

Oracle Revenue Management and Billing Upgrade from v2.8 to v5.1

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Document Control

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Upgrade Checklist

Enviourment - RMB SIT Upgrade 2.8 to 5.1	
Softwares	
Application Server	Oracle WebLogic 12.2.1.4 (64-bit)
Database Server	Oracle Database Server 19c
Operating System	Oracle Linux 8.x (64-bit) 86_64
ORMB	RMB 5.1
Framework	4.5.0.0.0
Pre-upgrade tasks	
Download RMB 5.1 Package from oracle edelivery for Linux x86-64	
1) Oracle Financial Services Revenue Management and Billing 5.1.0.0.0 - Multiplatform, 2) Oracle Financial Services Revenue Management and Billing 5.1.0.0.0 - Oracle Database, 3) Oracle Financial Services Revenue Management and Billing 5.1.0.0.0 - Oracle Utilities	
Download Oracle Utilities Application Framework 4.5.0.0.0 for Linux x86-64	
1) Oracle Utilities Application Framework 4.5.0.0.0 - Database Installation Media 2) Oracle Utilities Application Framework 4.5.0.0.0 - Application Installation Media	
Download all RMB 5.1 Mandatory Patches	
35168266 MANDATORY PATCH 1 FOR ORMB VERSION 5.1.0.0.0 35250817 MANDATORY PATCH 2 FOR ORMB VERSION 5.1.0.0.0 (Patch)	
Extra Patch applied Dev Env •35682098 •35784758 •36214760	
RMB SIT Database Cold Backup	
RMB Application RMBD139 Backup on both Nodes	
RMB FISAPP Backup on both Nodes	
RMB Weblogic / Middleware Backup on both Nodes	
IMP file backup by DEV team , if any on both Nodes	
DB Validation Task	
ORMB data is imported on Oracle Database Server 19c and the MAX_STRING_SIZE parameter is set to EXTENDED	
No data exists in the CI_BATCH_TEMP table before you start the upgrade process	
Backup of the CI_BATCH_RUN_CNTRL table and then truncate this table	
Execute the PreprocessingScript.sql query which is available in the V30000 MIGRATION PATCH DEPLOYMENT ISSUE	
AFTER DIRECT UPGRADE FROM 29010 TO 31000 patch (Patch Number: 33459344)	
Grant access queries needed to executed on CISUSER/CISREAD	
GRANT EXECUTE ON DBMS_CRYPTO TO CISADM;	
Upgrade Task	
TASK	Description
Shutdown RMB Application on Both nodes	Shutdown RMB Application on Both nodes
Shutdown ThreadPoll	
Start RMB Dev DB	
Create Dir for RMB5.1 and FW 4.5	
Installing OUA Framework Version 4.5.0.0.0: Apply Blueprint	Oracle Utilities Application Framework 4.5.0.0.0 - Database Installation Media
Installing Rollup Pack for OUA Framework Version 4.5.0.0.0: Apply Rollup	Oracle Utilities Application Framework V4.5.0.0.0 Single Fix Prerequisite Rollup for RMB V5.0.0.0.0 -Database
Installing OUA Framework Version 4.5.0.0.0 on Node 1 and Node 2	Oracle Utilities Application Framework 4.5.0.0.0 - Application Installation Media
Installing Rollup Pack for OUA Framework Version 4.5.0.0.0 on Node 1 and Node 2	Oracle Utilities Application Framework V4.5.0.0.0 Single Fix Prerequisite Rollup for RMB V5.0.0.0.0 - Application
Installing the ORMB Application 5.1 on Node 1 and Node 2	Oracle Revenue Management and Billing V5.0.0.0.0 Multiplatform
Upgrading the ORMB Database	Oracle Revenue Management and Billing V5.0.0.0.0 Oracle Database
validate ormb and framework version in DB/Application	
Execute SPL ENV	
Execute InitialSetup	
Execute iws	
Clear tmp/cahe/stage	
Redeploy all war files	
Start the RMB/Threadpool Application For Validation	
Stop RMB/Threadpool	
Apply Mandatory Roll ups	
Migration Patches	Migration patches from 2.8 to 5.1
Hashtag Generation	HashTag generation
Execute SPL ENV	
Execute InitialSetup	
Execute iws	
Clear tmp/cahe/stage	
Extra Patch applied Dev Env •35682098 •35784758 •36214760	
35682098	
35784758	
36214760	
Redeploy all war files	
Start the RMB/Threadpool Application For Validation	
Sanity	
Validate IWS Webservice URL	
Validate SPLWEB URL	
Execute Dummy Batch F1-FLUSH	
Sanity from Business	

Pre-Upgrade Tasks

1. RMB Application RMBT209 Backup on both the App Nodes.
2. RMB FISAPP Backup on both Nodes
3. RMB Weblogic/Middleware Backup on both Nodes
4. RMB SIT Database Cold Backup
5. Shutdown RMB Application on Both nodes
6. Shutdown ThreadPool.
7. SIT DB should be Up and Running.
8. Downloading the Patches:

Download RMB 5.1 Package from Oracle e-delivery for Linux x86-64

- a) Oracle Financial Services Revenue Management and Billing 5.1.0.0.0 - Multiplatform,
- b) Oracle Financial Services Revenue Management and Billing 5.1.0.0.0 - Oracle Database,
- c) Oracle Financial Services Revenue Management and Billing 5.1.0.0.0 - Oracle Utilities

Download Oracle Utilities Application Framework 4.5.0.0.0 for Linux x86-64

- a) Oracle Utilities Application Framework 4.5.0.0.0 - Database Installation Media
- b) Oracle Utilities Application Framework 4.5.0.0.0 - Application Installation Media

Download all RMB 5.1 Mandatory Patches

- a) 35162465 PRE-REQUISITE MANDATORY PATCH
- b) 35168266 MANDATORY PATCH 1 FOR ORMB VERSION 5.1.0.0.0
- c) 35250817 MANDATORY PATCH 2 FOR ORMB VERSION 5.1.0.0.0 (Patch)

9. Stage all the above Patches in the required Directory.

Prerequisites DB Steps

Step 1: Take Snapshot of below command:

```
select * from CI_BCHG_TEMP
```

INSTALL_OPT_ID	OWNER_FLG	RELEASE_ID	COMP_STATUS_FLG	UPDATE_DTTM	VE...	SORT_SEQ	BUILD_NBR	PATCH_NBR	DISPLAY_SW	PRODUCT_NAM
1 11111	F1	V4.5.0.0.0	COMP	02-JUL-24	13	Filter...	98 000	000	N	Oracle Utili
2 11111	CM	V2.8.0.0.24.07	COMP	02-JUL-24	88		2 0001.000	000	N	Customer Mod
3 11111	CI	V2.8.0.0.0	COMP	18-APR-21	24		10 146590	000	Y	Revenue Mana

PRODUCT_NAME
Oracle Utilities Application Framework
Customer Modification-Marsh
Revenue Management - QA-T209

Step 2: Validate Below Grants:

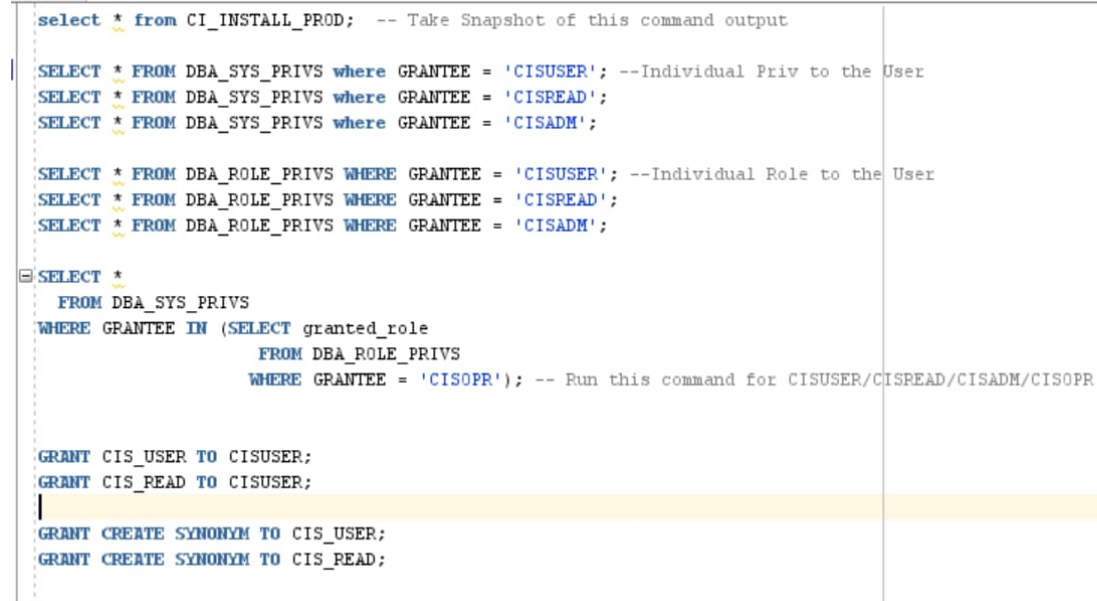
1. Assign dba role with admin privilege to CISADM.
2. Assign below Grants to CIS_USER & CIS_READ
GRANT CREATE SYNONYM TO CIS_USER;
GRANT CREATE SYNONYM TO CIS_READ;
3. Grant below Privileges to CISUSER.
GRANT SELECT ANY TABLE TO CISUSER;
GRANT CIS_USER TO CISUSER;
GRANT CIS_READ TO CISUSER;
GRANT CONNECT TO CISUSER;
4. Grant below privilege to CISREAD
GRANT SELECT ANY TABLE TO CISREAD;
GRANT CIS_READ TO CISREAD;
GRANT CONNECT TO CISREAD;
5. Assign below privilege to CISORP
GRANT CONNECT, RESOURCE, EXP_FULL_DATABASE TO CISORP;

```
SELECT * FROM DBA_SYS_PRIVS where GRANTEE = 'CISUSER'; --Individual Priv to the User
SELECT * FROM DBA_SYS_PRIVS where GRANTEE = 'CISREAD';
SELECT * FROM DBA_SYS_PRIVS where GRANTEE = 'CISADM';
```

```
SELECT * FROM DBA_ROLE_PRIVS WHERE GRANTEE = 'CISUSER'; --Individual Role to the User
SELECT * FROM DBA_ROLE_PRIVS WHERE GRANTEE = 'CISREAD';
SELECT * FROM DBA_ROLE_PRIVS WHERE GRANTEE = 'CISADM';
```

```
SELECT *
FROM DBA_SYS_PRIVS
WHERE GRANTEE IN (SELECT granted_role
                  FROM DBA_ROLE_PRIVS
                  WHERE GRANTEE = 'CISOPR'); -- Run this command for
CISUSER/CISREAD/CISADM/CISOPR
```

Reference screenshot from SIT:



```
select * from CI_INSTALL_PROD; -- Take Snapshot of this command output

SELECT * FROM DBA_SYS_PRIVS where GRANTEE = 'CISUSER'; --Individual Priv to the User
SELECT * FROM DBA_SYS_PRIVS where GRANTEE = 'CISREAD';
SELECT * FROM DBA_SYS_PRIVS where GRANTEE = 'CISADM';

SELECT * FROM DBA_ROLE_PRIVS WHERE GRANTEE = 'CISUSER'; --Individual Role to the User
SELECT * FROM DBA_ROLE_PRIVS WHERE GRANTEE = 'CISREAD';
SELECT * FROM DBA_ROLE_PRIVS WHERE GRANTEE = 'CISADM';

SELECT *
FROM DBA_SYS_PRIVS
WHERE GRANTEE IN (SELECT granted_role
                  FROM DBA_ROLE_PRIVS
                  WHERE GRANTEE = 'CISOPR'); -- Run this command for CISUSER/CISREAD/CISADM/CISOPR

GRANT CIS_USER TO CISUSER;
GRANT CIS_READ TO CISUSER;

GRANT CREATE SYNONYM TO CIS_USER;
GRANT CREATE SYNONYM TO CIS_READ;
```

Step 3: Verify MAX_STRING_SIZE parameter is set to EXTENDED. If NOT, kindly follow below steps:

1. Set the ORACLE_HOME and ORACLE_SID environment variables.
2. Shutdown the target database using the following command:
shutdown immediate
3. Start the database in the Upgrade mode using the following command:
startup upgrade
4. Set the MAX_STRING_SIZE parameter to EXTENDED using the following command:
alter system set max_string_size=extended scope=both;
5. Execute the utl32k.sql file using the following command:
@?/rdbms/admin/utl32k.sql
6. Restart the database in the Normal mode using the following commands:
shutdown immediate
startup

Step 4: Assign the Execute privilege for the DBMS_CRYPTO package to the CISADM user.
Enable the DBMS_CRYPTO package by executing the following command as SYS:

GRANT EXECUTE ON DBMS_CRYPTO TO CISADM

Step 5: Remove the ALTER_CI_PRCE_CALC_LN.sql script from the CDIni.Drv file which is located at <DESTINATION_FOLDER_1>/RMB/Upgrade/Oracle/Install-Upgrade and add it in the beginning of the CDIPost.Drv file which is located at <DESTINATION_FOLDER_1>/RMB/Upgrade/Oracle/Install-Upgrade

Note: The <DESTINATION_FOLDER_1> folder is the location where you have extracted the contents of the **Oracle Financial Services Revenue Management and Billing 5.1.0.0.0 - Oracle Database** package.

Step 6: Check if there is any data in **CI_BATCH_RUN_CNTRL** table & if so take backup of this table. After the backup truncate the table.

Step 7: Password Validation of Below User Account:

CISADM, CISUSER and CISREAD

Installing the ORMB & OUAF Packages

Patch 1: Oracle Utilities Application Framework 4.5.0.0.0 - Database Installation Media (V1020069-01)

Step 1: Unzip the the Patch and Export below environment variable using the following commands:

export JAVA_HOME=/web/bea/oltt209/JAVA

export

JAR_PATH=/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Database_media/jarfiles

export CLASS_PATH=\${JAR_PATH}/commons-collections-3.2.2.jar:\${JAR_PATH}/commons-codec-1.15.jar:\${JAR_PATH}/commons-cli-1.4-c12260c.jar:\${JAR_PATH}/ojdbc8-19.3.0.0.jar:\${JAR_PATH}/jackson-databind-2.12.2.jar:\${JAR_PATH}/jackson-core-2.12.2.jar:\${JAR_PATH}/jackson-annotations-2.12.2.jar:\${JAR_PATH}/spl-shared-4.5.0.0.jar:\${JAR_PATH}/spl-oradbi-4.5.0.0.jar:\${JAR_PATH}/log4j-core-2.17.1.jar:\${JAR_PATH}/log4j-api-2.17.1.jar

Step2: Execute the OraDBI (Java) utility using the following command:

\${JAVA_HOME}/bin/java -Xmx1500M -cp \${CLASS_PATH} com.oracle.ouaf.oem.install.OraDBI -d jdbc:oracle:thin:@USDFW34DB05V.mrshmc.com:3205:oltt209,cisadm,<CISADM_PWD>,CISUSER,CIS_READ,CIS_USER,CIS_READ,cisadm -p <CISADM_PWD>,<CISADM_PWD> -l 1,2 -q true -o

Type Y and then press Enter.

START Screenshot:


```

2024-07-02 09:01:19,621 [main] INFO (oem.install.OraDBI) Parameter file is @ /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGR
ADE/FW_4.5.0.0.0 Binaries/V1020069/Install-Upgrade/OraDBI.par
- 2024-07-02 09:01:19,714 [main] INFO (shared.common.Cryptography) Error initializing the keystore based cryptography. The
keystore file '/web/bea_apps/oltt209/RMBT209/ks/.keystore' does not exist. This file is either provided by the property com.ora
cle.uaaf.system.keystore.file or expected to exist at the default file location /web/bea_apps/oltt209/RMBT209/ks/.keystore Atte
mpting to use the legacy cryptography.
- 2024-07-02 09:01:19,864 [main] INFO (oem.install.OraDBI)

Connecting to the Target Database as user CISADM
- 2024-07-02 09:01:19,864 [main] DEBUG (oem.install.OraDBI)
User Name : CISADM
- 2024-07-02 09:01:19,864 [main] DEBUG (oem.install.OraDBI)
Database Name : jdbc:oracle:thin:@USDFW34DB05V.mrshmc.com:3205:oltt209

- 2024-07-02 09:01:20,118 [main] INFO (oem.install.OraDBI) The driver is 19.3.0.0.0
- 2024-07-02 09:01:20,118 [main] INFO (oem.install.OraDBI) The DBMS is Oracle Database 19c Enterprise Edition Release 19.0.
0.0.0 - Production
Version 19.23.0.0.0
- 2024-07-02 09:01:20,216 [main] INFO (oem.install.OraDBI)

Connecting to the Target Database as user CISADM
- 2024-07-02 09:01:20,217 [main] DEBUG (oem.install.OraDBI)
User Name : CISADM
- 2024-07-02 09:01:20,217 [main] DEBUG (oem.install.OraDBI)
Database Name : jdbc:oracle:thin:@USDFW34DB05V.mrshmc.com:3205:oltt209

- 2024-07-02 09:01:20,284 [main] INFO (oem.install.OraDBI) The driver is 19.3.0.0.0
- 2024-07-02 09:01:20,284 [main] INFO (oem.install.OraDBI) The DBMS is Oracle Database 19c Enterprise Edition Release 19.0.
0.0.0 - Production
Version 19.23.0.0.0
- 2024-07-02 09:01:20,284 [main] INFO (oem.install.OraDBI) Successfully connected with CISREAD & CISADM
- 2024-07-02 09:01:20,290 [main] DEBUG (oem.install.OraDBI) select count(*) from user_tables where table_name = ?;
- 2024-07-02 09:01:20,344 [main] DEBUG (oem.install.OraDBI) select count(*) from user_tab_columns where table_name = ? and c
olumn_name = 'SR_NO';
- 2024-07-02 09:01:20,347 [main] DEBUG (oem.install.OraDBI) select release_id||decode(release_id_sfx, ' ',null,'.'||release_i
d_sfx) from CISADM.CI_INSTALL_PROD where release_id <> ' ' and owner_flg = ?;
1,2 Top

```

END Screenshot:

```

CREATE or Replace SYNONYM CM_CRA_HIST_S FOR CISADM.CM_CRA_HIST_S;
- 2024-07-02 09:18:40,770 [main] DEBUG (oem.install.OraDBI)
update CISADM.CI_UT_INSTL_DTL set end_dttm=to_date('07-02-2024 09:18:40','MM-DD-YYYY HH24:MI:SS'), run_status_flg='02' where in
stl_log_id=2129 and seq_num = 162 - 1;
- 2024-07-02 09:18:40,773 [main] DEBUG (oem.install.OraDBI)
COMMIT;
- 2024-07-02 09:18:40,775 [main] DEBUG (oem.install.OraDBI)
update CISADM.CI_UT_INSTL set end_dttm=to_date('07-02-2024 09:18:40','MM-DD-YYYY HH24:MI:SS'), run_status_flg='02' where instl_
log_id=2129;
- 2024-07-02 09:18:40,778 [main] DEBUG (oem.install.OraDBI)
COMMIT;
- 2024-07-02 09:18:40,779 [main] INFO (oem.install.OraDBI)
Storing Database Credential with encrypted password...
- 2024-07-02 09:18:40,779 [main] DEBUG (oem.install.OraDBI) UPDATE CISADM.CI_WFM_OPT SET WFM_OPT_VAL=? WHERE EXT_OPT_TYPE=?;
- 2024-07-02 09:18:40,783 [main] DEBUG (oem.install.OraDBI) UPDATE CISADM.CI_WFM_OPT SET WFM_OPT_VAL=? WHERE EXT_OPT_TYPE=?;
- 2024-07-02 09:18:40,787 [main] DEBUG (oem.install.OraDBI)
COMMIT;
- 2024-07-02 09:18:40,788 [main] DEBUG (oem.install.OraDBI) update CISADM.CI_INSTALL_PROD set release_id=?,release_id_sfx= ?
,build_nbr=? where owner_flg=?;
- 2024-07-02 09:18:40,791 [main] DEBUG (oem.install.OraDBI)
COMMIT;
- 2024-07-02 09:18:41,025 [main] INFO (oem.install.OraDBI)
The following duplicates were found in table CI_MD_MO_OPT:
- 2024-07-02 09:18:41,025 [main] INFO (oem.install.OraDBI) MAINT_OBJ_CD=TENDER TYPE, MAINT_OBJ_OPT_FLG=F1BP, SEQ_NUM=1
- 2024-07-02 09:18:41,215 [main] INFO (oem.install.OraDBI)
Install/Upgrade of Database Rel.V4.5.0.0.0 Completed Successfully, Now Exiting ...
- 2024-07-02 09:18:41,216 [main] INFO (oem.install.OraDBI) Process Completed Successfully, Now Exiting ...
139384,2 Bot

```

Patch 2: Oracle Utilities Application Framework 4.5.0.0.0 - Application Installation Media (V1020099-01) (Execute on Each APP Nodes)

Step 1: Take Backup of RMBT209 folder e.g. **RMBT209_Before_Upgrade**

Step 2: Create a temp folder **/web/bea_apps/oltt209/Sit_upgrade** and place the RMBT209_Before_Upgrade/etc/**ENVIRON.INI** to the temp folder

(All the required customizations will be picked up from the existing ENVIRON.INI file)

Step 3: Run below mentioned command:

./install.sh -i /web/bea_apps/oltt209/Sit_upgrade/ENVIRON.INI

Pass Oracle_Client_Home: **/web/workspace/baseinstall/oracle/19.3.0/**

If you are getting below Error, then Delete the RMBT209 file (which is just created as part of the Upgrade Process) , export JAVA_HOME and try to re-run it.

```
240702:115104 <info> Checking environment integrity ...
240702:115104 <crit> Environment integrity error: JAVA_HOME environment variable does not match JAVA_HOME value in ENVIRON.INI
240702:115104 <crit> JAVA_HOME = /web/bea/oltt209/JAVA/
240702:115104 <crit> ENVIRON.INI = /web/bea/oltt209/JAVA
240702:115104 <crit> Failed one or more preliminary environment integrity checks.
240702:115104 <crit> Initial setup cannot be run.
Exiting at /web/bea_apps/oltt209/RMBT209/bin/initialSetup.plx line 2864.
main::check_environment_integrity() called at /web/bea_apps/oltt209/RMBT209/bin/initialSetup.plx line 205

End of output
Program Terminated at data/bin/perl/lib/SPL/splExternal.pm line 137.
Error: install.plx didn't finish successfully. Exiting.
wsadt209:usdfw23as121v:/web/workspace/RMB SIT Upgrade/ORMB 5.1 UPGRADE/FW 4.5.0.0.0 Binaries/Application Media/FW-V4.5.0.0.0>
```

START Screenshot:

```
wsadt209:usdfw23as121v:/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW-V4.5.0.0.0> .
/install.sh -i /web/bea_apps/oltt209/Sit_upgrade/ENVIRON.INI

Enter Oracle Client Home Directory (<ENTER> quit): /web/workspace/baseinstall/oracle/19.3.0/

240703:044416 <info> Silent mode installation. Input file: /web/bea_apps/oltt209/Sit_upgrade/ENVIRON.INI
>>> Checking Java version ... done.
>>> Checking WEB_SERVER_HOME ... done.
>>> Calculating additional variables ... done.
>>> Writing variables to /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW-V4.5.0.0.0/
tmp/2024-07-03-0444/ENVIRON.INI ... done.

240703:044418 <info> Creating Keystore Password File.
240703:044418 <info> Creating Keystore File Alias.
240703:044418 <info> Keystore creation completed.
240703:044418 <info> Creating Keystore File HMAC Alias.
240703:044418 <info> Keystore creation completed.
>>> Checking ONSCONFIG ... done.
>>> Checking DB_OVERRIDE_CONNECTION ... done.
>>> Calculating additional variables ... done.
>>> Backup /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW-V4.5.0.0.0/tmp/2024-07-03
-0444/ENVIRON.INI to /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW-V4.5.0.0.0/tmp/
2024-07-03-0444/ENVIRON.INI_20240703_0444 ... done.
>>> Writing variables to /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW-V4.5.0.0.0/
tmp/2024-07-03-0444/ENVIRON.INI ... done.

240703:044418 <info> Create directory /web/bea_logs/oltt209/RMBT209
240703:044418 <info> copying folder /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW
-V4.5.0.0.0/data to /web/bea_apps/oltt209/RMBT209
240703:044418 <info> copying folder /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW
-V4.5.0.0.0/data/bin to /web/bea_apps/oltt209/RMBT209/bin
240703:044418 <info> copying folder /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries/Application_Media/FW
-V4.5.0.0.0/data/bin/perl/lib to /web/bea_apps/oltt209/RMBT209/bin/perl/lib
```

End Screenshot:

```
240703:044612 <info> 240703:044612 <info> WebLogic ThreadPoolWorker is not enabled
240703:044612 <info> 240703:044612 <info> Removing /web/bea_apps/oltt209/RMBT209/splapp/applications/ThreadPoolWorker.ear
240703:044613 <info> 240703:044613 <info> Creating Trust Store Password File.
240703:044613 <info> 240703:044613 <info> Creating Trust Store File Alias.
240703:044614 <info> 240703:044614 <info>
240703:044614 <info> 240703:044614 <info> Warning:
240703:044614 <info> 240703:044614 <info> The JCEKS keystore uses a proprietary format. It is recommended to migrate to PKCS1
2 which is an industry standard format using "keytool -importkeystore -srckeystore /web/bea_apps/oltt209/RMBT209/ks/.ouaf_trust
store -destkeystore /web/bea_apps/oltt209/RMBT209/ks/.ouaf_truststore -deststoretype pkcs12".
240703:044614 <info> 240703:044614 <info> Packaging language packs.
240703:044614 <info> 240703:044614 <info> Folder /web/bea_apps/oltt209/RMBT209/languagepacks does not exist, skipping packagin
g language packs.
240703:044614 <info> 240703:044614 <info> Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0//perl/li
b/5.38.2/Getopt/Std.pm line 242.
240703:044614 <info> 240703:044614 <info>
240703:044614 <info> 240703:044614 <info> Initial Setup execution time: 1 minute 48 seconds.
240703:044614 <info> 240703:044614 <info> Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0//perl/li
b/5.38.2/Getopt/Std.pm line 242.
240703:044614 <info> 240703:044614 <info>
240703:044614 <info> 240703:044614 <info> Initial Setup completed successfully.
240703:044614 <info> 240703:044614 <info> Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0//perl/li
b/5.38.2/Getopt/Std.pm line 242.
240703:044614 <info> 240703:044614 <info>
240703:044614 <info> 240703:044614 <info> initialSetup completed.
240703:044614 <info> FW installation completed successfully, see the log /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.
5.0.0.0_Binaries/Application_Media/FW-V4.5.0.0.0/install_FW_RMBT209.log
Executing: /web/bea_apps/oltt209/RMBT209/bin/splenvirom.sh -e RMBT209
JAVA_HOME=/web/bea/oltt209/JAVA
WL_HOME=/web/bea/oltt209/Middleware/wlserver
Version ..... (SPLVERSION) : V4.5.0.0.0
Database Type ..... (CMPDB) : oracle
ORACLE_SID ..... (ORACLE_SID) : oltt209
NLS_LANG ..... (NLS_LANG) : AMERICAN_AMERICA.AL32UTF8
Environment Name ..... (SPLENVIRON) : RMBT209
Environment Code Directory (SPLEBASE) : /web/bea_apps/oltt209/RMBT209
App Output Dir - Logs ... (SPLOUTPUT) : /web/bea_logs/oltt209/RMBT209
wsadt209:usdfw23as121v:/web/bea_apps/oltt209/RMBT209>
```

Validation Screenshot:

```
wsadt209@usdfw23as121v:/web/bea_apps/oltt209/RMBT209/bin> ./splenvron.sh -e RMBT209
JAVA_HOME=/web/bea/oltt209/JAVA
WL_HOME=/web/bea/oltt209/Middleware/wlserver
Version ..... (SPLVERSION) : V4.5.0.0.0
Database Type ..... (CMPDB) : oracle
ORACLE_SID ..... (ORACLE_SID) : oltt209
NLS_LANG ..... (NLS_LANG) : AMERICAN_AMERICA.AL32UTF8
Environment Name ..... (SPLENVIRON) : RMBT209
Environment Code Directory (SPLEBASE) : /web/bea_apps/oltt209/RMBT209
App Output Dir - Logs ... (SPLOUTPUT) : /web/bea_logs/oltt209/RMBT209
[wsadt209@usdfw23as121v RMBT209]$ cd /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/FW_4.5.0.0.0_Binaries
```

Patch 3: Oracle Utilities Application Framework V4.5.0.0.0 Single Fix Prerequisite Rollup for RMB V5.0.0.0.0 -Database (V1034200-01)

Step 1: Once you unzip the Single-Fix Pack, extract the Jar file and you will see 2 folders named Database and Application.

Step 2: Create dbpatch_tools folder and Copy the **db_patch_standalone.jar** file to the dbpatch_tools folder.

The Overall Directory structure should look like below:

```
[wsadt209@usdfw23as120v FW-V4.5.0.0.0-Rollup]$ ls -ltrh
total 16K
drwxr-x--- 30 wsadt209 wladmin 4.0K Feb 15 2023 Database
drwxr-x--- 155 wsadt209 wladmin 8.0K Jul 3 04:41 Application
drwxr-x--- 2 wsadt209 wladmin 6 Jul 3 05:08 dbpatch_tools
[wsadt209@usdfw23as120v FW-V4.5.0.0.0-Rollup]$ pwd
/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1_Binaries/Oracle_Utility_Single_Fix/FW-V4.5.0.0.0-Rollup
```

Step 3: Run below command as it will require the bin directory from the mentioned Jar File in order to execute the Single Fix Patch for DB.

Jar -xvf db_patch_standalone.jar

Step 4: Export the mentioned environment variable.

```
export
TOOLSBIN=/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1_Binaries/Oracle
_Utility_Single_Fix/FW-V4.5.0.0.0-Rollup/dbpatch_tools/bin
```

Step 5: Go to the Install-upgrade Directory and Run below command:

./ouafDatabasePatch.sh

Pass below parameters once prompted:

Enter the target database type (O/M/D) [O] : O
Enter the username that owns the schema: CISADM
Enter the password for the user: Password
Enter the name of the Oracle Database Connection String:
//USDFW34DB05V.mrshmc.com:3205/oltt209

Note: You will get below prompt, just copy paste the same data for all the prompts:

```
- 2024-07-02 11:24:13,076 [main] INFO (database.patch.OUAFPatch) Exiting apply Patch()
- 2024-07-02 11:24:13,077 [main] INFO (database.patch.OUAFPatch)
Patch applied successfully..

- 2024-07-02 11:24:13,077 [main] INFO (database.patch.OUAFPatch)

-----
--Security generation started at 07-02-2024 11:24:13
-----

Enter a comma-separated list of Oracle users in which synonyms need to be created (e.g. CISUSER,CISREAD): CISUSER,CISREAD
```

[Patch 4: Oracle Utilities Application Framework V4.5.0.0.0 Single Fix Prerequisite Rollup for RMB V5.0.0.0.0 - Application \(V1034200-01\)](#) **(Execute on Each APP Nodes)**

Step 1: Unzip the Required Patch and provide the Executable permissions.

Step 2: Run the below mentioned command:

./installSFgroup.sh

The following message appears in the command line: Ready to process patches, Do you want to continue? (Y/N)

Type Y in the command line, and then press Enter.

Start Screenshot:

```
[wsadt209@usdfw23as121v Application]$ ./installSFgroup.sh
See Installation Log in BUGLIST.txt.RMBT209.install.log
240703:044756 <info> Update version from patch: V4.5.0.0.0.
240703:044756 <info> Currently installed version in environment: V4.5.0.0.0.
240703:044756 <info> Compatible update version found.
240703:044756 <info> Writing log to: /web/bea_apps/oltt209/RMBT209/logs/system/initialSetup.log
240703:044756 <info> Starting initialSetup.plx
Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm
line 242.
240703:044756 <info>
240703:044756 <info> initialSetup.plx execution time: 2024-07-03-0447
Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm
line 242.
240703:044756 <info>
>>> Calculating additional variables ... done.
>>> Backup /web/bea_apps/oltt209/RMBT209/etc/ENVIRON.INI to /web/bea_apps/oltt209/RMBT209/etc/ENVIRON.INI_20240703_0447 ... don
e.
>>> Writing variables to /web/bea_apps/oltt209/RMBT209/etc/ENVIRON.INI ... done.

>>> Calculating additional variables ... done.
>>> Backup /web/bea_apps/oltt209/RMBT209/etc/ENVIRON.INI to /web/bea_apps/oltt209/RMBT209/etc/ENVIRON.INI_20240703_0447 ... don
e.
>>> Writing variables to /web/bea_apps/oltt209/RMBT209/etc/ENVIRON.INI ... done.

240703:044757 <info> Skipping extracting ant product folder because it exists already.
240703:044757 <info> Checking environment integrity ...
240703:044757 <info> Passed environment integrity checks.
240703:044757 <info> 240703:044757 <info> Processing jar structure file for product FW
240703:044757 <info> 240703:044757 <info> No jar structure file for product cm
240703:044757 <info> 240703:044757 <info> Processing template /web/bea_apps/oltt209/RMBT209/structures/FW_jars_structure.xml
240703:044757 <info> 240703:044757 <info> Processed template is written to /web/bea_apps/oltt209/RMBT209/structures/FW_jars_s
tructure.xml.processed
240703:044757 <info> 240703:044757 <info> Completed successfully
240703:044757 <info> 240703:044757 <info> Processing jar structure file for product FW
240703:044757 <info> 240703:044757 <info> No jar structure file for product cm
240703:044757 <info> 240703:044757 <info> Processing template /web/bea_apps/oltt209/RMBT209/structures/FW_war_structure.xml
```

End Screenshot:

```
240703:050412 <info> BUILD SUCCESSFUL
240703:050412 <info> Total time: 9 seconds
240703:050412 <info> Build was successful.
240703:050412 <info> WebLogic ThreadPoolWorker is not enabled
240703:050412 <info> Removing /web/bea_apps/oltt209/RMBT209/splapp/applications/ThreadPoolWorker.ear
240703:050413 <info> Packaging language packs.
240703:050413 <info> Folder /web/bea_apps/oltt209/RMBT209/languagepacks does not exist, skipping packaging language packs.
Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm
line 242.
240703:050413 <info>
240703:050413 <info> Initial Setup execution time: 56 seconds.
Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm
line 242.
240703:050413 <info>
240703:050413 <info> Initial Setup completed successfully.
Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm
line 242.
240703:050413 <info>
240703:05:04:13 <info> Group installation of single fixes from the file BUGLIST.txt is complete!
240703:05:04:13 <info> Please check the installation log in each single fix directory in the group to ensure successful install
ation of each fix.
240703:05:04:13 <info> To start the environment, execute the following command:
240703:05:04:13 <info> /web/bea_apps/oltt209/RMBT209/bin/splenvirom.sh -e RMBT209 -c spl.sh start
```

Patch 5: Oracle Revenue Management and Billing V5.0.0.0 Multiplatform (V1034198-01) (Execute on Each APP Nodes)

Step 1: Unzip the Required Patch and provide the Executable permissions.

Step 2: Run the below mentioned command:

./install.sh

Type P in the command line, and then press Enter.

Start Screenshot:

```
[wsadt209@usdfw23as120v ORMB.V5.1.0.0.0]$ ./install.sh
240703:080912 <info>
240703:080912 <info> You are about to install the product CCB into the environment RMBT209 located at /web/bea_apps/oltt209/RMBT209
240703:080912 <info> Make sure you executed splenvirom.sh -e RMBT209 prior to installation process.
240703:080912 <info>
Do you wish to proceed with the installation? (Y,N): Y
240703:080915 <info> User chose to proceed with the installation
240703:080915 <info> Bringing environment RMBT209 down
240703:080915 <info> Start the installation process

*****
* Environment Configuration RMBT209 *
*****

Each item in the above list should be configured for a successful install.
Choose option (, <P> Process, <X> Exit): P
```

End Screenshot:

```
240703:081841 <info> 240703:081841 <info> [echo] ...Finished building EarWebBuilder EAR file.
240703:081841 <info> 240703:081841 <info>
240703:081841 <info> 240703:081841 <info> all:
240703:081841 <info> 240703:081841 <info>
240703:081841 <info> 240703:081841 <info> BUILD SUCCESSFUL
240703:081841 <info> 240703:081841 <info> Total time: 37 seconds
240703:081841 <info> 240703:081841 <info> Build was successful.
240703:081841 <info> 240703:081841 <info> WebLogic ThreadPoolsWorker is not enabled
240703:081841 <info> 240703:081841 <info> Removing /web/bea_apps/oltt209/RMBT209/splapp/applications/ThreadPoolsWorker.ear
240703:081842 <info> 240703:081842 <info> Packaging language packs.
240703:081842 <info> 240703:081842 <info> Folder /web/bea_apps/oltt209/RMBT209/languagepacks does not exist, skipping packaging language packs.
240703:081842 <info> Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm line 242.
240703:081842 <info> 240703:081842 <info>
240703:081842 <info> 240703:081842 <info> Initial Setup execution time: 3 minutes 1 second.
240703:081842 <info> 240703:081842 <info> Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm line 242.
240703:081842 <info> 240703:081842 <info>
240703:081842 <info> 240703:081842 <info> Initial Setup completed successfully.
240703:081842 <info> Use of uninitialized value $_ in pattern match (m//) at /web/workspace/baseinstall/oracle/19.3.0/perl/lib/5.38.2/Getopt/Std.pm line 242.
240703:081842 <info> 240703:081842 <info>
240703:081842 <info> 240703:081842 <info> initialSetup completed.
240703:081842 <info> CCB installation completed successfully, see the log /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1 Binaries/Multiplatform/ORMB.V5.1.0.0.0/install_CCB_RMBT209.log
Executing: /web/bea_apps/oltt209/RMBT209/bin/splenvirom.sh -e RMBT209
JAVA_HOME=/web/bea/oltt209/JAVA
WL_HOME=/web/bea/oltt209/Middleware/wlserver
Version ..... (SPLVERSION) : V4.5.0.0.0
Database Type ..... (CMPDB) : oracle
ORACLE_SID ..... (ORACLE_SID) : oltt209
NLS_LANG ..... (NLS_LANG) : AMERICAN_AMERICA.AL32UTF8
Environment Name ..... (SPLENVIRON) : RMBT209
Environment Code Directory (SPLEBASE) : /web/bea_apps/oltt209/RMBT209
App Output Dir - Logs ... (SPLOUTPUT) : /web/bea_logs/oltt209/RMBT209
[wsadt209@usdfw23as120v RMBT209]$
```

Patch 6: Oracle Revenue Management and Billing V5.0.0.0.0 Oracle Database (V1034199-01)

Step 1: Unzip the Patch and Export below environment variable using the following commands:

export

JAR_PATH=/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1_Binaries/Oracle_Database/RMB/jarfiles

export CLASS_PATH=\${JAR_PATH}/commons-collections-3.2.2.jar:\${JAR_PATH}/commons-codec-1.15.jar:\${JAR_PATH}/commons-cli-1.4-c12260c.jar:\${JAR_PATH}/ojdbc8-19.3.0.0.0.jar:\${JAR_PATH}/spl-shared-4.5.0.0.0.jar:\${JAR_PATH}/log4j-core-2.17.1.jar:\${JAR_PATH}/log4j-api-2.17.1.jar:\${JAR_PATH}/spl-oradbi-4.5.0.0.1.jar:\${JAR_PATH}/jackson-annotations-2.14.0-rc2.jar:\${JAR_PATH}/jackson-core-2.14.0-rc2.jar:\${JAR_PATH}/jackson-databind-2.14.0-rc2.jar

Step2: Execute the OraDBI (Java) utility using the following command:

cd

/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1_Binaries/Oracle_Database/RMB/Upgrade/Oracle/Install-Upgrade

\${JAVA_HOME}/bin/java -Xmx1500M -cp \${CLASS_PATH} com.oracle.ouaf.oem.install.OraDBI -d jdbc:oracle:thin:@USDFW34DB05V.mrshmc.com:3205:oltt209,cisadm,<CISADM_PWD>,CISUSER,CISREAD,CIS_USER,CIS_READ,cisadm -p <CISADM_PWD>,<CISADM_PWD> -l 1,2 -q true -o

Start Screenshot:


```
wsadt209:usdfw23as120v:/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1_Binaries/Oracle_Database/RMB/Upgrade/Oracle/Inst
all-Upgrade> ${JAVA_HOME}/bin/java -Xmx1500M -cp ${CLASS_PATH} com.oracle.ouaf.oem.install.OraDBI -d jdbc:oracle:thin:@USDFW34
DB05V.mrshmc.com:3205:oltt209,cisadm,4_LxRmavjCXq7xVD2,CISUSER,CISREAD,CIS_USER,CIS_READ,cisadm -p 4_LxRmavjCXq7xVD2,4_LxRmavjC
Xq7xVD2 -l 1,2 -q true -o
- 2024-07-03 08:23:46,292 [main] INFO (oem.install.OraDBI) Parameter file is @ /web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGR
ADE/ORMB_5.1_Binaries/Oracle_Database/RMB/Upgrade/Oracle/Install-Upgrade/OraDBI.par
No override property file 'spl.properties' because application mode STANDALONE is not WebApp, EJB or WL-TPW
INFO: Loaded jar:file:/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1_Binaries/Oracle_Database/RMB/jarfiles/spl-oradbi
-4.5.0.0.1.jar!/spl.properties from classpath: {}
No Expected spl.properties file usage set - Not Cross Checking
- 2024-07-03 08:23:46,347 [main] INFO (shared.common.Cryptography) Error initializing the keystore based cryptography. The
keystore file '/web/bea_apps/oltt209/RMBT209/ks/.keystore' does not exist. This file is either provided by the property com.ora
cle.ouaf.system.keystore.file or expected to exist at the default file location /web/bea_apps/oltt209/RMBT209/ks/.keystore Atte
mpting to use the legacy cryptography.
- 2024-07-03 08:23:46,526 [main] INFO (oem.install.OraDBI)

Connecting to the Target Database as user CISADM
- 2024-07-03 08:23:46,797 [main] INFO (oem.install.OraDBI) The driver is 19.3.0.0.0
- 2024-07-03 08:23:46,798 [main] INFO (oem.install.OraDBI) The DBMS is Oracle Database 19c Enterprise Edition Release 19.0.
0.0.0 - Production
Version 19.23.0.0.0
- 2024-07-03 08:23:46,907 [main] INFO (oem.install.OraDBI)

Connecting to the Target Database as user CISADM
- 2024-07-03 08:23:46,972 [main] INFO (oem.install.OraDBI) The driver is 19.3.0.0.0
- 2024-07-03 08:23:46,973 [main] INFO (oem.install.OraDBI) The DBMS is Oracle Database 19c Enterprise Edition Release 19.0.
0.0.0 - Production
Version 19.23.0.0.0
- 2024-07-03 08:23:46,973 [main] INFO (oem.install.OraDBI) Successfully connected with CISREAD & CISADM
- 2024-07-03 08:23:47,098 [main] INFO (oem.install.OraDBI) Upgrading from a different version. Skipping BP build number che
ck...
- 2024-07-03 08:23:47,100 [main] WARN (oem.install.OraDBI) WARNING: 7 session(s) are connected to the target database. This
might affect the OraDBI process.
```

End Screenshot:

```
Connecting to the Target Database as user CISUSER
- 2024-07-03 08:51:49,460 [main] INFO (oem.install.OraGenSec) The driver is 19.3.0.0.0
- 2024-07-03 08:51:49,460 [main] INFO (oem.install.OraGenSec) The DBMS is Oracle Database 19c Enterprise Edition Release 19
.0.0.0.0 - Production
Version 19.23.0.0.0
- 2024-07-03 08:51:49,460 [main] INFO (oem.install.OraGenSec)

Connecting to the Target Database as user CISREAD
- 2024-07-03 08:51:49,526 [main] INFO (oem.install.OraGenSec) The driver is 19.3.0.0.0
- 2024-07-03 08:51:49,526 [main] INFO (oem.install.OraGenSec) The DBMS is Oracle Database 19c Enterprise Edition Release 19
.0.0.0.0 - Production
Version 19.23.0.0.0
- 2024-07-03 08:51:49,526 [main] INFO (oem.install.OraGenSec)

Connecting to the Target Database as user CISADM
- 2024-07-03 08:51:49,594 [main] INFO (oem.install.OraGenSec) The driver is 19.3.0.0.0
- 2024-07-03 08:51:49,594 [main] INFO (oem.install.OraGenSec) The DBMS is Oracle Database 19c Enterprise Edition Release 19
.0.0.0.0 - Production
Version 19.23.0.0.0
- 2024-07-03 08:51:50,077 [main] INFO (oem.install.OraGenSec)

Generating Security ...
- 2024-07-03 08:52:33,602 [main] INFO (oem.install.OraDBI)
Storing Database Credential with encrypted password...

- 2024-07-03 08:52:33,903 [main] INFO (oem.install.OraDBI)
The following duplicates were found in table CI_MD_MO_OPT:
- 2024-07-03 08:52:33,903 [main] INFO (oem.install.OraDBI) MAINT_OBJ_CD=TENDER TYPE, MAINT_OBJ_OPT_FLG=F1BP, SEQ_NUM=1
- 2024-07-03 08:52:34,134 [main] INFO (oem.install.OraDBI)
Install/Upgrade of Database Rel.V5.1.0.0.0 Completed Successfully, Now Exiting ...

- 2024-07-03 08:52:34,134 [main] INFO (oem.install.OraDBI) Process Completed Successfully, Now Exiting ...
wsadt209:usdfw23as120v:/web/workspace/RMB_SIT_Upgrade/ORMB_5.1_UPGRADE/ORMB_5.1_Binaries/Oracle_Database/RMB/Upgrade/Oracle/Ins
tall-Upgrade>
```

Mandatory and Migration Rollup Patches

[Mandatory Patch 1: p35162465](#)

Step 1: Unzip the **MultiPlatform.zip**

Step 2: Run below command:

```
jar -xvf CCB.V5.1.0.0.0-35162465.jar
```

For Application Patch, Go to CCB.V5.1.0.0.0-35162465

Run on All Application Nodes:

```
./installSF.sh
```

For Database Patch, Go to database directory

Database Node:

```
./ouafDatabasePatch.sh
```

Pass below parameters once prompted:

Enter the target database type (O/M/D) [O] : O

Enter the username that owns the schema: CISADM

Enter the password for the user: Password

Enter the name of the Oracle Database Connection String:

//USDFW34DB05V.mrshmc.com:3205/oltt209

[Mandatory Patch 2: p35168266](#)

Step 1: Unzip the **MultiPlatform.zip**

Step 2: Run below command:

```
jar -xvf CCB.V5.1.0.0.0-35168266.jar
```

For Application Patch, Go to CCB.V5.1.0.0.0-35168266

Run on All Application Nodes:

```
./installSF.sh
```

For Database Patch, Go to database directory

Database Node:

```
./ouafDatabasePatch.sh
```

Pass below parameters once prompted:

Enter the target database type (O/M/D) [O] : O
Enter the username that owns the schema: CISADM
Enter the password for the user: Password
Enter the name of the Oracle Database Connection String:
//USDFW34DB05V.mrshmc.com:3205/oltt209

Mandatory Patch 3: p35250817

Step 1: Unzip the **MultiPlatform.zip**

Step 2: Run below command:

```
jar -xvf CCB.V5.1.0.0.0-35250817.jar
```

For Application Patch, Go to CCB.V5.1.0.0.0-35250817

Run on All Application Nodes:

```
./installSF.sh
```

For Database Patch, Go to database directory
Database Node:

```
./ouafDatabasePatch.sh
```

Pass below parameters once prompted:

Enter the target database type (O/M/D) [O] : O
Enter the username that owns the schema: CISADM
Enter the password for the user: Password
Enter the name of the Oracle Database Connection String:
//USDFW34DB05V.mrshmc.com:3205/oltt209

Migration Patches:

p31437274
p32359347
p34203584
p35168757

Output of Migration Patches:

p32359347
PL/SQL procedure successfully completed.
2 rows updated.
1 row updated.
1 row updated.

p34203584
PL/SQL procedure successfully completed.
0 rows updated.
0 rows updated.
Commit complete.

p35168757
0 rows inserted.
0 rows updated.

Run InitalSetup.sh and iwsdeploy.sh on Both the APP Nodes.

Post Upgrade Steps

After upgrade below statement needs to be executed

Note1: If any of the above table or column does not exist in the database, ignore the error message and proceed further.

Note2: If there is any data in below mentioned table, kindly take the backup and proceed further.

```
ALTER TABLE CI_BSEG_CALC_LN DROP COLUMN PRICEITEM_PARM_GRP_ID;  
ALTER TABLE CI_TXN_REC_TYPE DROP COLUMN RULE_VAL_ALG_CD;  
ALTER TABLE CI_CC DROP COLUMN DESCR254;  
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN AGG_FREQ;  
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN CIS_DIVISION;  
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN FINAL_PRICE_ITEM_CD;  
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN FINAL_TOU_CD;  
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN INITIAL_PRICE_ITEM_CD;
```

```
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN INTIAL_TOU_CD;  
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN TXN_END_DT;  
ALTER TABLE CI_TXN_DTL_PRITM_SUMMARY DROP COLUMN TXN_M softwareYYY;  
DROP TABLE CI_ACCT_EXTN;  
DROP TABLE CI_ACCT_EXTN_K;  
DROP TABLE CI_CIS_DIV_EXT;  
  
DROP TABLE CI_PER_EXTN;  
DROP TABLE CI_PER_EXTN_K;  
DROP TABLE CI_TXN_DTL_PRITM_SUMMARY_GTT;  
DROP TABLE CI_TXN_DTL_PRITM_VP_CHUNK_GTT;  
DROP TABLE CI_TXN_DTL_PRITM_VP_GTT;  
DROP TABLE SNP_CHECK_TAB;
```

Kindly Undeploy and Re-Deploy all the Applications.

Hash-Key Generation

Reset the hashkey by running below command:

```
perl run_java_standalone.plx com.splwg.shared.common.ResetCryptographyKey
```

Run below commands:

```
./initialSetup.sh  
./iwsdeploy.sh
```

Kindly Undeploy and Re-Deploy all the Applications.

Missing/Extra Patches

[Patch 1: 35682098](#)

Once you unzip the Patch, provide the Executable Permissions and Run the below command.

Run on All Application Nodes:

```
./installSF.sh
```

For Database Patch, Go to database directory
Database Node:

```
./ouafDatabasePatch.sh
```

Pass below parameters once prompted:

Enter the target database type (O/M/D) [O] : O
Enter the username that owns the schema: CISADM
Enter the password for the user: Password
Enter the name of the Oracle Database Connection String:
//USDFW34DB05V.mrshmc.com:3205/oltt209

[Patch 2: 35784758](#)

Once you unzip the Patch, provide the Executable Permissions and Run the below command.

Run on All Application Nodes:

```
./installSF.sh
```

For Database Patch, Go to database directory
Database Node:

```
./ouafDatabasePatch.sh
```

Pass below parameters once prompted:

Enter the target database type (O/M/D) [O] : O
Enter the username that owns the schema: CISADM
Enter the password for the user: Password
Enter the name of the Oracle Database Connection String:
//USDFW34DB05V.mrshmc.com:3205/oltt209

[Patch 3: 36214760](#)

Once you unzip the Patch, provide the Executable Permissions and Run the below command.

Run on All Application Nodes:

```
./installSF.sh
```

For Database Patch, Go to database directory
Database Node:

```
./ouafDatabasePatch.sh
```

Pass below parameters once prompted:

Enter the target database type (O/M/D) [O] : O
Enter the username that owns the schema: CISADM
Enter the password for the user: Password
Enter the name of the Oracle Database Connection String:
//USDFW34DB05V.mrshmc.com:3205/oltt209

[Patch 4: 36451019](#)

Once you unzip the Patch, provide the Executable Permissions and Run the below command.

Run on All Application Nodes:

```
./installSF.sh
```

For Database Patch, Go to database directory
Database Node:

```
./ouafDatabasePatch.sh
```

Pass below parameters once prompted:

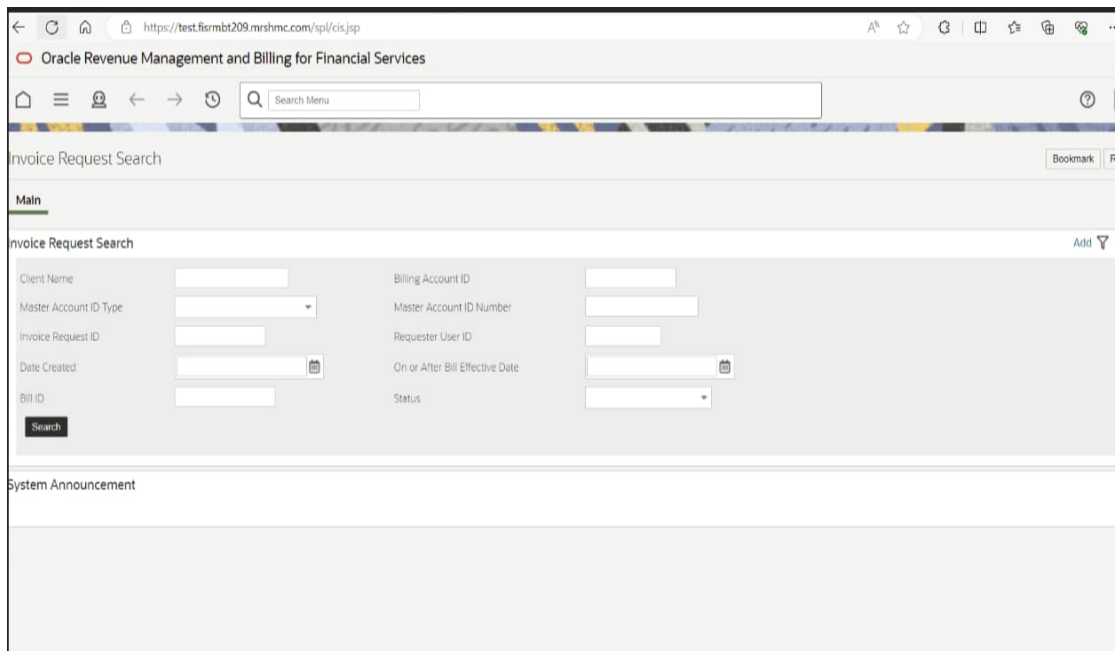
Enter the target database type (O/M/D) [O] : O
Enter the username that owns the schema: CISADM
Enter the password for the user: Password
Enter the name of the Oracle Database Connection String:
//USDFW34DB05V.mrshmc.com:3205/oltt209

Sanity

1. Run below commands:

```
./initialSetup.sh  
./iwsdeploy.sh
```

2. Kindly Undeploy and Re-Deploy all the Applications.
3. Clear the cache/tmp/stage directory on all the App Nodes
4. Start all the Services.
5. Test all the required URLs (F5 and Node URLs) and try to login. (Will work on Chrome only because of EMSL Issue on Edge Browser)



6. Also, do the required Sanity by shutting down one Node and kept the other Node Running. Will help us if any Node is faulty or Not.
7. Post-Upgrade Properties Check:

1. \$SPL_HOME/bin
2. find . -iname *.properties

```
./etc/conf/tpw/spl.properties  
./etc/conf/tpw/log4j2.properties  
./etc/conf/tpw/hibernate.properties  
./etc/conf/tpw/threadpoolworker.properties  
./etc/conf/service/log4j2.properties
```



```

/etc/conf/service/spl.properties
/etc/conf/service/hibernate.properties
/etc/conf/ohelp/spl.properties
/etc/SAMPLE-BATCH.properties
/product/apache-ant/lib/libraries.properties
/splapp/applications/help/ENG/dita.xml.properties
/splapp/businessapp/properties/log4j2.properties
/splapp/businessapp/properties/spl.properties
/splapp/standalone/config/log4j2.properties
/splapp/standalone/config/e0Batch.properties
/splapp/standalone/config/tpwlog4j2.properties
/splapp/standalone/config/hibernate.properties
/splapp/standalone/config/submitbatchlog4j2.properties
/splapp/standalone/config/threadpoolworker.properties
/splapp/standalone/config/submitbatch.properties
/splapp/standalone/config/spl.properties
/splapp/tpw/properties/spl.properties
/splapp/tpw/properties/log4j2.properties
/splapp/tpw/properties/hibernate.properties
/splapp/tpw/properties/threadpoolworker.properties
/splapp/iws/config/log4j2.properties
/splapp/iws/config/spl.properties
/splapp/iws/config/iwsdeploy-log4j2.properties
/splapp/iws/config/hibernate.properties
/splapp/iws/gen/versions.properties
/splapp/iws/gen/config/log4j2.properties
/tools/bin/db/config/log4j.properties

```

8. Compare all the above-mentioned properties file and their required template.

Template_Files:

```

=====
File Name: $SPL_HOME/template/spl.properties.template
=====

OLD FILE PARAMETERS: (Below paramters are missing in the above mentioned file)
+++++
ouaf.web.disablePreload=true
# Keystore properties
com.oracle.ouaf.system.keystore.file=@force_forward_slash(KS_KEYSTORE_FILE)@
com.oracle.ouaf.system.keystore.passwordFileName=@force_forward_slash(KS_STORE
PASS_FILE)@
com.oracle.ouaf.system.keystore.type=@KS_STORETYPE@
com.oracle.ouaf.system.keystore.alias=@KS_ALIAS@
com.oracle.ouaf.system.keystore.padding=@KS_PADDING@
com.oracle.ouaf.system.keystore.mode=@KS_MODE@

```

```
com.oracle.ouaf.system.keystore.hmac_key_alias=@KS_HMAC_ALIAS@
## Trust Store properties
com.oracle.ouaf.system.truststore.file=@force_forward_slash(TS_KEYSTORE_FILE)@
com.oracle.ouaf.system.truststore.passwordFileName=@force_forward_slash(TS_STOREPASS_FILE)@
com.oracle.ouaf.truststore.type=@TS_STORETYPE@
ouaf.timeout.service.default=3600
ouaf.timeout.business_service.default=3600
ouaf.timeout.business_object.default=3600
ouaf.timeout.service.CILOCSTP=3600
ouaf.timeout.script.default=3600
ouaf.timeout.query.default=3600
com.oracle.ouaf.uriCacheTTL.secs=3600
spl.runtime.disableCSRFProtection=true
com.oracle.ouaf.uriValidation.enable=@CLOUD_RESTRICTION_URLS_ENABLE@
```

NEW FILE PARAMETERS:

```
+++++
com.oracle.ouaf.uriValidation.enable=true
```

```
=====
File Name: $SPL_HOME/template/hibernate.properties.web.template
=====
```

OLD FILE PARAMETERS:

```
+++++
hibernate.ucp.connection_wait_timeout=50
```

NEW FILE PARAMETERS:

```
+++++
hibernate.ucp.connection_wait_timeout=5
```

File Names:

```
=====
$SPL_HOME/template/threadpoolworker.properties.wltpw.template
$SPL_HOME/template/threadpoolworker.job.be.template
$SPL_HOME/template/threadpoolworker.be.template
$SPL_HOME/template/threadpoolworker.sh.template
=====
```

OLD FILE PARAMETERS: (Below parameters are missing in the above mentioned file)

```

+++++
+++++

```

Keystore properties

```

com.oracle.ouaf.system.keystore.file=@force_forward_slash(KS_KEYSTORE_FILE)@
com.oracle.ouaf.system.keystore.passwordFileName=@force_forward_slash(KS_STORE
PASS_FILE)@
com.oracle.ouaf.system.keystore.type=@KS_STORETYPE@
com.oracle.ouaf.system.keystore.alias=@KS_ALIAS@
com.oracle.ouaf.system.keystore.padding=@KS_PADDING@
com.oracle.ouaf.system.keystore.mode=@KS_MODE@
com.oracle.ouaf.system.keystore.hmac_key_alias=@KS_HMAC_ALIAS@

```

Trust Store properties

```

com.oracle.ouaf.system.truststore.file=@force_forward_slash(TS_KEYSTORE_FILE)@
com.oracle.ouaf.system.truststore.passwordFileName=@force_forward_slash(TS_STOR
EPASS_FILE)@
com.oracle.ouaf.truststore.type=@TS_STORETYPE@

```

```

=====
File Name: $SPL_HOME/template/submitbatch.be.template
=====

```

OLD FILE PARAMETERS: (Below paramters are missing in the above mentioned file)

```

+++++
+++++

```

Keystore properties

```

com.oracle.ouaf.system.keystore.file=@force_forward_slash(KS_KEYSTORE_FILE)@
com.oracle.ouaf.system.keystore.passwordFileName=@force_forward_slash(KS_STORE
PASS_FILE)@
com.oracle.ouaf.system.keystore.type=@KS_STORETYPE@
com.oracle.ouaf.system.keystore.alias=@KS_ALIAS@
com.oracle.ouaf.system.keystore.padding=@KS_PADDING@
com.oracle.ouaf.system.keystore.mode=@KS_MODE@
com.oracle.ouaf.system.keystore.hmac_key_alias=@KS_HMAC_ALIAS@

```

Properties Files:

```

=====
File Names:

```

```

$SPL_HOME/splapp/businessapp/properties/spl.properties
$SPL_HOME/etc/conf/tpw/spl.properties
$SPL_HOME/etc/conf/service/spl.properties
$SPL_HOME/splapp/standalone/config/spl.properties
$SPL_HOME/splapp/tpw/properties/spl.properties

```

\$SPL_HOME/splapp/iws/config/spl.properties

(Below paramters are missing in the upgraded env)

ouaf.timeout.service.default=3600
ouaf.timeout.business_service.default=3600
ouaf.timeout.business_object.default=3600
ouaf.timeout.service.CILQCSTP=3600
ouaf.timeout.script.default=3600
ouaf.timeout.query.default=3600
com.oracle.ouaf.uriCacheTTL.secs=3600
spl.runtime.disableCSRFProtection=true

File Name:

\$SPL_HOME/etc/conf/tpw/hibernate.properties
\$SPL_HOME/etc/conf/service/hibernate.properties
\$SPL_HOME/splapp/standalone/config/hibernate.properties
\$SPL_HOME/splapp/iws/config/hibernate.properties

OLD FILE PARAMETERS:

+++++
hibernate.ucp.connection_wait_timeout=50

NEW FILE PARAMETERS:

+++++
hibernate.ucp.connection_wait_timeout=5

File Name:

\$SPL_HOME/etc/conf/tpw/threadpoolworker.properties
\$SPL_HOME/splapp/standalone/config/threadpoolworker.properties
\$SPL_HOME/splapp/standalone/config/submitbatch.properties

(Below paramters are missing in the upgraded env)

```
com.oracle.ouaf.system.keystore.file=/web/bea_apps/oltt209/RMBT209/ks/.ouaf_keyst
ore
com.oracle.ouaf.system.keystore.passwordFileName=/web/bea_apps/oltt209/RMBT209
/ks/.ouaf_storepass
com.oracle.ouaf.system.keystore.type=JCEKS
com.oracle.ouaf.system.keystore.alias=ouaf.system
com.oracle.ouaf.system.keystore.padding=PKCS5Padding
com.oracle.ouaf.system.keystore.mode=CBC
com.oracle.ouaf.system.keystore.hmac_key_alias=ouaf.system.hmac
```

```
=====
File Name:
```

```
$SPL_HOME/etc/conf/ohelp/spl.properties
=====
```

```
(Below paramters are missing in the upgraded env)
spl.runtime.disableCSRFProtection=true
```

9. Kindly add the customized parameters after the upgrade as show in above properties and template files.
10. Once above Steps done, again follow Sanity Steps 1-5.

