

REST API Services Approach  
Oracle FLEXCUBE Universal Banking  
Release 12.87.06.0.0  
[May] [2020]



---

# Table of Contents

- 1. REST SERVICES: SYNCHRONIZATION FROM FC TO REST SCHEMA/ DATABASES..... 1-1
  - 1.1 ISSUE DETAILS ..... 1-1
  - 1.2 CURRENT FUNCTIONALITY ..... 1-1
  - 1.3 REQUIREMENT..... 1-1
  - 1.4 ASSUMPTION ..... 1-1
  - 1.5 APPROACH..... 1-2
    - 1.5.1 Impacted Units..... 1-3

---

# 1. REST SERVICES: SYNCHRONIZATION FROM FC TO REST SCHEMA/ DATABASES

## 1.1 Issue Details

In the Rest framework, new Tables/Views are created and are referred in Java files. These tables/views do not have any data and hence Rest services are not working.

FCUBS Version	Site	Base Bug No	Child Bug DB	Functional Area
12.3	BANCA INTESA AD BEOGRAD	<a href="#">26764035</a>	<a href="#">26787320</a>	Rest Services

## 1.2 Current functionality

Currently for the REST framework to work the RAVW\_ views should fetch values in the REST API Database.

The RATM\_ tables will be available in the REST API Database. The views like RAVW\_ will be created on the RATM\_ tables.

These tables/views should fetch data to make the rest services work. Either these tables should be refreshed or the views should point to data stores where records can be fetched.

The possible solutions are,

- Option 1: The data from Host Database (FCUBS) should be replicated in real time using software/tools like Oracle Golden Gate.
- Option 2: If the REST API and Host (which should be FCUBS) are running on the same database server instance and in same schema then the views can be modified forcefully by referring to core FCUBS tables instead of RATM\_ tables.

## 1.3 Requirement

System should able to refer and fetch the FCUBS table values when the Rest is deployed with Embedded FCUBS.

## 1.4 Assumption

1. New Materialized Views with default MV parameters are created with FCUBS tables in order to have better performance. Materialized View Refresh Parameters need to be modified according to requirement.
2. Views are not created with any Database table schema names since the assumption is to have Rest framework with embedded FCUBS (Rest and FCUBS are in same database schema). If the database schema are different in a single database instance then the views can be created with the FCUBS table schema name as table prefix.

3. The compilation of “BuildRESTSQL.sql” for Rest without Embedded FCUBS or “BuildRESTSQL\_EmbeddedFCUBS.sql” for Rest with Embedded FCUBS should be operationally controlled and there are no changes in the installer part.

## 1.5 Approach

1. Existing Views are referring to ‘RATM\_%’ tables which will not have any records unless until replicated manually.
2. When the REST API and Host (which should be FCUBS) are running on the same database server instance and in same schema then the views can be modified forcefully by referring to core FCUBS tables instead of RATM\_ tables.
3. To achieve this the Materialized Views (mv) are created for all already existing Views, by referring to related FCUBS tables instead of ‘RATM\_%’ tables.
4. These MVs will be baselined in the path “SOFT/RestServices/DB/MV”.
5. These MVs will be getting compiled when the sql file “/SOFT/RestServices/DB/BuildRESTSQL\_EmbeddedFCUBS.sql” is compiled in the REST Schema (REST and FCUBS Schema both should be same).
6. Above said compilation should be operational.
7. Table mapping is as follows,

S. No	Old View Name	Old view - Referred Tables	New View Name	New View Referred Tables
1	ravw_account.vw	ratm_account	ravw_account.mv	sttb_account
2	ravw_account_class.vw	ratm_account_class	ravw_account_class.mv	sttm_account_class
3	ravw_account_master.vw	ratm_account_apps_master	ravw_account_master.mv	cltbs_account_apps_master
4	ravw_account_schedules.vw	ratm_account_schedules	ravw_account_schedules.mv	cltb_account_schedules
5	ravw_acc_comp_balances.vw	ratm_account_schedules, ratm_dates	ravw_acc_comp_balances.mv	cltb_account_schedules, sttms_dates
6	ravw_all_ac_entries.vw	ratm_daily_log, ratm_history	ravw_all_ac_entries.mv	actb_daily_log, actb_history
7	ravw_bank.vw	ratm_bank	ravw_bank.mv	sttm_bank
8	ravw_branch.vw	ratm_branch	ravw_branch.mv	sttm_branch
9	ravw_ccy_defn_master.vw	ratm_ccy_defn_master	ravw_ccy_defn_master.mv	cytm_ccy_defn_master
10	ravw_check_book.vw	ratm_check_book	ravw_check_book.mv	catm_check_book
11	ravw_contract.vw	ratm_contract	ravw_contract.mv	cstb_contract
12	ravw_contract_master.vw	ratm_contract_master	ravw_contract_master.mv	sitb_contract_master
13	ravw_current_users.vw	ratm_current_users	ravw_current_users.mv	smtb_current_users
14	ravw_customer.vw	ratm_customer	ravw_customer.mv	sttm_customer
15	ravw_cust_account.vw	ratm_cust_account	ravw_cust_account.mv	sttm_cust_account
16	ravw_cust_domestic.vw	ratm_cust_domestic	ravw_cust_domestic.mv	sttm_cust_domestic
17	ravw_cust_personal.vw	ratm_cust_personal	ravw_cust_personal.mv	sttm_cust_personal
18	ravw_dates.vw	ratm_dates	ravw_dates.mv	sttm_dates
19	ravw_dc_request.vw	ratm_dc_request	ravw_dc_request.mv	sttm_dc_request
20	ravw_deaccount.vw	ratm_account, ratm_branch, ratm_user, ratm_account_class, ratm_user_glexcept, ratm_user_glrest, ratm_glmaster, ratm_user_acclass	ravw_deaccount.mv	sttbs_account, sttm_branch, smtbs_user, sttms_account_class, smtb_user_glrest, gltm_glmaster, smtb_user_glexcept, smtbs_user_acclass

S. No	Old View Name	Old view - Referred Tables	New View Name	New View Referred Tables
21	ravw_ext_sys_functions.vw	ratm_ext_sys_functions	ravw_ext_sys_functions.mv	gwtm_ext_sys_functions
22	ravw_glmaster.vw	ratm_glmaster	ravw_glmaster.mv	gltm_glmaster
23	ravw_instruction.vw	ratm_instruction	ravw_instruction.mv	sitb_instruction
24	ravw_loan_acc.vw	ratm_loan_acc	ravw_loan_acc.mv	ictm_acc
25	ravw_operations_master.vw	ratm_operations_master	ravw_operations_master.mv	gwtm_operations_master
26	ravw_product.vw	ratm_product	ravw_product.mv	cstm_product
27	ravw_rates.vw	ratm_rates	ravw_rates.mv	cytm_rates
28	ravw_sifsigdetail.vw	ratm_cif_sig_det, ratm_cust_image	ravw_sifsigdetail.mv	svtms_cif_sig_det, sttm_cust_image
29	ravw_trn_code.vw	ratm_trn_code	ravw_trn_code.mv	sttm_trn_code
30	ravw_user.vw	ratm_user	ravw_user.mv	smtb_user
31	ravw_user_accclass.vw	ratm_user_accclass	ravw_user_accclass.mv	smtb_user_accclass

8. Folder and files structure is as follows:

Folder/Files	Path
Rest Services Parent Folder	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/
DB Folder	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/DB/
Existing Tables Folder	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/DB/TABLES
Existing Sequences Folder	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/DB/ SEQUENCES
Existing View Folder	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/DB/VW
Existing Build Rest SQL File	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/DB/BuildRESTSQL.sql
New MView Folder	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/DB/MV
New Build Rest SQL File (with FCUBS Embedded)	/FCUBS_12.3.0.0.0_SUPPORT/SOFT/RestServices/DB/BuildRESTSQL_EmbeddedFCUBS.sql

### 1.5.1 Impacted Units

Files Path: /FCUBS\_12.3.0.0.0\_SUPPORT/SOFT/RestServices/DB/MV

- ravw\_account.mv
- ravw\_account\_class.mv
- ravw\_account\_master.mv
- ravw\_account\_schedules.mv
- ravw\_acc\_comp\_balances.mv
- ravw\_all\_ac\_entries.mv
- ravw\_bank.mv
- ravw\_branch.mv
- ravw\_ccy\_defn\_master.mv
- ravw\_check\_book.mv
- ravw\_contract.mv
- ravw\_contract\_master.mv
- ravw\_current\_users.mv

- ravw\_customer.mv
- ravw\_cust\_account.mv
- ravw\_cust\_domestic.mv
- ravw\_cust\_personal.mv
- ravw\_dates.mv
- ravw\_dc\_request.mv
- ravw\_deaccount.mv
- ravw\_ext\_sys\_functions.mv
- ravw\_glmaster.mv
- ravw\_instruction.mv
- ravw\_loan\_acc.mv
- ravw\_operations\_master.mv
- ravw\_product.mv
- ravw\_rates.mv
- ravw\_sifsigdetail.mv
- ravw\_trn\_code.mv
- ravw\_user.mv
- ravw\_user\_accclass.mv

File path: /FCUBS\_12.3.0.0.0\_SUPPORT/SOFT/RestServices/DB/

- BuildRESTSQL\_EmbeddedFCUBS.sql



REST API SERVICES Approach  
[May] [2020]  
Version 12.87.06.0.0

Oracle Financial Services Software Limited  
Oracle Park  
Off Western Express Highway  
Goregaon (East)  
Mumbai, Maharashtra 400 063  
India

Worldwide Inquiries:  
Phone: +91 22 6718 3000  
Fax: +91 22 6718 3001  
<https://www.oracle.com/industries/financial-services/index.html>

Copyright © [2007], [2020], Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

**U.S. GOVERNMENT END USERS:** Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.