating: OPatch/jre/THIRDPARTYLICENSEREADME.txt

  inflating: OPatch/jre/THIRDPARTYLICENSEREADME-JAVAFX.txt

   creating: OPatch/jre/plugin/

   creating: OPatch/jre/plugin/desktop/

  inflating: OPatch/jre/plugin/desktop/sun_java.desktop

 extracting: OPatch/jre/plugin/desktop/sun_java.png

  inflating: OPatch/jre/Welcome.html

   creating: OPatch/jre/legal/

   creating: OPatch/jre/legal/javafx/

  inflating: OPatch/jre/legal/javafx/gstreamer.md

  inflating: OPatch/jre/legal/javafx/libxslt.md

  inflating: OPatch/jre/legal/javafx/webkit.md

  inflating: OPatch/jre/legal/javafx/public_suffix.md

  inflating: OPatch/jre/legal/javafx/directshow.md

  inflating: OPatch/jre/legal/javafx/libffi.md

  inflating: OPatch/jre/legal/javafx/jpeg_fx.md

  inflating: OPatch/jre/legal/javafx/icu_web.md

  inflating: OPatch/jre/legal/javafx/mesa3d.md

  inflating: OPatch/jre/legal/javafx/libxml2.md

  inflating: OPatch/jre/legal/javafx/glib.md

   creating: OPatch/jre/legal/jdk/

  inflating: OPatch/jre/legal/jdk/libxrandr.md
```

```
  inflating: OPatch/jre/legal/jdk/zlib.md

  inflating: OPatch/jre/legal/jdk/jcup.md

  inflating: OPatch/jre/legal/jdk/cryptix.md

  inflating: OPatch/jre/legal/jdk/xerces.md

  inflating: OPatch/jre/legal/jdk/unicode.md

  inflating: OPatch/jre/legal/jdk/colorimaging.md

  inflating: OPatch/jre/legal/jdk/ecc.md

  inflating: OPatch/jre/legal/jdk/icu.md

  inflating: OPatch/jre/legal/jdk/relaxngom.md

  inflating: OPatch/jre/legal/jdk/thaidict.md

  inflating: OPatch/jre/legal/jdk/dom.md

  inflating: OPatch/jre/legal/jdk/xorgproto.md

  inflating: OPatch/jre/legal/jdk/asm.md

  inflating: OPatch/jre/legal/jdk/lcms.md

  inflating: OPatch/jre/legal/jdk/santuario.md

  inflating: OPatch/jre/legal/jdk/xwd.md

  inflating: OPatch/jre/legal/jdk/freebxml.md

  inflating: OPatch/jre/legal/jdk/cldr.md

  inflating: OPatch/jre/legal/jdk/relaxngcc.md

  inflating: OPatch/jre/legal/jdk/dynalink.md

  inflating: OPatch/jre/legal/jdk/pcsclite.md

  inflating: OPatch/jre/legal/jdk/xmlresolver.md

  inflating: OPatch/jre/legal/jdk/jopt-simple.md

  inflating: OPatch/jre/legal/jdk/giflib.md

  inflating: OPatch/jre/legal/jdk/libpng.md

  inflating: OPatch/jre/legal/jdk/relaxngdatatype.md

  inflating: OPatch/jre/legal/jdk/pkcs11cryptotoken.md
```

```
  inflating: OPatch/jre/legal/jdk/mesa3d.md
  inflating: OPatch/jre/legal/jdk/joni.md
  inflating: OPatch/jre/legal/jdk/xalan.md
  inflating: OPatch/jre/legal/jdk/pkcs11wrapper.md
  inflating: OPatch/jre/legal/jdk/bcel.md
  inflating: OPatch/jre/legal/jdk/jpeg.md
   creating: OPatch/jre/lib/
  inflating: OPatch/jre/lib/plugin.jar
  inflating: OPatch/jre/lib/fontconfig.Turbo.properties.src
   creating: OPatch/jre/lib/management/
  inflating: OPatch/jre/lib/management/snmp.acl.template
  inflating: OPatch/jre/lib/management/jmxremote.password.template
  inflating: OPatch/jre/lib/management/management.properties
  inflating: OPatch/jre/lib/management/jmxremote.access
   creating: OPatch/jre/lib/security/
  inflating: OPatch/jre/lib/security/java.policy
   creating: OPatch/jre/lib/security/policy/
   creating: OPatch/jre/lib/security/policy/limited/
  inflating: OPatch/jre/lib/security/policy/limited/local_policy.jar
  inflating: OPatch/jre/lib/security/policy/limited/US_export_policy.jar
   creating: OPatch/jre/lib/security/policy/unlimited/
  inflating: OPatch/jre/lib/security/policy/unlimited/local_policy.jar
  inflating: OPatch/jre/lib/security/policy/unlimited/US_export_policy.jar
 extracting: OPatch/jre/lib/security/trusted.libraries
  inflating: OPatch/jre/lib/security/blacklisted.certs
  inflating: OPatch/jre/lib/security/cacerts
  inflating: OPatch/jre/lib/security/java.security
```

```
  inflating: OPatch/jre/lib/security/blacklist

  inflating: OPatch/jre/lib/security/javaws.policy

  inflating: OPatch/jre/lib/security/public_suffix_list.dat

  inflating: OPatch/jre/lib/jfr.jar

  inflating: OPatch/jre/lib/javafx.properties

  inflating: OPatch/jre/lib/management-agent.jar

  inflating: OPatch/jre/lib/logging.properties

  inflating: OPatch/jre/lib/tzdb.dat

  inflating: OPatch/jre/lib/psfontj2d.properties

   creating: OPatch/jre/lib/locale/

   creating: OPatch/jre/lib/locale/zh_TW/

   creating: OPatch/jre/lib/locale/zh_TW/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/zh_TW/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/pt_BR/

   creating: OPatch/jre/lib/locale/pt_BR/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/pt_BR/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/zh/

   creating: OPatch/jre/lib/locale/zh/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/zh/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/zh.GBK/

   creating: OPatch/jre/lib/locale/zh.GBK/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/zh.GBK/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/fr/

   creating: OPatch/jre/lib/locale/fr/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/fr/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/zh_HK.BIG5HK/

   creating: OPatch/jre/lib/locale/zh_HK.BIG5HK/LC_MESSAGES/
```

```
  inflating: OPatch/jre/lib/locale/zh_HK.BIG5HK/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/it/

   creating: OPatch/jre/lib/locale/it/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/it/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/ko/

   creating: OPatch/jre/lib/locale/ko/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/ko/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/zh_TW.BIG5/

   creating: OPatch/jre/lib/locale/zh_TW.BIG5/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/zh_TW.BIG5/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/ja/

   creating: OPatch/jre/lib/locale/ja/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/ja/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/sv/

   creating: OPatch/jre/lib/locale/sv/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/sv/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/es/

   creating: OPatch/jre/lib/locale/es/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/es/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/ko.UTF-8/

   creating: OPatch/jre/lib/locale/ko.UTF-8/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/ko.UTF-8/LC_MESSAGES/sunw_java_plugin.mo

   creating: OPatch/jre/lib/locale/de/

   creating: OPatch/jre/lib/locale/de/LC_MESSAGES/

  inflating: OPatch/jre/lib/locale/de/LC_MESSAGES/sunw_java_plugin.mo

  inflating: OPatch/jre/lib/deploy.jar

   creating: OPatch/jre/lib/cmm/
```

```
  inflating: OPatch/jre/lib/cmm/CIEXYZ.pf

  inflating: OPatch/jre/lib/cmm/PYCC.pf

  inflating: OPatch/jre/lib/cmm/GRAY.pf

  inflating: OPatch/jre/lib/cmm/sRGB.pf

  inflating: OPatch/jre/lib/cmm/LINEAR_RGB.pf

  inflating: OPatch/jre/lib/hijrah-config-umalqura.properties

  inflating: OPatch/jre/lib/fontconfig.RedHat.6.properties.src

  inflating: OPatch/jre/lib/fontconfig.SuSE.11.bfc

   creating: OPatch/jre/lib/fonts/

  inflating: OPatch/jre/lib/fonts/LucidaBrightRegular.ttf

  inflating: OPatch/jre/lib/fonts/LucidaBrightDemiItalic.ttf

  inflating: OPatch/jre/lib/fonts/LucidaTypewriterRegular.ttf

  inflating: OPatch/jre/lib/fonts/LucidaTypewriterBold.ttf

  inflating: OPatch/jre/lib/fonts/fonts.dir

  inflating: OPatch/jre/lib/fonts/LucidaSansRegular.ttf

  inflating: OPatch/jre/lib/fonts/LucidaSansDemiBold.ttf

  inflating: OPatch/jre/lib/fonts/LucidaBrightItalic.ttf

  inflating: OPatch/jre/lib/fonts/LucidaBrightDemiBold.ttf

  inflating: OPatch/jre/lib/jexec

   creating: OPatch/jre/lib/jfr/

  inflating: OPatch/jre/lib/jfr/default.jfc

  inflating: OPatch/jre/lib/jfr/profile.jfc

  inflating: OPatch/jre/lib/classlist

  inflating: OPatch/jre/lib/fontconfig.RedHat.5.bfc

   creating: OPatch/jre/lib/deploy/

  inflating: OPatch/jre/lib/deploy/messages_de.properties

 extracting: OPatch/jre/lib/deploy/mixcode_s.png
```

```
inflating: OPatch/jre/lib/deploy/splash@2x.gif

inflating: OPatch/jre/lib/deploy/messages_sv.properties

inflating: OPatch/jre/lib/deploy/messages_zh_HK.properties

inflating: OPatch/jre/lib/deploy/java-icon.ico

inflating: OPatch/jre/lib/deploy/messages_zh_CN.properties

inflating: OPatch/jre/lib/deploy/messages_ko.properties

inflating: OPatch/jre/lib/deploy/messages_ja.properties

inflating: OPatch/jre/lib/deploy/splash.gif

inflating: OPatch/jre/lib/deploy/MixedCodeMainDialog.ui

inflating: OPatch/jre/lib/deploy/messages.properties

inflating: OPatch/jre/lib/deploy/messages_it.properties

inflating: OPatch/jre/lib/deploy/cautionshield.icns

inflating: OPatch/jre/lib/deploy/splash_11-lic.gif

inflating: OPatch/jre/lib/deploy/messages_zh_TW.properties

inflating: OPatch/jre/lib/deploy/splash_11@2x-lic.gif

inflating: OPatch/jre/lib/deploy/messages_es.properties

inflating: OPatch/jre/lib/deploy/MixedCodeMainDialogJs.ui

inflating: OPatch/jre/lib/deploy/messages_fr.properties

inflating: OPatch/jre/lib/deploy/messages_pt_BR.properties

 creating: OPatch/jre/lib/ext/

inflating: OPatch/jre/lib/ext/cldrdata.jar

inflating: OPatch/jre/lib/ext/jaccess.jar

inflating: OPatch/jre/lib/ext/sunjce_provider.jar

inflating: OPatch/jre/lib/ext/nashorn.jar

inflating: OPatch/jre/lib/ext/dnsns.jar

inflating: OPatch/jre/lib/ext/zipfs.jar

inflating: OPatch/jre/lib/ext/sunec.jar
```

```
  inflating: OPatch/jre/lib/ext/sunpkcs11.jar

  inflating: OPatch/jre/lib/ext/jfxrt.jar

  inflating: OPatch/jre/lib/ext/localedata.jar

  inflating: OPatch/jre/lib/ext/meta-index

  inflating: OPatch/jre/lib/jfxswt.jar

  inflating: OPatch/jre/lib/charsets.jar

  inflating: OPatch/jre/lib/fontconfig.RedHat.5.properties.src

   creating: OPatch/jre/lib/oblique-fonts/

  inflating: OPatch/jre/lib/oblique-fonts/LucidaTypewriterBoldOblique.ttf

  inflating: OPatch/jre/lib/oblique-fonts/LucidaTypewriterOblique.ttf

  inflating: OPatch/jre/lib/oblique-fonts/LucidaSansDemiOblique.ttf

  inflating: OPatch/jre/lib/oblique-fonts/fonts.dir

  inflating: OPatch/jre/lib/oblique-fonts/LucidaSansOblique.ttf

  inflating: OPatch/jre/lib/resources.jar

   creating: OPatch/jre/lib/desktop/

   creating: OPatch/jre/lib/desktop/icons/

   creating: OPatch/jre/lib/desktop/icons/HighContrast/

   creating: OPatch/jre/lib/desktop/icons/HighContrast/48x48/

   creating: OPatch/jre/lib/desktop/icons/HighContrast/48x48/mimetypes/

 extracting: OPatch/jre/lib/desktop/icons/HighContrast/48x48/mimetypes/gnome-mime-
application-x-java-archive.png

 extracting: OPatch/jre/lib/desktop/icons/HighContrast/48x48/mimetypes/gnome-mime-text-x-
java.png

 extracting: OPatch/jre/lib/desktop/icons/HighContrast/48x48/mimetypes/gnome-mime-
application-x-java-jnlp-file.png

   creating: OPatch/jre/lib/desktop/icons/HighContrast/48x48/apps/

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/48x48/apps/sun-javaws.png

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/48x48/apps/sun-java.png
```

```
  inflating: OPatch/jre/lib/desktop/icons/HighContrast/48x48/apps/sun-jcontrol.png

   creating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/

   creating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/mimetypes/

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/mimetypes/gnome-mime-
application-x-java-archive.png

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/mimetypes/gnome-mime-text-x-
java.png

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/mimetypes/gnome-mime-
application-x-java-jnlp-file.png

   creating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/apps/

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/apps/sun-javaws.png

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/apps/sun-java.png

  inflating: OPatch/jre/lib/desktop/icons/HighContrast/16x16/apps/sun-jcontrol.png

   creating: OPatch/jre/lib/desktop/icons/hicolor/

   creating: OPatch/jre/lib/desktop/icons/hicolor/48x48/

   creating: OPatch/jre/lib/desktop/icons/hicolor/48x48/mimetypes/

 extracting: OPatch/jre/lib/desktop/icons/hicolor/48x48/mimetypes/gnome-mime-application-x-
java-archive.png

 extracting: OPatch/jre/lib/desktop/icons/hicolor/48x48/mimetypes/gnome-mime-text-x-
java.png

 extracting: OPatch/jre/lib/desktop/icons/hicolor/48x48/mimetypes/gnome-mime-application-x-
java-jnlp-file.png

   creating: OPatch/jre/lib/desktop/icons/hicolor/48x48/apps/

  inflating: OPatch/jre/lib/desktop/icons/hicolor/48x48/apps/sun-javaws.png

  inflating: OPatch/jre/lib/desktop/icons/hicolor/48x48/apps/sun-java.png

  inflating: OPatch/jre/lib/desktop/icons/hicolor/48x48/apps/sun-jcontrol.png

   creating: OPatch/jre/lib/desktop/icons/hicolor/16x16/

   creating: OPatch/jre/lib/desktop/icons/hicolor/16x16/mimetypes/
```

```
  extracting: OPatch/jre/lib/desktop/icons/hicolor/16x16/mimetypes/gnome-mime-application-x-
java-archive.png

  extracting: OPatch/jre/lib/desktop/icons/hicolor/16x16/mimetypes/gnome-mime-text-x-
java.png

  extracting: OPatch/jre/lib/desktop/icons/hicolor/16x16/mimetypes/gnome-mime-application-x-
java-jnlp-file.png

   creating: OPatch/jre/lib/desktop/icons/hicolor/16x16/apps/

  inflating: OPatch/jre/lib/desktop/icons/hicolor/16x16/apps/sun-javaws.png

  inflating: OPatch/jre/lib/desktop/icons/hicolor/16x16/apps/sun-java.png

  inflating: OPatch/jre/lib/desktop/icons/hicolor/16x16/apps/sun-jcontrol.png

   creating: OPatch/jre/lib/desktop/icons/HighContrastInverse/

   creating: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/

   creating: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/mimetypes/

  extracting: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/mimetypes/gnome-mime-
application-x-java-archive.png

  extracting: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/mimetypes/gnome-mime-
text-x-java.png

  extracting: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/mimetypes/gnome-mime-
application-x-java-jnlp-file.png

   creating: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/apps/

  inflating: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/apps/sun-javaws.png

  inflating: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/apps/sun-java.png

  inflating: OPatch/jre/lib/desktop/icons/HighContrastInverse/48x48/apps/sun-jcontrol.png

   creating: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/

   creating: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/mimetypes/

  extracting: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/mimetypes/gnome-mime-
application-x-java-archive.png

  extracting: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/mimetypes/gnome-mime-
text-x-java.png
```

```
extracting: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/mimetypes/gnome-mime-
application-x-java-jnlp-file.png

creating: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/apps/

inflating: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/apps/sun-javaws.png

inflating: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/apps/sun-java.png

inflating: OPatch/jre/lib/desktop/icons/HighContrastInverse/16x16/apps/sun-jcontrol.png

creating: OPatch/jre/lib/desktop/icons/LowContrast/

creating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/

creating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/mimetypes/

inflating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/mimetypes/gnome-mime-
application-x-java-archive.png

inflating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/mimetypes/gnome-mime-text-x-
java.png

inflating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/mimetypes/gnome-mime-
application-x-java-jnlp-file.png

creating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/apps/

inflating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/apps/sun-javaws.png

inflating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/apps/sun-java.png

inflating: OPatch/jre/lib/desktop/icons/LowContrast/48x48/apps/sun-jcontrol.png

creating: OPatch/jre/lib/desktop/icons/LowContrast/16x16/

creating: OPatch/jre/lib/desktop/icons/LowContrast/16x16/mimetypes/

extracting: OPatch/jre/lib/desktop/icons/LowContrast/16x16/mimetypes/gnome-mime-
application-x-java-archive.png

extracting: OPatch/jre/lib/desktop/icons/LowContrast/16x16/mimetypes/gnome-mime-text-x-
java.png

extracting: OPatch/jre/lib/desktop/icons/LowContrast/16x16/mimetypes/gnome-mime-
application-x-java-jnlp-file.png

creating: OPatch/jre/lib/desktop/icons/LowContrast/16x16/apps/

extracting: OPatch/jre/lib/desktop/icons/LowContrast/16x16/apps/sun-javaws.png
```

```
extracting: OPatch/jre/lib/desktop/icons/LowContrast/16x16/apps/sun-java.png

extracting: OPatch/jre/lib/desktop/icons/LowContrast/16x16/apps/sun-jcontrol.png

creating: OPatch/jre/lib/desktop/applications/

inflating: OPatch/jre/lib/desktop/applications/sun_java.desktop

inflating: OPatch/jre/lib/desktop/applications/sun-java.desktop

inflating: OPatch/jre/lib/desktop/applications/sun-javaws.desktop

creating: OPatch/jre/lib/desktop/mime/

creating: OPatch/jre/lib/desktop/mime/packages/

inflating: OPatch/jre/lib/desktop/mime/packages/x-java-jnlp-file.xml

inflating: OPatch/jre/lib/desktop/mime/packages/x-java-archive.xml

inflating: OPatch/jre/lib/net.properties

inflating: OPatch/jre/lib/fontconfig.Turbo.bfc

inflating: OPatch/jre/lib/fontconfig.SuSE.10.properties.src

inflating: OPatch/jre/lib/psfont.properties.ja

inflating: OPatch/jre/lib/fontconfig.properties.src

creating: OPatch/jre/lib/images/

creating: OPatch/jre/lib/images/icons/

extracting: OPatch/jre/lib/images/icons/sun-java_HighContrastInverse.png

extracting: OPatch/jre/lib/images/icons/sun-java_HighContrast.png

extracting: OPatch/jre/lib/images/icons/sun-java.png

extracting: OPatch/jre/lib/images/icons/sun-java_LowContrast.png

creating: OPatch/jre/lib/images/cursors/

extracting: OPatch/jre/lib/images/cursors/motif_CopyDrop32x32.gif

extracting: OPatch/jre/lib/images/cursors/motif_MoveDrop32x32.gif

extracting: OPatch/jre/lib/images/cursors/motif_LinkNoDrop32x32.gif

extracting: OPatch/jre/lib/images/cursors/motif_MoveNoDrop32x32.gif

extracting: OPatch/jre/lib/images/cursors/invalid32x32.gif
```

```
  extracting: OPatch/jre/lib/images/cursors/motif_LinkDrop32x32.gif

  extracting: OPatch/jre/lib/images/cursors/motif_CopyNoDrop32x32.gif

   inflating: OPatch/jre/lib/images/cursors/cursors.properties

   inflating: OPatch/jre/lib/jvm.hprof.txt

    creating: OPatch/jre/lib/amd64/

   inflating: OPatch/jre/lib/amd64/libglassgtk3.so

   inflating: OPatch/jre/lib/amd64/libsctp.so

   inflating: OPatch/jre/lib/amd64/libjsig.so

    creating: OPatch/jre/lib/amd64/server/

   inflating: OPatch/jre/lib/amd64/server/libjsig.so

   inflating: OPatch/jre/lib/amd64/server/Xusage.txt

   inflating: OPatch/jre/lib/amd64/server/libjvm.so

   inflating: OPatch/jre/lib/amd64/libjsdt.so

   inflating: OPatch/jre/lib/amd64/libnpt.so

   inflating: OPatch/jre/lib/amd64/libnio.so

   inflating: OPatch/jre/lib/amd64/libsaproc.so

   inflating: OPatch/jre/lib/amd64/libjfxmedia.so

   inflating: OPatch/jre/lib/amd64/libsunec.so

   inflating: OPatch/jre/lib/amd64/libjsound.so

   inflating: OPatch/jre/lib/amd64/libsplashscreen.so

   inflating: OPatch/jre/lib/amd64/libprism_common.so

   inflating: OPatch/jre/lib/amd64/libdecora_sse.so

   inflating: OPatch/jre/lib/amd64/libgstreamer-lite.so

   inflating: OPatch/jre/lib/amd64/libjaas_unix.so

   inflating: OPatch/jre/lib/amd64/jvm.cfg

   inflating: OPatch/jre/lib/amd64/libavplugin-57.so

   inflating: OPatch/jre/lib/amd64/libavplugin-ffmpeg-57.so
```

```
inflating: OPatch/jre/lib/amd64/libhprof.so

inflating: OPatch/jre/lib/amd64/libawt.so

inflating: OPatch/jre/lib/amd64/libinstrument.so

inflating: OPatch/jre/lib/amd64/libavplugin-56.so

inflating: OPatch/jre/lib/amd64/libunpack.so

inflating: OPatch/jre/lib/amd64/libdt_socket.so

inflating: OPatch/jre/lib/amd64/libavplugin-54.so

inflating: OPatch/jre/lib/amd64/libfxplugins.so

inflating: OPatch/jre/lib/amd64/libattach.so

inflating: OPatch/jre/lib/amd64/libjava_crw_demo.so

inflating: OPatch/jre/lib/amd64/libjavafx_iio.so

inflating: OPatch/jre/lib/amd64/libjava.so

inflating: OPatch/jre/lib/amd64/libjavafx_font_pango.so

inflating: OPatch/jre/lib/amd64/libdeploy.so

inflating: OPatch/jre/lib/amd64/libverify.so

inflating: OPatch/jre/lib/amd64/libmanagement.so

inflating: OPatch/jre/lib/amd64/libawt_xawt.so

inflating: OPatch/jre/lib/amd64/libprism_sw.so

inflating: OPatch/jre/lib/amd64/libresource.so

inflating: OPatch/jre/lib/amd64/libj2pcsc.so

inflating: OPatch/jre/lib/amd64/libjawt.so

inflating: OPatch/jre/lib/amd64/liblcms.so

inflating: OPatch/jre/lib/amd64/libdcpr.so

inflating: OPatch/jre/lib/amd64/libavplugin-53.so

inflating: OPatch/jre/lib/amd64/libzip.so

inflating: OPatch/jre/lib/amd64/libjdwp.so

inflating: OPatch/jre/lib/amd64/libt2k.so
```

```
inflating: OPatch/jre/lib/amd64/libjsoundalsa.so

inflating: OPatch/jre/lib/amd64/libjavafx_font.so

inflating: OPatch/jre/lib/amd64/libmlib_image.so

inflating: OPatch/jre/lib/amd64/libglassgtk2.so

inflating: OPatch/jre/lib/amd64/libavplugin-ffmpeg-56.so

inflating: OPatch/jre/lib/amd64/libglib-lite.so

inflating: OPatch/jre/lib/amd64/libjavafx_font_freetype.so

inflating: OPatch/jre/lib/amd64/libavplugin-ffmpeg-58.so

inflating: OPatch/jre/lib/amd64/libglass.so

inflating: OPatch/jre/lib/amd64/libfontmanager.so

inflating: OPatch/jre/lib/amd64/libjpeg.so

inflating: OPatch/jre/lib/amd64/libawt_headless.so

inflating: OPatch/jre/lib/amd64/libjfr.so

inflating: OPatch/jre/lib/amd64/libj2pkcs11.so

inflating: OPatch/jre/lib/amd64/libbci.so

inflating: OPatch/jre/lib/amd64/libavplugin-55.so

creating: OPatch/jre/lib/amd64/jli/

inflating: OPatch/jre/lib/amd64/jli/libjli.so

inflating: OPatch/jre/lib/amd64/libjfxwebkit.so

inflating: OPatch/jre/lib/amd64/libprism_es2.so

inflating: OPatch/jre/lib/amd64/libnet.so

inflating: OPatch/jre/lib/amd64/libj2gss.so

inflating: OPatch/jre/lib/jce.jar

inflating: OPatch/jre/lib/rt.jar

inflating: OPatch/jre/lib/fontconfig.SuSE.10.bfc

inflating: OPatch/jre/lib/fontconfig.SuSE.11.properties.src

inflating: OPatch/jre/lib/content-types.properties
```

```
  inflating: OPatch/jre/lib/fontconfig.RedHat.6.bfc

  inflating: OPatch/jre/lib/calendars.properties

  inflating: OPatch/jre/lib/sound.properties

  inflating: OPatch/jre/lib/fontconfig.bfc

  inflating: OPatch/jre/lib/flavormap.properties

  inflating: OPatch/jre/lib/jsse.jar

  inflating: OPatch/jre/lib/meta-index

  inflating: OPatch/jre/lib/javaws.jar

  inflating: OPatch/jre/lib/currency.data

   creating: OPatch/jre/bin/

  inflating: OPatch/jre/bin/rmiregistry

  inflating: OPatch/jre/bin/ControlPanel

  inflating: OPatch/jre/bin/orbd

  inflating: OPatch/jre/bin/policytool

  inflating: OPatch/jre/bin/jjs

  inflating: OPatch/jre/bin/rmid

  inflating: OPatch/jre/bin/javaws

  inflating: OPatch/jre/bin/jcontrol

  inflating: OPatch/jre/bin/pack200

  inflating: OPatch/jre/bin/java

  inflating: OPatch/jre/bin/servertool

  inflating: OPatch/jre/bin/tnameserv

  inflating: OPatch/jre/bin/unpack200

  inflating: OPatch/jre/bin/keytool

  inflating: OPatch/jre/COPYRIGHT

extracting: OPatch/jre/README

extracting: OPatch/jre/LICENSE
```

```
  inflating: OPatch/opatch.pl

   creating: OPatch/plugins/

   creating: OPatch/plugins/opatchauto/

   creating: OPatch/plugins/opatchauto/modules/

  inflating:
OPatch/plugins/opatchauto/modules/oracle.glcm.opatchauto.db.actions.classpath.jar

  inflating:
OPatch/plugins/opatchauto/modules/oracle.glcm.opatchauto.core.actions.classpath.jar

  inflating: OPatch/opatchauto.cmd

   creating: OPatch/oplan/

  inflating: OPatch/oplan/oplan

   creating: OPatch/config/

 extracting: OPatch/config/opatch.properties

   creating: OPatch/modules/

   creating: OPatch/modules/oracle.ldap/

  inflating: OPatch/modules/oracle.ldap/ojmisc.jar

  inflating: OPatch/modules/javax.activation.javax.activation.jar

  inflating: OPatch/modules/com.sun.org.apache.xml.internal.resolver.jar

  inflating: OPatch/modules/com.sun.xml.bind.jaxb-jxc.jar

   creating: OPatch/modules/internal/

   creating: OPatch/modules/internal/features/

  inflating: OPatch/modules/internal/features/lib_jaxb_2.3.0.jar

   creating: OPatch/modules/features/

  inflating: OPatch/modules/features/com.oracle.orapki.jar

  inflating: OPatch/modules/features/com.oracle.glcm.patch.opatch-common-api-classpath.jar

  inflating: OPatch/modules/features/oracle.glcm.opatchauto.core.wallet.classpath.jar

  inflating: OPatch/modules/features/orapki.lib.jar
```

```
 inflating: OPatch/modules/features/oracle.glcm.opatch.common.api.classpath.jar

 inflating: OPatch/modules/com.oracle.glcm.patch.opatch-common-api_13.9.5.0.jar

  creating: OPatch/modules/oracle.pki/

 inflating: OPatch/modules/oracle.pki/oraclepki.jar

 inflating: OPatch/modules/com.oracle.glcm.patch.opatchauto-wallet_12.2.1.25.jar

  creating: OPatch/modules/oracle.osdt/

 inflating: OPatch/modules/oracle.osdt/osdt_core.jar

 inflating: OPatch/modules/oracle.osdt/osdt_xmlsec.jar

 inflating: OPatch/modules/oracle.osdt/osdt_restsec.jar

 inflating: OPatch/modules/oracle.osdt/osdt_cert.jar

 inflating: OPatch/modules/oracle.osdt/osdt_wss.jar

 inflating: OPatch/modules/oracle.osdt/osdt_ws_sx.jar

 inflating: OPatch/modules/oracle.osdt/osdt_saml.jar

 inflating: OPatch/modules/oracle.osdt/osdt_saml2.jar

 inflating: OPatch/modules/javax.xml.bind.javax.xml.bind-api.jar

 inflating: OPatch/modules/com.sun.xml.bind.jaxb-core.jar

 inflating: OPatch/modules/com.sun.xml.bind.jaxb-impl.jar

  creating: OPatch/modules/oracle.rsa/

 inflating: OPatch/modules/oracle.rsa/cryptoj.jar

  creating: OPatch/modules/thirdparty/

 inflating: OPatch/modules/thirdparty/jackson-databind-2.10.2.jar

 inflating: OPatch/modules/thirdparty/jackson-module-jaxb-annotations-2.10.2.jar

  creating: OPatch/modules/thirdparty/features/

 inflating: OPatch/modules/thirdparty/features/jackson-databind_2.10.2.0.0.jar

 inflating: OPatch/modules/thirdparty/features/xercesimpl.jar

 inflating: OPatch/modules/thirdparty/features/jackson-module-jaxb-annotations.jar

 inflating: OPatch/modules/thirdparty/features/jackson-annotations_2.10.2.0.0.jar
```

```
  inflating: OPatch/modules/thirdparty/features/jackson-core.jar

  inflating: OPatch/modules/thirdparty/features/jackson-databind.jar

  inflating: OPatch/modules/thirdparty/features/jackson-module-jaxb-
annotations_2.10.2.0.0.jar

  inflating: OPatch/modules/thirdparty/features/jackson-annotations.jar

  inflating: OPatch/modules/thirdparty/features/jackson-core_2.10.2.0.0.jar

  inflating: OPatch/modules/thirdparty/features/xercesimpl_2.11.0.0.0.jar

  inflating: OPatch/modules/thirdparty/jackson-core-2.10.2.jar

  inflating: OPatch/modules/thirdparty/jackson-annotations-2.10.2.jar

  inflating: OPatch/modules/thirdparty/xercesImpl-2.11.0.jar

  inflating: OPatch/modules/com.oracle.glcm.patch.opatch-common-api-schema_13.9.5.0.jar

  inflating: OPatch/modules/com.sun.xml.bind.jaxb-xjc.jar

  inflating: OPatch/modules/com.oracle.glcm.patch.opatch-common-api-interfaces_13.9.5.0.jar

[oracle@dg1 1900]$




[oracle@dg1 OPatch]$ ./opatch version

OPatch Version: 12.2.0.1.25  <-------



OPatch succeeded.

[oracle@dg1 OPatch]$
```

Step 4: Apply DSTV37 UPDATE Patch to ORACLE HOME (Can be apply patch online)

```
[oracle@dg1 PSU]$ unzip p32327201_190000_Linux-x86-64.zip

Archive:  p32327201_190000_Linux-x86-64.zip

  creating: 32327201/

  creating: 32327201/files/
```

```
  creating: 32327201/files/oracore/

  creating: 32327201/files/oracore/zoneinfo/

 inflating: 32327201/files/oracore/zoneinfo/timezone_36.dat

  creating: 32327201/files/oracore/zoneinfo/big/

 inflating: 32327201/files/oracore/zoneinfo/big/timezone_36.dat

 inflating: 32327201/files/oracore/zoneinfo/big/timezlrg_36.dat

  creating: 32327201/files/oracore/zoneinfo/little/

 inflating: 32327201/files/oracore/zoneinfo/little/timezlrg_36.dat

 inflating: 32327201/files/oracore/zoneinfo/little/timezone_36.dat

 inflating: 32327201/files/oracore/zoneinfo/timezlrg_36.dat

 inflating: 32327201/files/oracore/zoneinfo/readme_36.txt

 inflating: 32327201/README.txt

  creating: 32327201/etc/

  creating: 32327201/etc/config/

 inflating: 32327201/etc/config/actions.xml

 inflating: 32327201/etc/config/inventory.xml

[oracle@dg1 PSU]$
```

`[oracle@dg1 PSU]$` **/oracle/1900/OPatch/opatch prereq CheckConflictAgainstOHWithDetail -ph /orabkup/PSU/32327201**

```
Oracle Interim Patch Installer version 12.2.0.1.25

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PREREQ session



Oracle Home       : /oracle/1900

Central Inventory : /oracle/oraInventory
```

```
   from             : /oracle/1900/oraInst.loc

OPatch version    : 12.2.0.1.25

OUI version       : 12.2.0.7.0

Log file location : /oracle/1900/cfgtoollogs/opatch/opatch2021-08-23_00-21-47AM_1.log


Invoking prereq "checkconflictagainstohwithdetail"

Prereq "checkConflictAgainstOHWithDetail" passed.


OPatch succeeded.

[oracle@dg1 PSU]$


cd /orabkup/PSU/32327201

[oracle@dg1 32327201]$ /oracle/1900/OPatch/opatch apply -oh /oracle/1900

Oracle Interim Patch Installer version 12.2.0.1.25

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Oracle Home       : /oracle/1900

Central Inventory : /oracle/oraInventory

   from             : /oracle/1900/oraInst.loc

OPatch version    : 12.2.0.1.25

OUI version       : 12.2.0.7.0

Log file location : /oracle/1900/cfgtoollogs/opatch/opatch2021-08-23_00-23-30AM_1.log



Verifying environment and performing prerequisite checks...

OPatch continues with these patches:   32327201
```

```
Do you want to proceed? [y|n]y

User Responded with: Y  <----

All checks passed.

Backing up files...

Applying interim patch '32327201' to OH '/oracle/1900'


Patching component oracle.oracore.rsf, 19.0.0.0.0...

Patch 32327201 successfully applied.

Log file location: /oracle/1900/cfgtoollogs/opatch/opatch2021-08-23_00-23-30AM_1.log

OPatch succeeded.

[oracle@dg1 32327201]$



[oracle@dg1 1900]$ /oracle/1900/OPatch/opatch lsinv | grep -i "DSTV37 UPDATE"

Patch description:  "RDBMS - DSTV37 UPDATE - TZDATA2020E"

[oracle@dg1 1900]$
```

Step 5: Verify current TZ Version

```
[oracle@dg1 OPatch]$ sqlplus / as sysdba




SQL*Plus: Release 19.0.0.0.0 - Production on Mon Aug 23 00:41:09 2021

Version 19.3.0.0.0




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Connected to:

Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production
```

```
Version 19.3.0.0.0


SQL> SELECT * FROM v$timezone_file;



FILENAME              VERSION     CON_ID

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

timezlrg_32.dat            32           0



SQL> shut immediate;

Database closed.

Database dismounted.

ORACLE instance shut down.

SQL> startup;

ORACLE instance started.



Total System Global Area  524285856 bytes

Fixed Size                  8898464 bytes

Variable Size             268435456 bytes

Database Buffers          243269632 bytes

Redo Buffers                3682304 bytes

Database mounted.

Database opened.

SQL> SQL> SELECT * FROM v$timezone_file;



FILENAME              VERSION     CON_ID

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

timezlrg_32.dat            32           0  <---- 32
```

```
SQL>

SQL> SELECT PROPERTY_NAME, SUBSTR(property_value, 1, 30) value

FROM DATABASE_PROPERTIES

WHERE PROPERTY_NAME LIKE 'DST_%'

ORDER BY PROPERTY_NAME;     2     3     4


PROPERTY_NAME                    VALUE

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

DST_PRIMARY_TT_VERSION        32 DST_SECONDARY_TT_VERSION       0DST_UPGRADE_STATE

NONE



SQL>
```

Step 6: Verify latest TZ Version

```
SQL> SELECT DBMS_DST.get_latest_timezone_version FROM   dual;




GET_LATEST_TIMEZONE_VERSION

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

                        37  <------



SQL>
```

Upgrade TZ:

Step 7 : Startup DB in Upgrade mode

```
SQL> shut immediate;

Database closed.
```

```
Database dismounted.

ORACLE instance shut down.

SQL>

SQL> STARTUP UPGRADE;

ORACLE instance started.


Total System Global Area   524285856 bytes

Fixed Size                   8898464 bytes

Variable Size              268435456 bytes

Database Buffers           243269632 bytes

Redo Buffers                 3682304 bytes

Database mounted.

Database opened.

SQL>

SQL> select name,open_mode from v$database;


NAME        OPEN_MODE

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

TEST         READ WRITE



SQL>

SQL> select instance_name,status from v$instance;



INSTANCE_NAME       STATUS

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

test              OPEN MIGRATE   <------
```

Step 8 : Prepare Pre-Upgrade Stage

```
SQL> DECLARE

  l_tz_version PLS_INTEGER;

BEGIN

  l_tz_version := DBMS_DST.get_latest_timezone_version;



  DBMS_OUTPUT.put_line('l_tz_version=' || l_tz_version);

  DBMS_DST.begin_prepare(l_tz_version);

END;

/     2     3     4     5     6     7     8     9


PL/SQL procedure successfully completed.




SQL>




SQL> COLUMN property_name FORMAT A30

COLUMN property_value FORMAT A20



SELECT property_name, property_value

FROM   database_properties

WHERE  property_name LIKE 'DST_%'

ORDER BY property_name; SQL> SQL> SQL>    2     3     4



PROPERTY_NAME                    PROPERTY_VALUE

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

DST_PRIMARY_TT_VERSION          32 DST_SECONDARY_TT_VERSION          37    <-----
```

```
DST_UPGRADE_STATE                    PREPARE <-----



SQL>
```

Step 9 : Find the affected tables

```
SQL> EXEC DBMS_DST.find_affected_tables;



PL/SQL procedure successfully completed.



SQL> select count(*) from sys.dst$affected_tables;



   COUNT(*)

----------

         0   <-----



SQL> select * from sys.dst$error_table;

no rows selected



SQL>
```

Step 10: End the Pre-Upgrade stage

```
SQL> EXEC DBMS_DST.end_prepare;



PL/SQL procedure successfully completed.



SQL>
```

Step 11: Start TZ Upgrade

```
SQL> SHUTDOWN IMMEDIATE;

Database closed.

Database dismounted.

ORACLE instance shut down.

SQL>

SQL> startup upgrade;

ORACLE instance started.



Total System Global Area  524285856 bytes

Fixed Size                  8898464 bytes

Variable Size             268435456 bytes

Database Buffers          243269632 bytes

Redo Buffers                3682304 bytes

Database mounted.

Database opened.

SQL>

SQL> SET SERVEROUTPUT ON

DECLARE

  l_tz_version PLS_INTEGER;

BEGIN

  SELECT DBMS_DST.get_latest_timezone_version

  INTO   l_tz_version

  FROM   dual;



  DBMS_OUTPUT.put_line('l_tz_version=' || l_tz_version);
```

```
  DBMS_DST.begin_upgrade(l_tz_version);

END; SQL>    2    3    4    5    6    7    8    9    10


 11   /l_tz_version=36


An upgrade window has been successfully started.




PL/SQL procedure successfully completed.




SQL>
```

Step 12: Shutdown and Startup DB in Normal mode

```
SQL> shut immediate;

Database closed.

Database dismounted.

ORACLE instance shut down.

SQL>

SQL> startup;

ORACLE instance started.



Total System Global Area  524285856 bytes

Fixed Size                  8898464 bytes

Variable Size             268435456 bytes

Database Buffers          243269632 bytes

Redo Buffers                3682304 bytes

Database mounted.

Database opened.

SQL>
```

Step 13: End TZ Upgrade

```
SQL> SET SERVEROUTPUT ON

DECLARE

  l_failures   PLS_INTEGER;

BEGIN

  DBMS_DST.upgrade_database(l_failures);

  DBMS_OUTPUT.put_line('DBMS_DST.upgrade_database : l_failures=' || l_failures);

  DBMS_DST.end_upgrade(l_failures);

  DBMS_OUTPUT.put_line('DBMS_DST.end_upgrade : l_failures=' || l_failures);

END;
/
SQL>   2    3    4    5    6    7    8    9

Table list: "GSMADMIN_INTERNAL"."AQ$_CHANGE_LOG_QUEUE_TABLE_S"

Number of failures: 0

Table list: "GSMADMIN_INTERNAL"."AQ$_CHANGE_LOG_QUEUE_TABLE_L"

Number of failures: 0

Table list: "MDSYS"."SDO_DIAG_MESSAGES_TABLE"

Number of failures: 0

Table list: "DVSYS"."AUDIT_TRAIL$"

Number of failures: 0

Table list: "DVSYS"."SIMULATION_LOG$"

Number of failures: 0

DBMS_DST.upgrade_database : l_failures=0An upgrade window has been successfully ended.

DBMS_DST.end_upgrade : l_failures=0



PL/SQL procedure successfully completed.
```

```
SQL>
```

Step 14: Verify TZ Upgrade

```
SQL> SELECT * FROM v$timezone_file;


FILENAME              VERSION     CON_ID

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

timezlrg_36.dat           37          0   <---- Upgraded to 37



SQL>

SQL> COLUMN property_name FORMAT A30

COLUMN property_value FORMAT A20



SELECT property_name, property_value

FROM   database_properties

WHERE  property_name LIKE 'DST_%'

ORDER BY property_name; SQL> SQL> SQL>   2    3    4



PROPERTY_NAME                 PROPERTY_VALUE

-------------------------------- --------------------DST_PRIMARY_TT_VERSION            37  <----

- Upgraded to 37 DST_SECONDARY_TT_VERSION      0  <----- Should be 0

DST_UPGRADE_STATE             NONE <--- Should be NONE

SQL>
```