Oracle Financial Services Asset Liability Management Analytics

User Guide

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OFS Asset Liability Management Analytics User Guide

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1 Preface

This Preface provides supporting information for the OFS Asset Liability Management Analytics User Guide and includes the following topics:

- Intended Audience
- <u>Access to Oracle Support</u>
- <u>Related Documents</u>
- <u>Conventions</u>
- <u>Symbols</u>

1.1 Intended Audience

The OFS Asset Liability Management Analytics User Guide provides useful guidance and assistance to:

- Technical end users
- Functional end users
- Data Administrators
- Consultants
- Systems Analysts
- System Administrators
- Other MIS professionals

1.2 Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

1.3 Related Documents

For more information about using OFS Asset Liability Management Analytics User Guide, see the following related documents:

- Oracle Financial Services Asset Liability Management (OFSALM) User Guide
- Oracle Financial Services Funds Transfer Pricing User Guide

1.4 What is New in This Release for ALMBI Application

This preface lists new features and changes in OFS Asset Liability Management Analytics User Guide release v8.1.2.0.0.

• Non-Maturity Products Modeling: Helps to create a model that can calculate core/volatile balance for non-maturity products portfolio; based on historical end of period balances available from these products. You can define non-maturity behavior pattern based on model outputs like how much is core, how long core will be available based on decay rate profile generated by the model. These in-built PYTHON models can help you manage, funds available from non-maturity products more precisely to enhance your profitability

For more information, see the Non-Maturity Products Modeling section.

Cash Flow Edits: A redesigned Cash Flow Edits is available to check quality of input data and cleanse it. In addition to a fresh user interface, rules are categorized into multiple groups/sub-groups. User can select one or more group/sub-group to execute on the selected data. For a customer upgrading from prior release of ALM, both old and new Cash Flow Edits are available to maintain continuity. A fresh installation of ALM 8.1.2.0.0 will only have the new Cash Flow Edits. Overtime, all customers are expected to move to the new version.

For more information, see the Cash Flow Edits section.

• **Hybrid Curve IRC**: New curve types added - Custom Weighted Average, Maximum, and Minimum.

For more information, see the Interest Rates section.

• **Discount method to include EIR**: EIR is now included as a discount method in the Discount rule.

For more information, see the Discount Methods section.

• **IRRBB Fixed Margin cash flow:** Interest Rate Gap has been enhanced to include the margin cashflow post reprice of an instrument to maturity via new financial elements.

For more information, see the IRRBB section.

• **IRRBB Scalars:** The required scalars are also stored in table FSI_IRC_STDAPRCH_SHOCKS. It is applied directly as per formula for SA Methods. Scalars are applied directly in the Forecast Rates screen when you Define and Apply.

For more information, see the Forecast Rate section.

• **Prepayment Rule - User Defined Tenor**: Ability to add a prepayment model to the user defined tenors in a prepayment rule is now supported.

For more information, see the Prepayment Rules section.

The OFS Asset Liability Management Analytics User Guide uses the following text and font characteristics:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.
Upper case text connected by underscores	Used to denote table names. For example, FSI_O_RESULT_MASTER table or FSI_O_PROCESS_ERRORS table.
Lower case text connected by underscores	This convention is used to designate the column name within a table. Examples of this convention include market_value and transfer_rate.

1.5 Symbols

Bullets indicate a list of items or topics.

Numbered lists are used for sequential steps in completing a procedure.

2 Introduction to ALM BI

This chapter provides a general description of the Asset Liability Management Analytics application.

Topics:

Features and Components of ALM BI

2.1 Features and Components of ALM BI

Oracle Asset Liability Management Analytics (ALMBI) is a business intelligence application that integrates robust Oracle Business Intelligence (OBIEE) capabilities with the Asset Liability Management (ALM), Funds Transfer Pricing (FTP) results, thereby unleashing the power of back-office data and turning it into fully operational intelligence.

The features of ALMBI application are as follows:

- Wide functional coverage for ALM, FTP, intelligence.
- Designed for performance in heavy data volume environments.
- The low total cost of ownership, efficient data movement, and template-like design to ease implementation.
- Unleash the power of Oracle Financial Services Analytical Applications (OFSAA) data content; extend the wealth of back-office data to executives, risk managers, finance, and treasury with role-based dashboards, driving insight into interest rate risk and liquidity risk management through powerful analytics.
- Pervasive, compelling, and actionable insight with comprehensive drill-down paths and analysis, increasing alignment, and effectiveness.

The ALMBI application is comprised of the following components:

- 1. OFSAA ALMBI Reporting Mart (physical data model)
 - Many ALM related relational database tables optimized for reporting and analysis.
 - Results from each ALM process are consolidated into a single reporting table allowing for comparative reporting.
 - Historical results are retained for each process, allowing for a period over period and trend reporting.
 - Results are stored in both base currency and any reporting currency specified by users during processing.
 - Account-level data is (optionally) consolidated into a series of application-specific Account Summary tables, supporting drill-down to the finest grain of detail.
 - Audit data, such as detail cash flow information and rate outputs, are additionally stored in the ALMBI Data Mart.
- **2.** Data Movement Processes
 - Data movement processes are provided to populate the required data into the ALMBI Data Mart. Data Movement is accomplished through the use of Table-to-Table (T2T)

functionality and Procedural Language or Structured Query Language (PL/SQL or PLSQL) procedures.

- Data Movement processes can be executed directly through a batch process using the Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) or through a Simplified Batch process. These processes are detailed in the following sections.
- 3. ALMBI OBIEE Repository
 - ALMBI specific OBIEE repository file is included with the ALMBI application, which provides the mapping of the physical data into the ALMBI Business Model.
 - This repository defines the necessary data objects, join relationships, and calculated items needed for ALMBI reporting.
- 4. ALMBI OBIEE Web Catalog
 - The ALMBI specific OBIEE Web Catalog provides out of the box dashboards and seeded reports which provide users with a head-start in developing their organization-specific ALM, FTP, and related BI content.

3 Overview of the ALM BI Process Flow

This chapter provides an overview of the end-to-end process flow.

Topics:

- Steps in ALM BI Process Flow
- End to End ALM BI Data Movement Process

3.1 Steps in ALM BI Process Flow

The following steps include the ALMBI Process:

1. Hierarchy Flattening

Runs when a new Hierarchy is created and when an existing Hierarchy used within ALMBI is modified.

2. Dimension Table Population and Slowly Changing Dimension Processing

Runs after a new Hierarchy or ALM Process is created and after Hierarchy modification or the <ALM>Active Time Bucket definition is changed.

3. Populating the Dimension Run table

Runs only after a new ALM Process is created or modified.

4. Time Dimension Population

Runs before ALM Results Transformation. This process is also run automatically during ALM Results Transformation if the current data does not already exist.

5. ALM Results Transformation

Runs after the execution of any ALM Process. This process can be run manually as part of a batch process or automatically as an option embedded within each ALM process.

6. (Optional) The population of Account Summary data

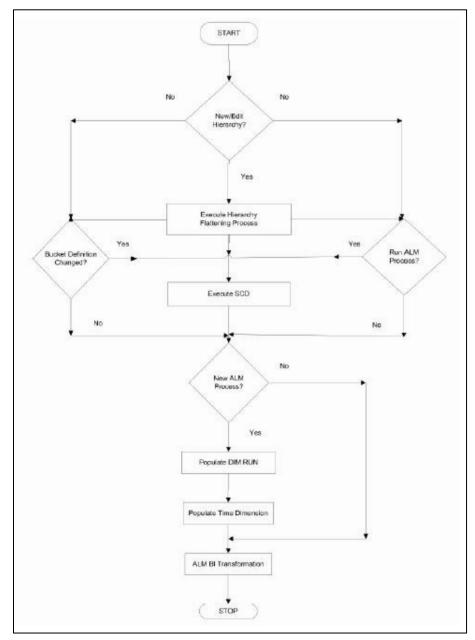
Runs the Instrument Table-specific T2T processes for each new as-of-date and after all account-level processes have completed (if account level output option is selected). For example, ALM account level output of Market Value, Duration, Convexity, and so on.

7. (Optional) The population of Ledger data

This Ledger Transformation process can be run as part of a batch process to move data from the management ledger table (processing area) to fact ledger stat of ALMBI.

3.2 End to End ALM BI Data Movement Process

The following flowchart illustrates the end to end ALMBI data movement process:



The end to end data movement process is typically managed through the execution of one or more Batch processes. The recommended approach is to define two batch processes to perform ALMBI Transformation, as follows:

- **1.** ALMBI Batch1, with a single Task includes:
 - Hierarchy Flattening Process
- 2. ALMBI Batch2, with three Tasks in sequential order includes:
 - Slowly Changing Dimension (SCD) Process

- Dimension Run Population Process
- ALMBI Transformation Process
- **3.** (Optional) ALMBI Batch3, with Tasks to execute the required Account Summary T2T processes. This process is needed only if there is a requirement to report against the account-level data. It consists of:
 - Populate Time Dimension
 - Slowly Changing Dimension Process
 - Account Summary T2T Definition Processes (one per Instrument table)

See the following sections on how to create a batch and adding respective tasks. The following are a few examples of use cases and related processing requirements.

- **4.** Case 1: Initially, when a new Hierarchy is created or when edits are made to a Hierarchy, follow these steps:
 - Run Hierarchy Flattening
 - Run Dimension Table Population and Slowly Changing Dimension Processing
 - Populate the Dimension Run table
 - Run ALM Results Transformation
- **5.** Case 2: When the active time bucket definition has been changed. Follow these steps:
 - Run Dimension Table Population and Slowly Changing Dimension Processing
 - Run ALM Results Transformation
- 6. Case 3: When a new ALM Process is created. Follow these steps:
 - Run Dimension Table Population and Slowly Changing Dimension Processing
 - Populate the Dimension Run table
 - Run ALM Results Transformation

4 Dimension Population

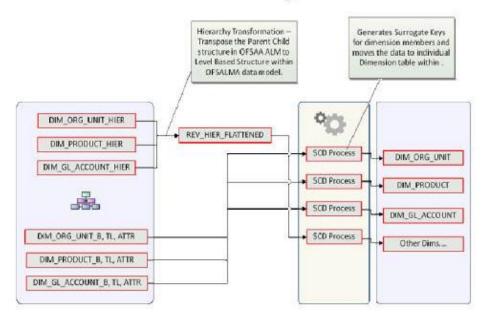
This chapter describes the steps required to set up and execute the SCD process.

Topics:

- Overview of Dimension Population
- Hierarchy Flattening
- Dimension Table Population
- DIM_RUN Population
- Time Dimension Population

4.1 **Overview of Dimension Population**

In OFSAA, Hierarchies are defined and managed through the common infrastructure, Dimension Management User Interface. Before use in ALMBI, the related parent or child hierarchy data must first be converted to a flattened and level-based format. The dimension population process involves both the hierarchy flattening process and movement of the dimension data from processing dimension tables to the common reporting dimension tables, shared by all the OFSAA BI applications.



Dimension Population

The Dimension Population process has the two components.

4.2 Hierarchy Flattening

Topics:

Overview of Hierarchy Flattening Process

- Prerequisites and Troubleshooting
- <u>Tables Used by the Hierarchy Flattening Process</u>
- <u>Executing the Hierarchy Flattening Process</u>
- <u>Checking the Execution Status</u>

4.2.1 Overview of Hierarchy Flattening Process

The Hierarchies are maintained in the Dimension Management component of OFSAA Infrastructure. (In the **Common Object Maintenance** menu, navigate to **Master Maintenance** and select **Dimension Management**, and then select **Hierarchies**).

The Hierarchy Flattening process is used to move hierarchy data from the parent-child storage data structure to a level based storage data structure. In the Hierarchy Dimension Population Management model, hierarchy data for any hierarchies created on seeded or user-defined dimensions is stored within dimension specific hierarchy tables for the respective dimensions. The Hierarchy Flattening process copies this data to the REV_HIER_FLATTENED table in the BI data model after flattering is completed.

For example:

The hierarchy data of one or more Product Hierarchies created on the Product dimension (a seeded dimension) is stored in the DIM PRODUCTS HIER table.

Similarly, assuming there is a user-defined dimension (for example, Legal Entity) and a hierarchy has been defined on this dimension, then the hierarchy data is stored in the DIM_LE_HIER table (assuming this is the hierarchy table created for this hierarchy).

The hierarchy data in the preceding example is moved to REV_HIER_FLATTENED in the BI data model by the hierarchy flattening process.

Database components used by this transformation are:

- REV BATCHHIERFLATTEN Oracle database function.
- REV_HIER_TRANSFORMATON_BIAPPS Oracle database Package called by the preceding function.

Some of the features of the Hierarchy Flattening process are:

- You have the choice to process a single hierarchy or all hierarchies belonging to a particular dimension as part of a single execution.
- Any change made to the hierarchy using the Hierarchy Management maintenance window changes the flag FLATTENED_ROWS_COMPLETION_CODE in REV_HIER_DEFINITIONS to Pending. This improves processing efficiency as the Flattening process will avoid hierarchies that have not been modified.

4.2.2 Prerequisites and Troubleshooting

The following are the pre-requisites and troubleshooting steps:

1. All the post-install steps mentioned in the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure (OFSAAI) Installation and Configuration Guide</u> and the <u>Oracle Financial Services</u> <u>Asset Liability Management Analytics Installation and Configuration guide</u>. ALM Analytics have to be completed successfully.

- 2. The Hierarchies are maintained in the Dimension Management component of OFSAA Infrastructure. (In the **Common Object Maintenance**, navigate to **Master Maintenance** and select Dimension Management, and then select **Hierarchies**).
- **3.** The steps mentioned subsequently in this section are debugging steps and must be checked only if the hierarchy flattening process has failed. Seeded Hierarchies which are included with the installation and any hierarchies created using the Dimension Management user interface will have the proper data in the following section Tables Used by the Hierarchy Flattening Process.
 - Check in the database (atomic schema) to confirm the FLATTENED_ROWS_COMPLETION_CODE column in REV_HIER_DEFINITIONS table has the value Pending for the Hierarchy ID being processed. This column will have the value Pending for any new hierarchy created or modified using the OFSAAI Hierarchy management UI.
 - Check if the REV_DIMENSIONS_B table has a row for the dimension that is being processed. (Use a database SQL query to check. This is available in the section Executing the Hierarchy Flattening Transformation).
 - Check if the REV_HIERARCHIES table has a row for the hierarchy ID that is being processed. (Use a database SQL query to check. This is available in the section Executing the Hierarchy Flattening Transformation).
- **4.** Application users must be mapped to a role which has the seeded batch execution function (BATPRO)
 - By default, this SMS function is mapped to the SMS Role Data Centre Manager (SYSOPC).
 - The ALM Application seeds three user-profiles:
 - ALM Administration
 - ALM Analyst
 - ALM Auditor

After installation of ALM, the system administrator should additionally map the BATPRO function with the required ALM roles.

- 5. Before executing a batch, check if the following services are running on the application server:
 - ICCServer
 - Router
 - AM
 - Messageserver

For more information on how to check if the services are up and how to start the services if you find them not running, see the <u>Oracle Financial Services Analytical Applications Infrastructure</u> <u>User Guide</u>.

6. Users must create Batch Processes for executing flattening and movement procedures. This process is explained in the section Executing the Hierarchy Flattening Transformation.

- The flattening procedure takes Dimension ID and Hierarchy sys ID as additional parameters; Dimension ID is mandatory whereas Hierarchy ID is optional.
- These processes can also be run using the Simplified Batch window, which allows for the execution of stored procedures.

4.2.3 Tables Used by the Hierarchy Flattening Process

The following are the tables used by the hierarchy flattening process:

- REV HIERARCHIES: This is the master table for hierarchies with one row per hierarchy.
- REV DIMENSIONS B: This is the master table for dimensions with one row per dimension.
- REV_HIER_DEFINITIONS: The FLATTENED_ROWS_COMPLETION_CODE column is checked to determine if the hierarchy can be processed.
- DIM_<DIMENSIONNAME>_HIER: This table stores the parent or child hierarchy data and is the source for the transformation. For example, DIM PRODUCTS HIER.
- REV_HIER_FLATTENED: This is the output table for the transformation into which the flattened hierarchy data gets populated.

4.2.4 Executing the Hierarchy Flattening Process

You can execute the function from the Operations framework module of OFSAAI.

Define a new Batch and an underlying Task definition from the **Batch Maintenance** window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition, follow these steps:

- 1. Select the checkbox adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed.
- 3. Enter the Task ID and Description.
- 4. Select Transform Data from the Transform Data drop-down list.
- 5. Select the following from the Dynamic Parameters drop-down list:
 - Datastore Type: Select the appropriate datastore type from the drop-down list:
 - Datastore Name: Select the appropriate datastore name from the drop-down list.
 - IP address: Select the IP address from the drop-down list.
 - Rule Name: Select BATCH_HIERTRANSFORMATION from the drop-down list of available transformations. (This is a seeded Data Transformation procedure installed as part of the ALMBI application. If you do not see this procedure in the list, contact <u>Oracle support</u>).
 - Parameter List: These are comma-separated values of Dimension ID and Hierarchy ID.
 Following are the available Dimension ID values and Hierarchy ID values:

Dimension ID Values

ORG_UNIT_ID = 1

GL_ACCOUNT_ID = 2 COMMON_COA_ID = 3 PRODUCT_ID = 4

6. If you are using a user-defined Dimension, execute the following query in the database to find the value, and use the value in the Dimension ID column to process the dimension name and description:

```
SELECT B.DIMENSION_ID, T.DIMENSION_NAME, T.DESCRIPTION FROM
REV_DIMENSIONS_B B INNER JOIN REV_DIMENSIONS_TL T ON
B.DIMENSION_ID = T.DIMENSION_ID AND T.DIMENSION_NAME LIKE '<DIMENSION
NAME>'
```

7. Replace the tag <DIMENSION NAME> in this query with the Dimension Name you find in the UI (Navigate to OFS ALM Home page, select Common Object Maintenance, select Master Maintenance, and then select Dimension Management). This is the Dimension on which the Hierarchy you want to flatten is configured. You must create separate Batches for each Dimension.

If all the Hierarchies belonging to a Dimension are to be processed, then provide null (in lower case) as the parameter value. Otherwise, provide the System Identifier of the Hierarchy that needs to be transformed.

For example, you can find the Hierarchy ID through the Hierarchy user interface at the bottom of the window, as depicted in the following figure.

Audit Trail	User Comments		
* System I	D :40006997		
Created By		QTUSER	
Last Modified	Бу	CHRIS	

You can also execute the following query to find the unique system identifier for a specific Hierarchy:

SELECT B.OBJECT_DEFINITION_ID, SHORT_DESC, LONG_DESC FROM FSI_M_OBJECT_DEFINITION_B B INNER JOIN

FSI_M_OBJECT_DEFINITION_TL T ON B.OBJECT_DEFINITION_ID =

T.OBJECT_DEFINITION_ID AND B.ID_TYPE =<ID_TYPE>

Use the value in the HIERARCHY_ID column as the parameter for the hierarchy to be processed.

<ID_TYPE> represents the dimension number to which a particular hierarchy belongs.

For example, if all the Hierarchies for the GL Account Dimension must be processed, the parameter list should be given as follows:

'2', null, where '2' is the Dimension ID for the seeded Dimension GL Account.

If a particular Hierarchy with code 1000018112 needs to be processed, the parameter list should be given as follows:

'2', '1000018112'

8. Click Save. The Task definition is saved for the selected Batch.

9. Execute the Batch.

You can execute a Batch definition from the Batch Execution window of the OFSAAI Operations module.

NOTE This process can also be run using the Simplified Batch user interface. In the optional parameters field within the Simplified Batch window, specify the parameters mentioned earlier.

Hierarchy transformation can also be directly executed on the database through SQLPLUS.

- Function Name: REV BATCHHIERFLATTEN
- Parameters: BATCH RUN ID, MIS DATE, PDIMENSIONID, and PHIERARCHYID.
- Sample Parameter Values: 'Batch1', '20091231', '2', and '1000018112'.

NOTE This process can also be run using the Simplified Batch user interface. In the optional parameters field within the Simplified Batch window, specify the parameters mentioned above.

The first paragraph should contain the command overview or a short description of the reference information.

4.2.5 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor window of the OFSAAI Operations module.

The status messages in Batch Monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The Event Log window in Batch Monitor provides logs for execution with the top row being the most recent. If there is any error during execution, it will get listed here. Even if you see Successful as the status in Batch Monitor it is advisable to go through the Event Log and re-check if there are any errors.

Alternatively, the execution log can be accessed on the application server in the following directory <code>\$FIC_DB_HOME/log/date</code>. The file name will have the Batch Execution ID.

The database-level operations log can be accessed by querying the FSI_MESSAGE_LOG table. The Batch Run ID column can be filtered for identifying the relevant log. (This is the same log you see in the Event Log window.)

Check the .profile file in the Installation Home if you are unable to navigate to these locations.

4.3 Dimension Table Population

The dimension table population process serves two purposes:

- Move flattened hierarchy data from operational tables to the BI Tables.
- Execute the SCD process against each processed dimension.

Dimension table population should be run after the initial creation of a hierarchy and after any changes are made to a hierarchy Dimensional data changes are handled in the ALMBI solution using the SCD component.

Topics:

- Overview of SCD Process
- <u>Prerequisites</u>
- Tables Used by the SCD Component
- Executing the SCD Component
- <u>Checking the Execution Status</u>
- List of Dimension Tables

4.3.1 Overview of SCD Process

SCDs are used to maintain the history of dimension-member changes over time. SCD is a required process and is tied into the BI application. Without this process, the updated information will not be reflected in ALMBI. For example, if the Active Time Bucket Definition was changed for an ALM Process Execution, the SCD process is required to reflect the new Active Time Bucket details into the Result Area. It is mandatory to run the SCD process if the hierarchies have changed.

For more information on SCDs, see:

• Oracle Data Integrator Best Practices for a Data Warehouse at

http://www.oracle.com/technetwork/middleware/data-integrator/overview/odi-best practices-datawarehouse-whi-129686.pdf

• Oracle Warehouse Builder Data Modeling, ETL, and Data Quality Guide, 11g Release 2 (11.2), Part #E10935-03 at

http://docs.oracle.com/cd/E18283_01/owb.112/e10935/dim_objects.htm.

The SCD component is delivered through an executable. For the ALMBI solution, the types of SCD supported are Type 1 and Type 2.

1. Type 1 SCD Methodology

The Type 1 methodology overwrites old data with new data, and therefore does not track changes to the data across time.

Example:

Consider a Dimension Table, DIM_PRODUCT:

In this example:

N_PRODUCT_ SKEY	V_PRODUCT_NAME	D_START_DATE	D_END_DATE	F_LATEST_RECORD_ INDICATOR
1	Personal Loan	5/31/2010	12/31/9999	γ

- N_PRODUCT_SKEY is the surrogate key column which is a unique key for each record in the dimension table.
- V_PRODUCT_NAME is the product name.
- D_START_DATE indicates the date from which this product record is valid.
- D END DATE indicates the date to which this product record is valid.
- F_LATEST_RECORD_INDICATOR: A value Y indicates this is the latest record in the dimension table for this product and N indicates it is not. If the v_PRODUCT_NAME column is set as a Type 1 and if there is a change in the product name to *Personal Loan* from *PL* in the earlier example in the next processing period, then the record changes as shown in the following table:

N_PRODUCT _SKEY	V_PRODUCT_NAME	D_START_DATE	D_END_DATE	F_LATEST_RECORD _INDICATOR
1	Personal Loan	6/30/2010	12/31/9999	Υ

2. Type 2 SCD Methodology

The Type 2 method tracks historical data by creating multiple records for a given natural key in the dimensional tables with separate surrogate keys. With Type 2, the historical changes in dimensional data are preserved. In the earlier example, for the change in product name from *PL* to *Personal Loan* if history will be preserved then the V_PRODUCT_NAME column must be set as Type 2 in which case when SCD is processed for the processing period in which the change happens it will insert a new record as shown in the following example:

N_PRODUCT_SKEY	V_PRODUCT_NAME	D_START_DATE
1	Personal Loan	5/31/2010
1	Personal Loan	6/30/2010

A new record is inserted to the product dimension table with the new product name and the latest record indicator for this is set as 'Y' indicating this is the latest record for the personal loan product and the same flag for the earlier record is set to 'N'.

4.3.2 Prerequisites

The following are the prerequisites:

- The hierarchy flattening process has been run.
- The setup tables accessed by the SCD component, including SETUP_MASTER, SYS_TBL_MASTER, and SYS_STG_JOIN_MASTER have the required entries.
- Having entries in the table SETUP_MASTER is optional. By default, SCD maintains only a history of changes to all the members within a dimension, without the context of any hierarchy. If instead, you wish to maintain the history of changes for a specific hierarchy, the SETUP_MASTER table can be used for this purpose.
- This is achieved by specifying the sys-id of the required hierarchies, in table SETUP_MASTER. This table is referenced during SCD execution and if a hierarchy ID is found, it would be included during the SCD process.
- The column v_COMPONENT_DESC is used to identify the dimension-type and v COMPONENT VALUE for the hierarchy sys-ID.

V_COMPONENT DESC	Meaning
PRODUCT_HIER1	Signifies the PRODUCT dimension
ORG_UNIT_HIER11	Signifies the ORG UNIT dimension
GL_ACCOUNT_HIER1	Signifies the GL ACCOUNT dimension
COMMON_COA_HIER1	Signifies the COMMON COA dimension

• The permissible values for the V_COMPONENT_DESC are listed in the following table:

- Separate rows in this table are seeded for different hierarchy sys-ID's, one-row corresponding to each of the four dimensions, that is PRODUCT, ORG UNIT, COMMON COA, and GL ACCOUNT. Add entries in this table only if you add a user-defined dimension.
- The tables SYS_TBL_MASTER and SYS_STG_JOIN_MASTER are seeded for the Org unit, GL Account, Product, and Common COA dimensions. Add entries in these tables only if you add user-defined dimensions.
- Database Views with the name DIM_<Dimension Name>_V are seeded along with the seeded dimensions during the ALMBI installation. These views present data from the dimension tables as well as the flattened hierarchy data. For example, DIM_PRODUCT_V in usable format. New views should be included for any new dimensions defined.

4.3.3 Tables Used by the SCD Component

These tables are described in the following sections:

4.3.3.1 SETUP_MASTER

Rows for each of the four key dimensions **PRODUCT**, **ORG UNIT**, **COMMON COA**, and **GL ACCOUNT** will be seeded into this table during the ALMBI Installation.

The table structure is as follows:

- V COMPONENT CODE: This column acts as a primary key.
- V_COMPONENT_DESC: This column contains a standard value used within the database view for a flattened hierarchy.
- V_COMPONENT_VALUE: This column contains the unique hierarchy identifier for the reporting hierarchies to be used in ALMBI.

Hierarchy unique identifiers can be obtained by executing the following query.

```
Select b.object_definition_id, short_desc,long_desc from
fsi_m_object_definition_b b inner join fsi_m_object_definition_tlt on
b.object_definition_id = t.object_definition_id and b.id_type = 5 and
b.leaf num id = <dimension id>; <dimension id>
```

represents the dimension number to which a particular hierarchy belongs.

Alternatively, the unique system identifier for each hierarchy can be found at the bottom of the Hierarchy Management page while in EDIT mode.

The following rows are seeded into the SETUP_MASTER table, exactly as follows, with the exception of V_COMPONENT_VALUE. This value should reflect the unique system identifier of the Reporting Hierarchy for each dimension.

V_COMPONENT_CODE	V_COMPONENT_DESCRIPTION	V_COMPONENT_VALUE
22	PRODUCT_HIER1	1000018711
88	ORG_UNIT_HIER1	100573
90	GL_ACCOUNT_HIER1	100574
91	COMMON_COA_HIER1	100575

4.3.3.2 SYS_TBL_MASTER

The ALMBI application installer populates one row per dimension for the seeded dimensions in this table.

Column Name	Data Type	Column Description
MAP_REF_NUM	Number (3) NOT NULL	The mapping reference number for this unique mapping of a source to a dimension.

TBL_NM	VARCHAR2(30) NOT NULL	Dimension Table Name
STG_TBL_NM	VARCHAR2(30) NOT NULLL	Staging Table Name
SRC_PRTY	NUMBER(2) NULL	The priority of the Source when multiple sources are mapped to the same target. The sequence in which the various sources for the DIMENSION will be taken up for processing.
SRC_TYP	VARCHAR2(30) NOT NULL	The type of the Source for a Dimension, that is, Transaction Or Master Source
DT_OFFSET	NUMBER(2) NOT NULL	The offset for calculating the Start Date based on the FRD.
SRC_KEY	NUMBER(3) NULL	Source Key

Example: The following data is inserted by the application installer for the product dimension.

Column Name	Data Type
MAP_REF_NUM	NUMBER(3) NOT NULL
TBL_NM	VARCHAR2(30) NOT NULL
STG_TBL_NM	VARCHAR2(30) NOT NULL
SRC_PRTY	NUMBER(2)

No changes are required to this table if the standard key dimensions are being used within ALMBI. If any new dimensions have been added (for example, <code>ALM_COA_ID</code>) a row will have to be inserted to this table manually.

4.3.3.3 SYS_STG_JOIN_MASTER

The ALMBI application installer populates this table for the seeded dimensions.

Column Name	Data Type	Column Description
MAP_REF_NUM	NUMBER (3) NOT NULL	The Mapping Reference Number for this unique mapping of a Source to a Dimension Table
COL_NM	VARCHAR2(30) NOT NULL	Name of the column in the Dimension Table
COL_TYP	VARCHAR2(20) NOT NULL	Type of column. The possible values are given below
STG_COL_NM	VARCHAR2(30) NOT NULL	Name of the column in the Staging Table
SCD_TYP_ID	NUMBER (3) NOT NULL	SCD type for the column
PRTY_LOOKUP_REQD	CHAR(1) NOT NULL	Column to determine whether Lookup is required for Priority of Source against the Source Key Column or not
COL_DATATYPE	VARCHAR2(15) NULL	Column Data Type
COL_FORMAT	VARCHAR2(15) NULL	Column Format

The possible values for column type (the column COL_TYPE) in SYS_STG_JOIN_MASTER are:

- PK: Primary Dimension Value (maybe multiple for a given "Mapping Reference Number")
- SK: Surrogate Key
- DA: Dimensional Attribute (maybe multiple for a given "Mapping Reference Number")
- SD: Start Date
- ED: End Date
- LRI: Latest Record Indicator (Current Flag)
- CSK: Current Surrogate Key
- PSK: Previous Surrogate Key
- SS: Source Key
- LUD: Last Updated Date or Time
- LUB: Last Updated By

Example: The following data is inserted by the application installer for the Product Dimension.

Column Name	Data Type
MAP_REF_NUM	6
COL_NM	V_PRODUCT_NAME
COL_TYP	DA
STG_COL_NM	V_PRODUCT_NAME
SCD_TYP_ID	2
PRTY_LOOKUP_REQD_FL G	Ν
COL_DATATYPE	VARCHAR
COL_FORMAT	

No changes are required to this table if the standard key dimensions are being used within ALMBI. If any new dimensions have been added (for example, <code>ALM_COA_ID</code>), a row must be inserted to this table manually.

• DIM_<dimensionname>_V: The database view which SCD uses as the source.

Example:

Dim_products_V

These views come as part of the application installation.

For any new dimension added, a View will have to be created similar to DIM PRODUCTS V.

 DIM_<dimensionname> – Output table to which SCD writes the dimension data. A sequence should be added for every user-defined dimension.

Example:

4.3.4 Executing the SCD Component

You can execute the function from the Operations framework module of OFSAAI.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition, follow these steps:

1. Select the checkbox adjacent to the newly created Batch Name in the **Batch Maintenance** window.

- 2. Click Add (+) from the Task Details grid. The **Task Definition** window is displayed. Enter the Task ID and Description.
- 3. Select Run Executable from the **Run Executable** drop-down list.
- 4. Select the following from the Dynamic Parameters drop-down list:

Executable: scd,<map_ref_num>

For example, scd, 125.

A third optional parameter (N or Y) passed during SCD execution (like SCD,<map_ref_no>,<N/Y>) determines if a soft delete should be executed on for old records. The default parameter value is 'N'. For example, if the records are not part of the STG tables and SCD is executed with a parameter 'Y', then the older records in the DIM table will get soft deleted by setting the LRI indicator to 'N'.

Use the following table to identify the map_ref_num to be used, while executing the SCD process.

map_ref_num	Target Table that will be updated
124	DIM_FCST_RATES_SCENARIO
125	DIM_RESULT_BUCKET
126	DIM_ORG_UNIT
127	DIM_GL_ACCOUNT
128	DIM_PRODUCT
129	DIM_COMMON_COA
130	DIM_PRODUCT_TYPE
131	DIM_CUSTOMER
-1	<for all="" entries=""></for>
270	DIM_ORG_STRUCTURE

• Wait: When the file is being executed, you can either wait until the execution is complete or proceed with the next task. Select the checkbox for Yes or No.

Click Yes to wait for the execution to be complete. Click No to proceed with the next task.

- Batch Parameter: Select Y. (upper case required).
- 5. Click **Save**. The Task definition is saved for the selected Batch.

6. Execute the Batch.

You can execute a Batch definition from the **Batch Execution** window of an OFSAAI Operations module.

You cannot execute the SCD process from the simplified batch window.

4.3.5 Checking the Execution Status

The Batch execution status can be monitored through the **Batch Monitor** window of the OFSAAI Operations module.

The status messages in the batch monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The ICC execution log can be accessed on the application server in the directory \$FIC_DB_HOME/log/ficgen.

Sample Path:/dbfiles/home/oracle/OFSAAI/ficdb/log/ficgen

The file name will have the Batch Execution ID.

The detailed SCD component log can be accessed on the application server under <ftp-share>/<infodom name>/logs.

The file name will have the Batch Execution ID.

Sample Path:/dbfiles/home/oracle/ftpshare/OFSAADEMO/logs

Check the .profile file in the installation home if you are not able to find the paths mentioned earlier.

4.3.6 SCD Process Scenarios

It is not necessary to run SCD for all dimensions. In certain cases, you should specify the specific dimension requiring updates.

The following common scenarios provide guidance on which dimensions must be rerun:

- Rerunning an existing ALM Process for the same as-of-date. It is not necessary to rerun any of the SCD dimensions.
- Running an existing ALM Process for a new as-of-date.
- Run SCD for Time Dimension (3), to refresh DIM_RESULT_BUCKET. Once per as-of-date and applies to all ALM processes run for that as-of-date.
- Running a new ALM Process:
 - a. Run SCD for Forecast Rate Scenarios or Stochastic Process (1)

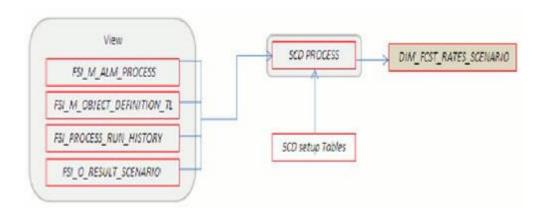
b. If new as-of-date, also run for Time Dimension (3)

If Hierarchy changes are made, rerun SCD for the appropriate dimension(s). For example, 4-7 as needed.

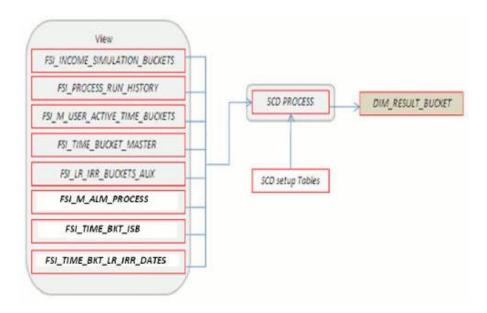
4.3.7 List of Dimension Tables

List of ALMBI Dimensions impacted by the SCD procedure are:

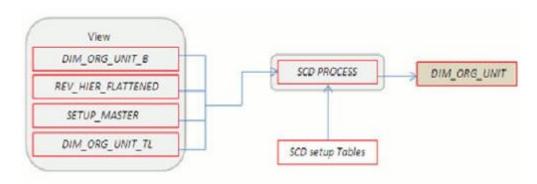
• DIM_FCST_RATES_SCENARIO: This table stores all Deterministic Processes with relevant details.



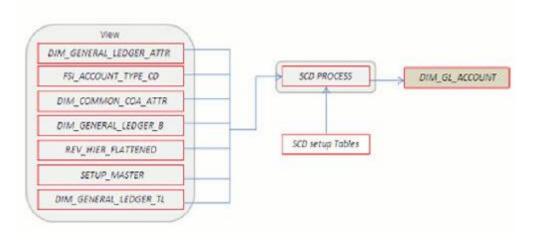
• DIM_RESULT_BUCKET: This table stores Income Simulation, Liquidity Risk Gap, and Interest Rate Gap Bucket information for each process



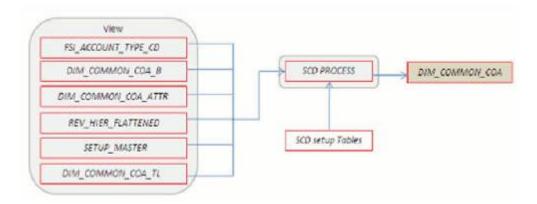
• DIM ORG UNIT: This table stores Organization Unit dimension information.



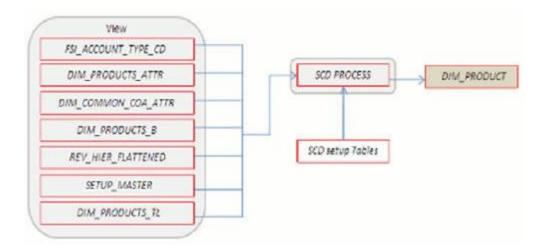
• DIM GL ACCOUNT: This table stores General Ledger Account information.



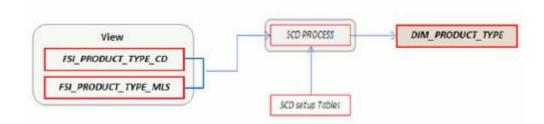
• DIM COMMON COA: This table stores Dimensional Attributes of the COMMON_COA dimension.



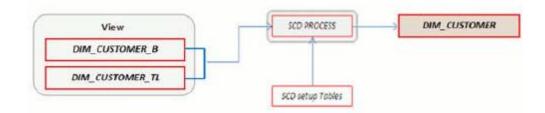
• DIM PRODUCT: This table stores Dimensional Attributes of the PRODUCT dimension.



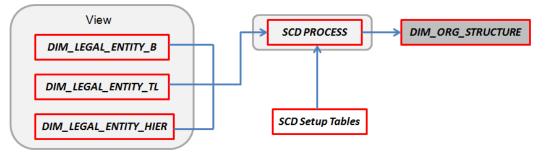
• DIM_PRODUCT_TYPE: This table stores Dimensional Attributes of the PRODUCT_TYPE dimension.



• DIM_CUSTOMER: This table stores Dimensional Attributes of the CUSTOMER dimension.



• DIM ORG STRUCTURE: This table stores Dimensional Attributes of the Legal Entity Dimension.



4.4 **DIM_RUN Population**

The DIM_RUN table is the dimension object that stores dimensional data for both Stochastic and Deterministic ALM Processes. A Data Transformation process is provided to populate the DIM_{RUN} table.

Topics:

- Overview of DIM_RUN Process
- <u>Prerequisites</u>
- Table Used to Populate RUN details
- <u>Executing the DIM_RUN Process</u>
- <u>Checking the Execution Status</u>

4.4.1 Overview of DIM_RUN Process

The database components used by this transformation are:

- Database function: FN_DIM_RUN_ALM
- Database procedure: POP_DIM_RUN, that is invoked by the function FN_DIM_RUN_ALM.

4.4.2 Prerequisites

Following are the pre-requisites for the DIM RUN Process:

- 1. All the post-install steps mentioned in the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure (OFSAAI) Installation and Configuration Guide</u> and the <u>Oracle Financial Services</u> <u>Asset Liability Management Analytics User Guide</u> have to be completed successfully.
- **2.** Application users must be mapped to a role that has the seeded batch execution function (**BATPRO**).
- 3. Before executing a batch, check if the following services are running on the application server.
 - Iccserver
 - Router
 - AM
 - Messageserver

For more information on how to check if the services are up and on, and how to start the services if you find them not running, see the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure User Guide</u>.

4. Batches must be created for executing the function. This is explained in section Executing the DIM_RUN Process.

4.4.3 Table Used to Populate RUN details

The physical table used in the ALM BI data model is DIM_RUN.

FSI_PROCESS_RUN_HISTORY, FSI_M_ALM_PROCESS, and FSI_M_OBJECT_DEFINITION_TL are the source tables which are used to populate DIM_RUN.

This table stores the Run details to be used for building the ALMBI reports. See the <u>Oracle Financial</u> <u>Services Analytical Applications Data Dictionary Guide</u> or the <u>ALM BI Erwin Data Model</u> for viewing the structure of this table.

4.4.4 Executing the DIM_RUN Process

You can execute the function from the Operations framework module of OFSAAI.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition, follow these steps

- 1. Select the check box adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed. Enter the Task ID and Description.
- 3. Select Transform Data from the Transform Data drop-down list.
- 4. Select the following from the **Dynamic Parameters** list:
 - Rule Name: Select Populate_Dim_Run_ALM from the list of all available transformations. (This is a seeded Data Transformation process which is installed as part of the ALM BI application, if you don't see this process in the list, contact<u>Oracle support</u>).
 - Parameter List: Not Required.
- 5. Click Save. The Task definition is saved for the selected Batch.
- **6.** Execute the Batch. You can execute a Batch definition from the Batch Execution window of the OFSAAI Operations module.

You cannot execute this process from the Simplified Batch window.

4.4.5 Checking the Execution Status

The Batch execution status can be monitored through the Batch Monitor window of the OFSAAI Operations module.

The status messages in the batch monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The execution log and the detailed Dim Run population component log can be accessed from the location <code>\$FIC DB HOME/log/date</code>.

The file name will have the Batch Execution ID.

Sample Path:/dbfiles/home/oracle/OFSAAI/ficdb/log/date

The database-level operations log can be accessed by querying the FSI_MESSAGE_LOG table. The Batch Run ID column can be filtered for identifying the relevant log.

Check the .profile file in the installation home if you are not able to find the paths mentioned earlier.

4.5 Time Dimension Population

ALM Business data is commonly represented as of a point in time or across a range of time periods. For this reason, the creation of a Time Dimension in OBIEE is an important capability. The following section describes how the time dimension is created and managed in ALM BI.

Topics:

- Overview of Time Dimension Population
- Prerequisites
- How does ALM BI Use DIM Dates
- <u>Table Used to Populate the Time Dimension</u>
- <u>Executing the Time Dimension Population Process</u>
- <u>Checking the Execution Status</u>

4.5.1 **Overview of Time Dimension Population**

The Time Dimension is treated as a Calendar dimension in OBIEE, which contains all dates for a specified period. The data is used on a day to day basis to populate the Account Summary Tables and many of the ALM BI result tables. The Time Dimension population process is used to populate the DIM DATES table with values (between two dates) specified by the user.

The database components used by this process are:

- Database function: FN DIM DATES
- Database procedure: PROC_DIM_DATES_POPULATION, which is invoked by the function FN_DIM_DATES.

4.5.2 Prerequisites

Following are the prerequisites for Time Dimension Population:

- 1. All the post-install steps mentioned in the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure (OFSAAI) Installation and Configuration Guide</u> and the <u>Oracle Financial Services</u> <u>Asset Liability Management Analytics User Guide</u> must be completed successfully.
- **2.** Application users must be mapped to a role that has the seeded batch execution function (BATPRO).
- 3. Before executing a Batch, check if the following services are running on the application server.

- lccserver
- Router
- AM
- Messageserver

For more information on how to check if the services are up and on, and how to start the services if you find them not running, see the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure User Guide</u>.

4. Batches must be created for executing the function. This is explained in the section Executing the Time Dimension Population Process

4.5.3 How does ALM BI Use DIM Dates

During ALM BI transformation, each result table joins to the DIM_DATES table.

For example:

An ALM Deterministic Process inserts data into the following tables:

- Result Detail (RES_DTL_XXXX, CONS_DTL_XXXX)
- Result Master (FSI_O_RESULT_MASTER, FSI_O_CONSOLIDATED_MASTER)
- Process Cash Flows (FSI O PROCESS CASH FLOWS)
- Interest Rate Audit (FSI O INTEREST RATES AUDIT)
- Exchange Rate Audit (FSI O EXCHANGE RATES AUDIT)
- Economic Indicator Audit (FSI O ECONOMIC IND AUDIT)
- Process Errors (FSI PROCESS ERRORS)

Result data is written to Process Cash Flows:

- (FSI O PROCESS CASH FLOWS), Interest Rate Audit
- (FSI O INTEREST RATES AUDIT), Exchange Rate Audit
- (FSI O EXCHANGE RATES AUDIT), and Economic Indicator Audit
- (FSI_O_ECONOMIC_IND_AUDIT) tables, only when the corresponding process option is selected

An ALM Stochastic Process can insert data into the Value at Risk result tables and the Earnings at Risk result tables based on the process options selected in the ALM Stochastic Process rule. The following tables are populated for each type of process:

- Value at Risk
 - VaR by Product and Rate Path (FSI_O_STOCH_VAR)
 - Total VaR by Rate Path (FSI_O_STOCH_TOT_VAR)
 - Market Value by Product and Rate Path (FSI_O_STOCH_MKT_VAL)
 - Total Market Value by Rate Path (FSI_O_STOCH_TOT_MKT_VAL)
 - Interest Rate Audit (FSI O INTEREST RATES AUDIT)

- Detail Cash Flows (FSI_0_PROCESS_CASH_FLOWS)
- Process Errors (FSI_PROCESS_ERRORS)
- Earnings at Risk
 - Average EaR by Product (FSI_O_EAR_LEAF_AVG)
 - EaR by Product and Rate Path (FSI_O_EAR_LEAF_DTL)
 - Average Net EaR (FSI_O_EAR_TOTAL_AVG)
 - Net EAR by Product (FSI O EAR TOTAL DTL)
 - Interest Rate Audit (FSI O INTEREST RATES AUDIT)
 - Detail Cash Flows (FSI_O_PROCESS_CASH_FLOWS)
 - Process Errors (FSI PROCESS ERRORS)

To successfully transform data from each of the above tables into the reporting model, the dates contained in these tables must also exist in the DIM_DATES table.

This includes the as_of_date, all dynamic start dates, and the dates corresponding to all active time bucket start and end dates. Result data is written to Interest Rate Audit (FSI_O_INTEREST_RATES_AUDIT) and Detail Cash Flows (FSI_O_PROCESS_CASH_FLOWS) tables only when the corresponding process option is selected.

4.5.4 Table Used to Populate the Time Dimension

The physical table used to store the time dimension in the ALM BI data model is:

DIM DATES: This table holds the date details to be used for building the ALMBI reports.

4.5.5 Executing the Time Dimension Population Process

You can execute the function from the Operations framework module of OFSAAI.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the How to Define a Batch.

To define a new task for a Batch definition:

- 1. Select the checkbox adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed.
- 3. Enter the Task ID and Description.
- 4. Select Transform Data from the **Transform Data** drop-down list.
- 5. Select the following from the Dynamic Parameters drop-down list:
 - Rule Name: Select Dim_Dates_Population from the list of all available transformations. (This is a seeded Data Transformation which is installed as part of the ALM BI application, if you don't see this in the drop-down list, contact<u>Oracle support</u>).
 - Parameter List: Enter the Start Date and End Date in 'yyyymmdd' format. This is a mandatory parameter.

- For example, 19000101', '20120101'
- Start Date: This is the date from which the Transformation will populate the DIM_DATES table.
- End Date: This is the date up to which the Transformation will populate the DIM_DATES table.
- 6. Click **Save**. Execute the Batch.
- **7.** You can execute a Batch definition from the **Batch Execution** window of the OFSAAI Operations module.
- **8.** You can execute this process from the Simplified Batch window. For more details, see <u>Simplified</u> <u>Batch Execution</u>.
- **9.** The function can also be executed directly on the database through SQLPLUS by providing the following details:
 - Function Name: FN_DIM_DATES
 - Parameters: P_BATCH_RUN_ID, P_AS_OF_DATE, P_ST_DT, and P_ED_DT

Sample Parameter Values: 'Batch1', '20091231', '19000101', and '19050101'

4.5.6 Checking the Execution Status

The Batch execution status can be monitored through the Batch Monitor window of the OFSAAI Operations module.

The status messages in the batch monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The Batch Process execution log and the detailed Time Dimension component log can be accessed from the location <code>\$FIC DB HOME/log/date</code>.

The file name will have the Batch Execution ID.

Sample Path:/dbfiles/home/oracle/OFSAAI/ficdb/log/date

The database-level operations log can be accessed by querying the FSI_MESSAGE_LOG table. The Batch Run ID column can be filtered for identifying the relevant log.

Check the .profile file in the installation home if you are not able to find the paths mentioned above.

5 ALM Results Transformation

This chapter describes the steps required to set up and execute the ALM Result transformation process.

ALM Results Transformation is the process of pushing the ALM Results from the ALM Processing area to the ALM BI Mart. It transforms both Deterministic and Stochastic ALM results, as well as other related information such as forecast rates and detailed cash flows, based on the type of process and processing options selected.

Topics:

- Overview of the ALM Results Transformation Process
- <u>Tables Populated by ALM Results Transformation</u>
- Executing the ALM Results Transformation Process
- <u>Checking the Execution Status</u>
- <u>Support of Multiple Hierarchies</u>

5.1 Overview of the ALM Results Transformation Process

ALM Results Transformation is used to move ALM result data from ALM Processing Tables to ALM BI FACT Tables for Reporting.

The following Database components are used by the ALM Results Transformation:

- FN ALM BI TRANSFORMATION: Oracle database function.
- PKG_ALM_BI_TRANSFORMATIONS: Oracle database Package invoked by the above function.

5.1.1 Prerequisites

Following are the pre-requisites for the ALM Results Transformation Process:

- 1. An ALM Process (or processes) (Stochastic or Deterministic) has been executed successfully and produced results.
- 2. Hierarchy Transformation is executed successfully.
- 3. Dimension Movement (SCD) and DIM_RUN population executed successfully.
- 4. Dim Dates process executed successfully.
- 5. All the post-install steps mentioned in the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure (OFSAAI) Installation and Configuration Guide</u> and the <u>Oracle Financial Services</u> <u>Asset Liability Management User Guide</u> and <u>Oracle Financial Services Asset Liability Analytics</u> <u>User Guide</u> must be completed successfully.
- **6.** Application users must be mapped to a role that has the seeded batch execution function (BATPRO).
- 7. Before executing a batch, check if the following services are running on the application server.
 - lccserver
 - Router

- AM
- Messageserver

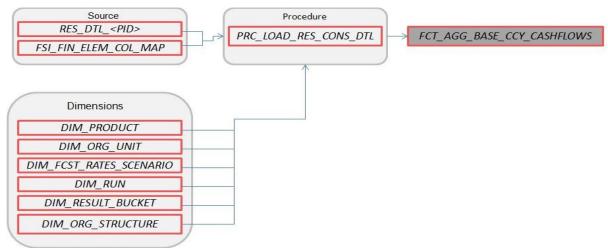
For more information on how to check if the services are up and on, and how to start the services if you find them not running, see the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure User Guide</u>.

Batches must be created for executing the function. This is explained in section Executing the ALM Results Transformation Process.

5.2 Tables Populated by ALM Results Transformation

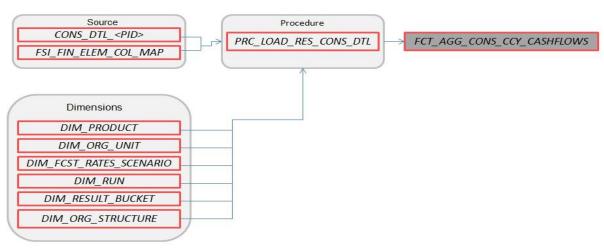
One or more of the following tables may be included in the ALM Results Transformation process, depending on the calculation element and audit selections in the specific process being transformed. For example, if you have selected to produce only standard cash flow output and are not consolidating multi-currency results, then only the FCT_AGG_BASE_CCY_CASHFLOWS table will be populated by the transformation process. If currency consolidation is selected, and you have multiple currencies in your data set, then additionally the consolidated results table will be populated. Similarly, when the Interest Rate Gap or Liquidity Gap calculation elements are selected in the ALM Process, then results will also be written to the corresponding FCT_ tables. The following are the primary target FCT_ tables populated by the ALM Results Transformation process:

• FCT_AGG_BASE_CCY_CASHFLOWS



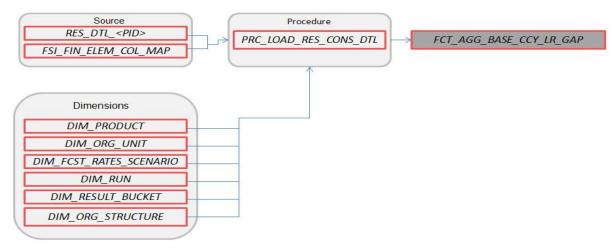
Where, RES_DTL_<Process ID> contains the standard (base currency) cash flow output for all current position and forecast balances, across all forecast rate scenarios.

• FCT_AGG_CONS_CCY_CASHFLOWS



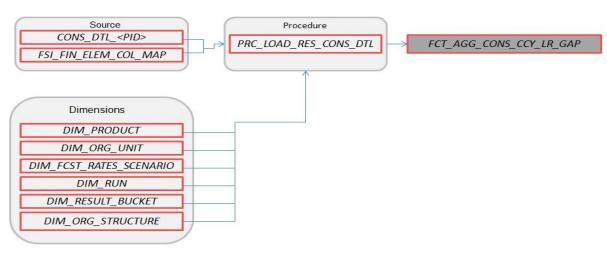
Where, CONS_DTL_<Process ID> contains standard (consolidated to reporting currency) cash flow output for all current position and forecast balances, across all forecast rate scenarios.

FCT_AGG_BASE_CCY_LR_GAP



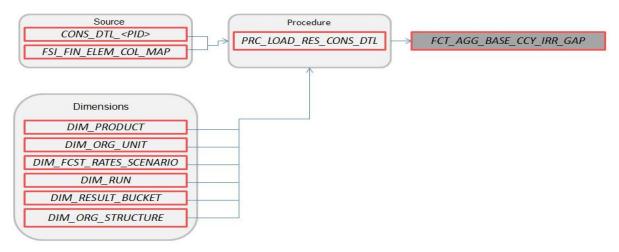
Where, RES_DTL_<Process ID> contains Liquidity Gap Financial Element (base currency) cash flow output for all current position balances, across all forecast rate scenarios.

• FCT_AGG_CONS_CCY_LR_GAP



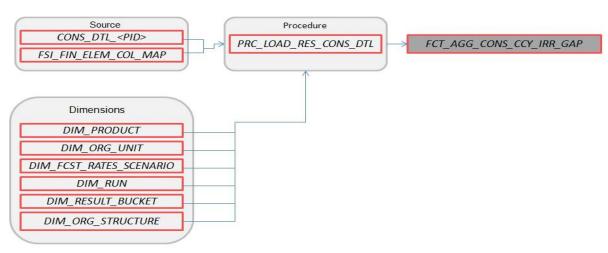
Where, CONS_DTL_<Process ID> contains Liquidity Gap Financial Element (consolidated to reporting currency) cash flow output for all current position balances, across all forecast rate scenarios.

FCT_AGG_BASE_CCY_IRR_GAP



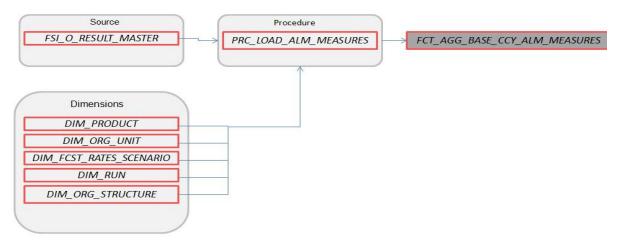
Where, CONS_DTL_<Process ID> contains Repricing Gap Financial Element (consolidated to reporting currency) cash flow output for all current position balances, across all forecast rate scenarios.

FCT_AGG_CONS_CCY_IRR_GAP



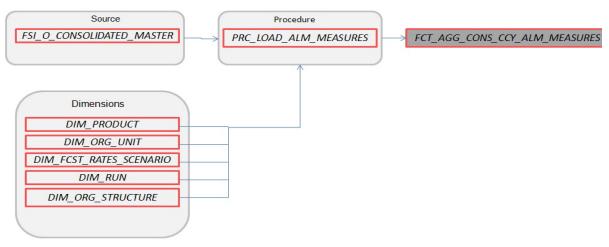
Where, CONS_DTL_<Process ID> contains Repricing Gap Financial Element (consolidated to reporting currency) cash flow output for all current position balances, across all forecast rate scenarios.

• FCT_AGG_BASE_CCY_ALM_MEASURES



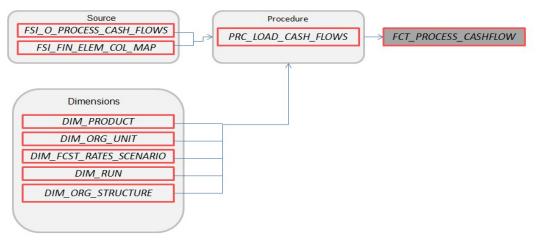
Where, FSI_O_RESULT_MASTER contains Market Value, Duration, and Convexity information (base currency) for all current position balances, across all forecast rate scenarios.

• FCT_AGG_CONS_CCY_ALM_MEASURES



Where, FSI_O_CONSOLIDATED_MASTER contains Market Value, Duration, and Convexity information (consolidated to reporting currency) for all current position balances, across all forecast rate scenarios.

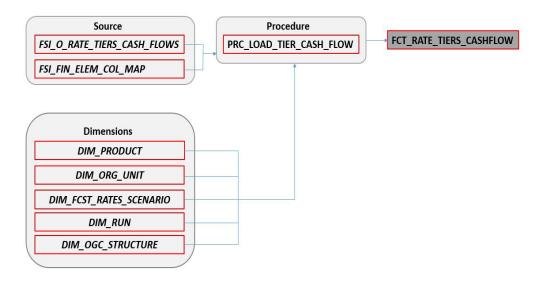
• FCT_PROCESS_CASHFLOW



Where, FSI_O_PROCESS_CASH_FLOWS contains account level detailed cash flow information for the number of instrument records selected on the Audit block of the ALM Process.

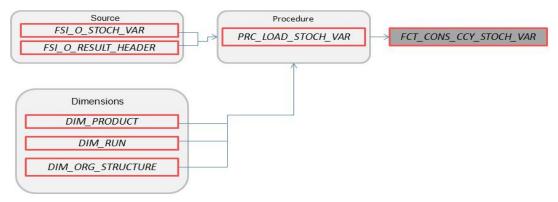
Note: Here, FCT_COMMON_ACCOUNT_SUMMARY is a pre-requisite for FCT_PROCESS_CASHFLOW. To run the Cash flow successfully, first load the table FCT_COMMON_ACCOUNT_SUMMARY(PK) and then FCT_PRCESS_CASHFLOW(FK). There is a Referential Integrity (PK-FK) between these two tables which should be satisfied.

FCT_RATE_TIERS_CASHFLOW



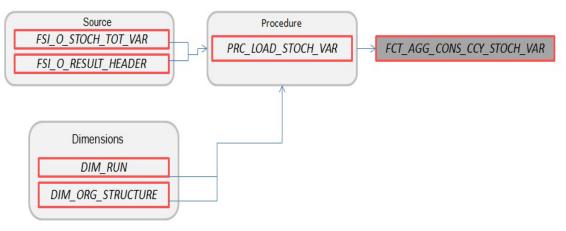
Where, FSI_O_PROCESS_CASH_FLOWS contains account level detailed cash flow information for the number of instrument records selected on the Audit block of the ALM Process.

• FCT_CONS_CCY_STOCH_VAR



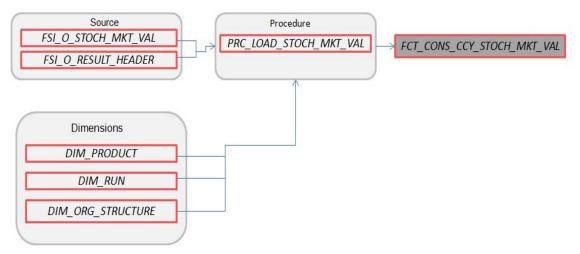
Where, FSI_O_STOCH_VAR contains Value at Risk information (in Consolidated Currency) for each Monte Carlo rate path at the Product COA level.

• FCT_AGG_CONS_CCY_STOCH_VAR



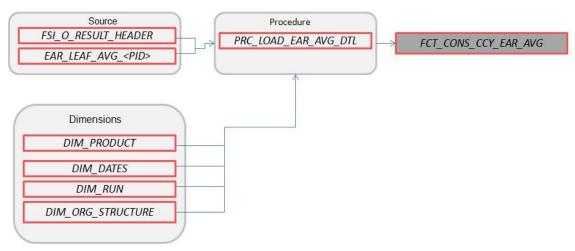
Where, FSI_O_STOCH_TOT_VAR contains Value at Risk information (in Consolidated Currency) for each Monte Carlo rate path at the Portfolio level.

FCT_CONS_CCY_STOCH_MKT_VAL



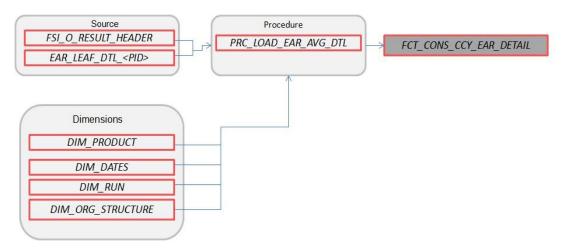
Where, FSI_O_STOCH_MKT_VAL contains Market Value information (in Consolidated Currency) for each Monte Carlo rate path at the Product COA level.

• FCT_CONS_CCY_EAR_AVG



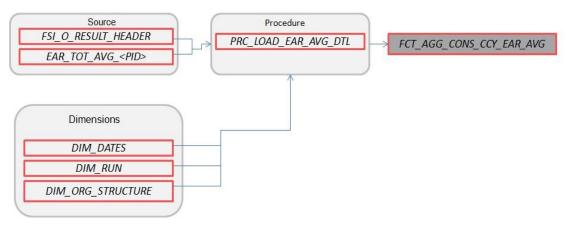
Where, EAR_LEAF_AVG_<Process ID> contains the average Earnings at Risk information (in Consolidated Currency) across all Monte Carlo rate paths at the Product COA level.

• FCT_CONS_CCY_EAR_DETAIL



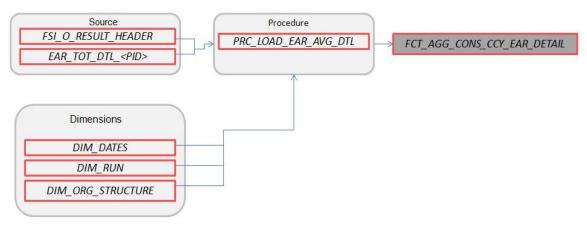
Where, AR_LEAF_DTL_<Process ID> contains Earnings at Risk information (in Consolidated Currency) for each Monte Carlo rate path at the Product COA level.

• FCT_AGG_CONS_CCY_EAR_AVG



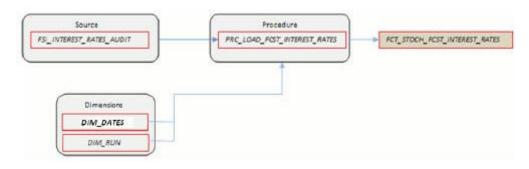
Where, EAR_TOT_AVG_<Process ID> contains average Earnings at Risk information (in Consolidated Currency) across all Monte Carlo rate paths at the Portfolio level (net interest income - net interest expense).

FCT_AGG_CONS_CCY_EAR_DETAIL



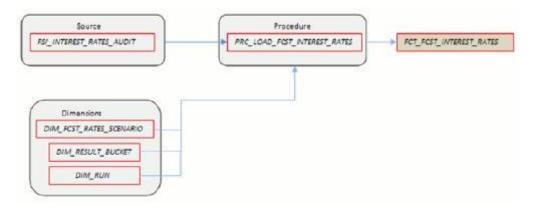
Where, EAR_TOT_DTL_<PID> contains Earnings at Risk information (in Consolidated Currency) for each Monte Carlo rate path at the Portfolio level (net interest income – net interest expense).

• FCT_STOCH_FCST_INTEREST_RATES



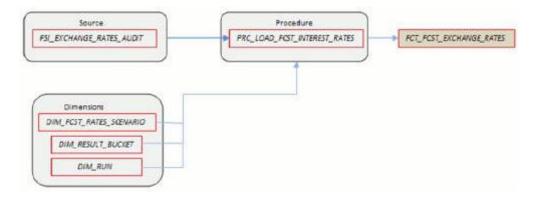
Where, FCT_STOCH_FCST_INTEREST_RATES contains 1M forward rates output from the Monte Carlo process for each scenario, typically used for Audit purposes.

• FCT_FCST_INTEREST_RATES



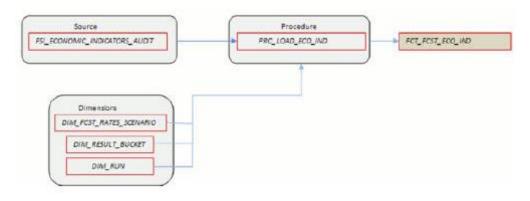
Where, FCT_FCST_INTEREST_RATES contains forecast interest rates for each ALM Deterministic Process, for each scenario.

• FCT_FCST_EXCHANGE_RATES



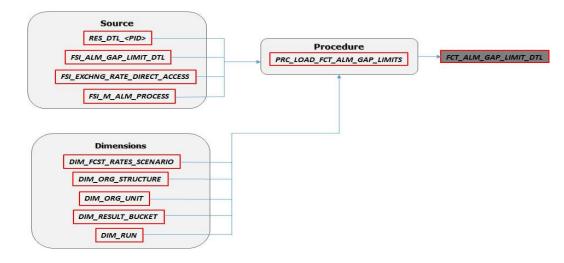
Where, FCT_FCST_EXCHANGE_RATES contains forecast currency exchange rates for each ALM Deterministic Process, for each scenario.

• FCT_FCST_ECO_IND



Where, FCT_FCST_ECO_IND contains forecast Economic Indicators for each ALM Deterministic Process, for each scenario.

• FCT_ALM_GAP_LIMIT_DTL



Where, FCT_ALM_GAP_LIMIT_DTL contains a repricing gap limit for each ALM process and for each scenario.

See the <u>Oracle Financial Services Analytical Applications Data Model Data Dictionary</u> or the ALM BI Erwin Data Model to view the detailed structure of these tables.

5.3 Executing the ALM Results Transformation Process

There are four ways to execute the ALM Results Transformation process. Depending on your preference and particular use case, you can choose to run ALM Results Transformation using any of these methods.

 Select the ALM Results Transformation option from the Output Preferences block of the ALM Processing window. When this option is selected, the ALM BI Transformation runs automatically as the ALM process run.

* Output Preferences		
Output Dimension* Product	~	
Consolidate to Reporting Currency		Move Results to ALM BI Mart

- From the ALM Processing Summary page, select any ALM Process and then select the Transform ALM Results option. This triggers the immediate execution of the ALM BI transformation process.
- 3. Create and run a Batch process using the infrastructure Batch Processing.
- **4.** Create and run a batch process using the simplified batch window. For more information, see the <u>Simplified Batch Execution</u> section.

The following steps describe how to execute the ALM Results Transformation process from the OFSAAI Batch Processing framework.

You can execute the function from the Operations framework module of OFSAAI.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition, follow these steps

- 1. Select the check box adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed.
- **3.** Enter the Task ID and Description.
- 4. Select Transform Data from the **Transform Data** drop-down list.
- 5. Select the following from the Dynamic Parameters list:
 - Rule Name: Select ALM_BI_TRANSFORMATION from the list of all available transformations. (This is a seeded Data Transformation which is installed as part of the ALM BI application. If you don't see this in the list, contact <u>Oracle support</u>).
 - Parameter List: Enter the Process ID, Rerun Flag, and Limit Flag.
 - Process ID indicates the process for which the data is to be transformed from ALM operational tables to ALM BI tables. This is a mandatory parameter.

Rerun Flag indicates whether the current run is a fresh run or a rerun for the same process ID. 'N' indicates a fresh run and 'Y' indicates a rerun. When ALM Results Transformation is executed for a new ALM process, it is treated as a new run. The BI_TRANSFORM_STATUS will be NULL in FSI_PROCESS_RUN_HISTORY for the Process and As-of-date combination.

When the Transformation is performed for an existing process, it becomes a rerun, which means the related FACT table records are first deleted for the process and new results are reinserted. The BI_TRANSFORM_STATUS will be "1" in FSI_PROCESS_RUN_HISTORY for the Process and As-of-date combination.

The sample parameters for this task are: 40006526, 'Y' (uppercase required).

- 6. Click Save. The Task definition is saved for the selected Batch.
- **7.** Execute the Batch.
 - You can execute a Batch definition from the Batch Execution window of the OFSAAI Operations module.
 - The function can also be executed directly on the database through SQLPLUS using the following details:

Function Name: FN ALM BI TRANSFORMATION

Parameters: P_BATCH_RUN_ID, P_AS_OF_DATE, PID, and P_RE_RUN_FLAG.

Sample parameter values are 'Batch1','20111231', '40006526', and 'Y'

NOTE When prompted for the execution date, select the 'As of Date' corresponding to the ALM results that you want to transform. If some other date is selected, the ALM Result Transformation will not run for the expected data set.

5.4 Checking the Execution Status

The Batch execution status can be monitored through the **Batch Monitor** window of the OFSAAI Operations module.

The status messages in the batch monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The Batch Process execution log and the detailed ALM Transformation component log can be accessed on the application server at $FIC_DB_HOME/log/date$.

The file name will have the Batch Execution ID.

Sample Path: /dbfiles/home/oracle/OFSAAI/ficdb/log/date. The database-level operations log can be accessed by querying the FSI_MESSAGE_LOG table. The Batch Run ID column can be filtered for identifying the relevant log.

To monitor the progress of the transformation program query the table <code>FSI_MESSAGE_LOG</code> with process ID and batch run ID as follows.:

select * from fsi_message_log where a.process_id=<ProcessID> and batch_run_id=<Batch Run ID>;

Check the <code>.profile file</code> in the installation home if you are not able to find the paths mentioned above.

5.5 Support of Multiple Hierarchies

Multiple hierarchies on a single dimension can be set up in ALMBI.

One can view multiple hierarchies in a report in a single view through the following steps:

- 1. Create your product hierarchy (for example, Product Hierarchy 1).
- 2. Perform Hierarchy Transformation.
- 3. Run the SCD process.
- **4.** Run the ALM Results Transformation process for a particular As of Date.

Records will be populated into the relevant FACT tables for the mentioned hierarchy and As of Date. Similarly, perform these steps for multiple hierarchies and run the ALMBI Transformation accordingly. From this point, you will be able to select any of the multiple hierarchies while designing a new report.

6 Account Summary Population

This chapter describes how and when to execute the data movement processes needed to populate account-level data in the reporting mart.

Account Summary tables are account level BI tables that are used to consolidate information from the various product-specific tables used in both the Staging Area and Operational Processing areas. The Account Summary tables in the ALM BI data model are loaded from both the Staging Area tables and operational Instrument Tables using the Table to Table (T2T) component of the OFSAAI framework.

Topics:

- Overview of Account Summary Tables
- <u>Tables Used by the Account Summary Population T2T Process</u>
- <u>Executing the Account Summary Population T2T</u>
- <u>Checking the Execution Status</u>

6.1 **Overview of Account Summary Tables**

Within ALM BI, customer account-level data from both the OFSAA Staging Area and Instrument tables and consolidated into the standardized relational ALM BI data model. This consolidation is performed to organize all the relevant account-level data into a single Fact structure to be used for reporting.

This relational BI model consists of four vertically partitioned Account Summary tables that are organized by application subject area:

- FCT_COMMON_ACCOUNT_SUMMARY: This table is shared by all OFSAA BI applications and contains dimensional values, attributes, and financial measures which are generally applicable to the individual account records. This data is sourced directly from the staging area.
- FCT_ALM_ACCOUNT_SUMMARY: This table contains ALM specific financial measures and is sourced from the operational Instrument Tables.
- FCT_FTP_ACCOUNT_SUMMARY: This table contains FTP specific financial measures and is sourced from the operational Instrument Tables.
- FCT_LOAN_COMMITMENTS: This table contains loan commitments, which are loans that are not yet booked and is sourced from the operational Instrument Table FSI D LOAN COMMITMENTS.

6.1.1 Overview of Account Summary Population

Upon installation of the ALM BI application, you will see multiple T2T process definitions for each Instrument table. Each T2T process maps instrument table data to the three Account Summary tables mentioned above. The T2T process definitions are primarily direct column to column mappings from Instrument to Fact table and in certain cases might have expressions that apply SQL functions or do arithmetic operations on instrument columns before moving them to the Fact table.

The Database functions are used for conversion if there is a data type difference between the mapped columns of an Instrument Table. For example:

TO_NUMBER(TO_CHAR(NEXT_PAYMENT_DATE, 'YYYYMMDD')).

Or an arithmetic operation if a currency conversion is required for a balance column.

For example:

FSI_D_CREDIT_CARDS.GROSS_FEE_INCOME *

FSI_EXCHANGE_RATE_HIST.EXCHANGE_RATE)

Also, a surrogate key is populated in Fact (BI) table dimension columns by doing SQL joins between the Instrument tables and Dimension tables, based on the relevant ID column and populating the surrogate key from the Dimension Table for each Instrument dimension ID value.

While moving data using the T2T processes, the account number linkage between Staging, instrument, and Fact table records is preserved since the movement happens at an account level. Also, the unique Account Number links the data flowing into Fact tables from both EPM instrument tables and ERM account level tables.

6.1.1.1 Prerequisites

Following are the pre-requisites for Account Summary population:

- All the post-install steps mentioned in the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure (OFSAAI) Installation and Configuration Guide</u> and the <u>Oracle Financial Services</u> <u>Asset Liability Management Analytics User Guide</u> have to be completed successfully.
- Application users must be mapped to a role that has the seeded batch execution function (BATPRO).
- Before executing a batch, check if the following services are running on the application server:
 - ICCServer
 - Router
 - AM
 - Messageserver

For more information on how to check if the services are up and on, and how to start the services if you find them not running, see the <u>Oracle Financial Services Analytical Applications</u> <u>Infrastructure User Guide</u>.

- Batches must be created for executing the function. This is explained in section Executing the Account Summary Population T2T.
- The Dimension Table Population step must be done before you execute the T2T batch. For more details, see section <u>Executing the Account Summary Population T2T</u>.

6.2 Tables Used by the Account Summary Population T2T Process

There are separate T2T definitions configured for each instrument or stage t.able, which are used to populate each of - FCT_COMMON_ACCOUNT_SUMMARY, FCT_FTP_ACCOUNT_SUMMARY, FCT_ALM_ACCOUNT_SUMMARY, and FCT_LOAN_COMMITMENTS.

The following table lists the seeded T2T Definitions, with related Source Table and Destination tables.

TABLES USED BY THE ACCOUNT SUMMARY POPULATION T2T PROCESS

Definition Name	Source Table	Destination Table
T2T_STG_ANNUITY_CONTR ACTS_CAS	STG_ANNUITY_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_BORROWINGS_CA S	STG_BORROWINGS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_CARDS_CAS	STG_CARDS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_CASA_CAS	STG_CASA	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_FX_CONTRACTS_ CAS	STG_FX_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_GUARANTEES_CA S	STG_GUARANTEES	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_INVESTMENTS_C AS	STG_INVESTMENTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_LC_CAS	STG_LC_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_LEASES_CONTRA CTS_CAS	STG_LEASES_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_LOANS_CAS	STG_LOAN_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_MM_CAS	STG_MM_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_OD_CAS	STG_OD_ACCOUNTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_OPTIONS_CAS	STG_OPTION_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_RETIREMENT_AC COUNTS_CAS	STG_RETIREMENT_ACCOUNTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_TD_CONTRACTS_ CAS	STG_TD_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY

T2T_STG_FUTURES_CAS	STG_FUTURES	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_STG_SWAPS_CONTRAC TS_CAS	STG_SWAPS_CONTRACTS	FCT_COMMON_ACCOUNT_SUMMA RY
T2T_FCT_ALM_ACCOUNT ANNUITY	FSI_D_ANNUITY_CONTRACTS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT BORROWINGS	FSI_D_BORROWINGS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT BREAK_FUNDING	FSI_D_BREAK_FUNDING_CHARGES	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT CASA	FSI_D_CASA	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT CREDIT_LINES	FSI_D_CREDIT_LINES	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT CREDITCARDS	FSI_D_CREDIT_CARDS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT_T DEPOSITS	FSI_D_TERM_DEPOSITS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT FORWARDS	FSI_D_FORWARD_RATE_AGMTS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT FUTURES	FSI_D_FUTURES	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT FX_CONTRACTS	FSI_D_FX_CONTRACTS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT GUARANTEES	FSI_D_GUARANTEES	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUN TINVESTMENTS	FSI_D_INVESTMENTS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUN TLEASES	FSI_D_LEASES	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT LEDGER_STAT	FSI_D_LEDGER_STAT_INSTRUMENT	FCT_ALM_ACCOUNT_SUMMARY

T2T_FCT_ALM_ACCOUNT LOANS	FSI_D_LOAN_CONTRACTS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT MM_CONTRACTS	FSI_D_MM_CONTRACTS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT MORTGAGE_BACK_SEC	FSI_D_MORTGAGE_BACK_SEC	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT MORTGAGES	FSI_D_MORTGAGES	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT OPTIONS	FSI_D_OPTIONS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT RETIREMENT	FSI_D_RETIREMENT_ACCOUNTS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT SWAPS	FSI_D_SWAPS	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT ANNUITY	FSI_D_ANNUITY_CONTRACTS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT ANNUITY	FSI_D_ANNUITY_CONTRACTS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT BORROWINGS	FSI_D_BORROWINGS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT CASA	FSI_D_CASA	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT CREDIT_LINES	FSI_D_CREDIT_LINES	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT CREDITCARDS	FSI_D_CREDIT_CARDS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT_T DEPOSITS	FSI_D_TERM_DEPOSITS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT_F ORWARDS	FSI_D_FORWARD_RATE_AGMTS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT GUARANTEES	FSI_D_GUARANTEES	FCT_FTP_ACCOUNT_SUMMARY

T2T_FCT_FTP_ACCOUNTI NVESTMENTS	FSI_D_INVESTMENTS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_ALM_ACCOUNT LEASES	FSI_D_LEASES	FCT_ALM_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNTL OANS	FSI_D_LOAN_CONTRACTS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT_M M_CONTRACTS	FSI_D_MM_CONTRACTS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT MORTGAGES	FSI_D_MORTGAGES	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT_R ETIREMENT	FSI_D_RETIREMENT_ACCOUNTS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT_S WAPS	FSI_D_SWAPS	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_ACCOUNT_B REAK_FUNDING	FSI_D_BREAK_FUNDING_CHARGES	FCT_FTP_ACCOUNT_SUMMARY
T2T_FCT_FTP_LOAN_COM MITMENTS	FSI_D_LOAN_COMMITMENTS	FCT_LOAN_COMMITMENTS

6.3 Executing the Account Summary Population T2T

NOTE	You can use a seeded batch Infodom_FFAS_Consolidated_Batch to execute all the FCT_FTP_ACCOUNT_SUMMARY T2Ts. This batch also includes the DTs to delete the data from the FCT_FTP_ACCOUNT_SUMMARY table.
	If you are creating a new batch to execute the FCT_FTP_ACCOUNY_SUMMARY T2Ts, then delete the data from the FCT_FTP_ACCOUNY_SUMMARY table before executing to T2Ts for same AS of DATE or MIS DATE.

The following steps describe how to execute the ALM BI Account Summary T2T processes from the OFSAAI Batch Processing framework.

You can execute the function from the Operations module of OFSAAI, as mentioned below.

Define a new Batch and an underlying Task definition from the **Batch Maintenance** window of OFSAAI. For more information on defining a new Batch, the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition, follow these steps:

- 1. Select the check box adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed.
- 3. Enter the Task ID and Description.
- 4. Select Load Data from the **Load Data** drop-down list.
- 5. Select the following from the **Dynamic Parameters** list:
 - Datastore Type: Select the appropriate datastore from the list.
 - Datastore Name: Select the appropriate name from the list.
 - IP Address: Select the IP address from the list.
 - Load Mode: Select Table to Table from the list.
 - Source Name: Select PROCESSING from the list. (This is seeded with the ALM BI solution install.)
 - File Name: Select the T2T name for the instrument you want to process. This is a seeded T2T name installed as part of the ALM BI solution installer. If you don't see this in the drop-down, contact <u>Oracle support</u>.
 - Data file Name: NULL
 - Default Value: Enter the reporting currency value in the following format. [DRCY]='ABC' (where 'ABC' denotes reporting currency code, for example, 'USD').
- 6. Click **Save**. The Task definition is saved for the selected Batch.
- 7. Execute the Batch.

You can execute a Batch definition from the Batch Execution window of the OFSAAI Operations module.

NOTE You cannot execute this process from the **Simplified Batch** window.

6.4 Checking the Execution Status

The Batch execution status can be monitored through the **Batch Monitor** window of the OFSAAI Operations module.

The status messages in the batch monitor are:

- N: Not Started
- 0: On Going

- F: Failure
- S: Success

The Batch Process execution log and the detailed Time Dimension component log can be accessed on the application server at $\protect{sfic_DB_HOME/log/t2t}$.

The file name will have the Batch Execution ID.

For more information on populating the Common Account Summary data directly from Instrument tables, see the <u>Update Breakage Charges through Batch Execution</u>.

7 Fact Ledger Population

Fact Ledger population involves populating the FCT_LEDGER_STAT table from the LEDGER_STAT table.

Topics:

- <u>Overview of Fact Ledger Population Transformation</u>
- Prerequisites
- Tables Used by the Fact Ledger Population Transformation
- Executing the Fact Ledger Population Transformation
- <u>Checking the Execution Status</u>

7.1 Overview of Fact Ledger Population Transformation

The LEDGER_STAT table is optimized for processing purposes but is not a convenient structure for reporting purposes. In generating FACT_LEDGER_STAT, time from LEDGER_STAT is transformed into an explicit dimension in FACT_LEDGER_STAT.

Fact Ledger Population transformation is used to populate the FCT_LEDGER_STAT table from the LEDGER_STAT table. The horizontally structured MONTH and YTD columns in Ledger or Stat are transposed to a vertical structure. The twelve Month Columns in LEDGER_STAT are replaced by a single N_AS_OF_DATE_SKEY column in FCT_LEDGER_STAT with each month value stored in N_VALUE column. Similarly, the YTD column value is stored in N_VALUE_YTD. This is done to make reporting easier, considering Time is a dimension in most of the reports.

The database components, used by the Fact Ledger Population transformations are:

- Database function FSI_LEDGER_STAT_TRM
- Database function LEDGER_STAT_TRM, which is called by the function FSI_LEDGER_STAT_TRM mentioned above.

7.2 Prerequisites

Following are the pre-requisites for the Fact Ledger Population Transformation:

- 1. All the post-install steps mentioned in the <u>Oracle Financial Services Asset Liability Management</u> <u>Analytics Installation and Configuration Guide</u> have been completed successfully.
- **2.** The application User must be mapped to a role that has seeded batch execution function (BATPRO).
- **3.** Ensure that your FISCAL year information is configured properly. It has the following two columns.
 - FISCAL_PERIOD: This gives the number of months in the given FISCAL period.
 - START_MONTH: This indicates which month of the calendar year is the FISCAL starting month. For example, a value '1' for this column means FISCAL year starts from January, and the value of '4' indicates that the FISCAL year starts from April.

- 4. Before executing a Batch, check if the following services are running on the application server.
 - Iccserver
 - Router
 - AM Server
 - Messageserver
 - Olapdataserver

For more information on how to check if the services are up and how to start the services, see the <u>Oracle Financial Services Analytical Applications Infrastructure User Guide</u>.

5. Batches must be created for executing the function. For more information, see the <u>How to</u> <u>Define a Batch</u> section.

7.3 Tables Used by the Fact Ledger Population Transformation

Following are the tables used by the Fact Ledger Population Transformation:

• FCT_ALM_SIGNIFICANT_CURRENCY: This table helps to identify which of the currencies for a given legal entity have material exposure. It stores a list of currencies for each legal entity on the books and marks them as 'significant' if the assets or liabilities in a significant currency exceed a certain threshold. That is, as per Interest Rate Risk in Banking Book regulation a currency is considered to have 'material exposure' if it accounts for more than 5% of either banking book assets or liabilities.

Below are the details:

- N MIS DATE SKEY: key of the date. The date-key is stored in YYYYMMDD format.
- V_CALC_BASIS_CODE: This column stores code that identifies the basis that was used in significant currency calculation. Example Asset, Liability, Transaction Turnover, Cashflows, IRRBB, and so on.
- N_ENTITY_SKEY: This column stores the surrogate key of the legal entity for which calculation is being performed.
- V ISO CURRENCY CODE: Three letter ISO currency code.
- N_ASSET_BAL_TOTAL: This column stores the total asset balance of selected legal entity across all currencies.
- N_ASSET_BAL_CCY_WISE: This column stores the currency-wise asset balance of a given legal entity.
- N_LIAB_BAL_TOTAL: This column stores the total liability balance of selected legal entity across all currencies.
- N_LIAB_BAL_CCY_WISE: This column stores the currency-wise liability balance of given legal entity.
- F_SIGNIFICANT_CCY_FLAG: This column indicates the significant material exposure. 'Y' indicates significant while 'N' indicates non-significant.

- V_REPORTING_CURRENCY_CODE: This column stores the code for currency in which all amounts are denominated.
- FSI_FISCAL_YEAR_INFO: This table has the FISCAL year info. The entries required in this table are mentioned in the Prerequisites section.
- FSI_BI_SETUP_TABLE: This table has the setup information used by the Fact Ledger Population Transformation. They are:
 - TARGET TABLE NAME: This is the destination table name for transformation.
 - TARGET_COLUMN_NAME: This is the Destination column name in the FCT_LEDGER_STAT table.
 - MEMBER COL NAME: This is the column Name in the LEDGER STAT table.
 - SOURCE_DIM_TABLE_NAME: This is the dimension table to which the Ledger data has to be joined to get the surrogate key value.
 - SOURCE_COLUMN_NAME: This is the column in the dimension table to which the LEDGER STAT ID column is joined.
 - SKEY_COLUMN_NAME: This is the column in the dimension table which has the surrogate key value.
 - JOIN_REQUIRED: This provides the information, whether the column to be moved into FCT_LEDGER_STAT is directly available in LEDGER_STAT or a join must be taken with the dimension table to get the surrogate key.
- LEDGER STAT: This table is the source of the transformation.
 - DIM_<Dimension Name>: The flattened dimension tables used in Business Intelligence (BI) reporting are accessed to obtain the surrogate key to be populated to FCT_LEDGER_STAT dimension columns. For example, DIM ORG UNIT, DIM PRODUCT, and so on.
- FCT_LEDGER_STAT: This is the output table for the transformation. For more details on viewing the structure of these tables, see <u>Oracle Financial Services Analytical Applications Data Model</u> <u>Data Dictionary</u> or the ALMBI Erwin Data Model. The Custom Dimensions can be added to the target table, FCT LEDGER STAT by updating the configuration table FSI BI SETUP TABLE.
- DIM_LOB and DIM_ORG_STRUCTURE are two Custom Dimension tables, for which the dimension data must be entered manually during implementation.

7.4 Executing the Fact Ledger Population Transformation

You can execute the function from the Operations framework module of OFSAAI.

This component for ALMBI has been seeded with the Batch ID <INFODOM>_Fact_Table_Transformation - Task1, which can be executed from the Batch Execution window. A single Batch triggers the transformation for FCT LEDGER STAT.

The Parameter List includes pstart_month, pend_month, pyears, pidentity_code,
psource_type, pre_run_flg, and prcy.

For example, 1,12,1994,",",'Y','USD'.

You can also define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u>.

To define a new task for a Batch definition, follow these steps:

- 1. Select the check box adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed.
- **3.** Enter the Task ID and Description.
- 4. Select Run Executable from the **Run Executable** drop-down list.
- 5. Select the following from the **Dynamic Parameters** list:
 - Datastore Type: Select the appropriate datastore type from the drop-down list.
 - Datastore Name: Select the appropriate datastore name from the list.
 - IP address: Select the IP address from the list.
 - Rule Name: Select FSI_LEDGER_STAT_TRM from the drop-down list of available transformations. (This is a seeded Data Transformation which is installed as part of the ALMBI solution installer. If you don't see this in the list, contact Oracle support).
 - Parameter List: Enter pStart_Month , pEnd_Month , pYears , pIdentity_Code , pSource_Type , pRe_Run_Flg, and pRCY.
 - pStart Month: This is an optional parameter that indicates the Starting Month.
 - pEnd Month: This is an optional parameter that indicates the Ending Month.
 - pYears: This is a mandatory parameter that indicates the Year value.
 - pIdentity Code: This is an optional parameter that indicates the Identity Code.
 - This is the identity code in the LEDGER_STAT table. The value 'O' in this field indicates, only the rows in LEDGER_STAT with identity code 'O' should get processed. Identity code 'O' indicates rows in LEDGER_STAT loaded by the ledger load program. This results in the movement of rows loaded by ledger load program to FCT_LEDGER_STAT. Similarly, any particular allocation output values can be moved by filtering on the identity code.
 - pSource_Type: This is an optional parameter that indicates the Source Type. Source Type indicates which process populated a row in LEDGER_STAT. For example, '0' indicates it was loaded by the Ledger Load program and '100' indicates the allocation rule populated it, and so on.
 - pRe_Run_Flg: This is an optional parameter that indicates the Rerun Flag. If the value is 'Y', the existing data in the fact table will be removed and reloaded.
 - prcy: This indicates the reporting currency with Default Value 'USD'.
- 6. Click **Save**. The Task definition is saved for the selected Batch.
- **7.** Execute the Batch.

You can execute a Batch definition from the **Batch Execution** window of the OFSAAI Operations module.

Ledger Stat Transformation can also be directly executed on the database through SQLPLUS.

Use the following details:

- Function Name: FSI_LEDGER_STAT_TRM
- **Parameters**: pBatch_Id, pAs_of_date, pStart_Month, pEnd_Month, pYears, pIdentity_Code, pSource_Type, pRe_Run_Flg, and prcy.
- Sample parameter values are 'Batch1', '20091231', 1, 8, 2009, 0, 0, 'Y', and 'GBP' respectively.

7.5 Checking the Execution Status

The Batch execution status can be monitored through the **Batch Monitor** window of the OFSAAI Operations module.

The status messages in Batch Monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The execution log can also be accessed on the application server in the directory <code>\$FIC DB HOME/log/date</code>, where the file name will have the Batch Execution ID.

You can access the database level operations log by querying the FSI_MESSAGE_LOG table. Filter the Batch Run ID column for identifying the relevant log. Check the <code>.profile</code> file in the installation home if you are unable to find this path.

8 Overview of ALM BI Dashboards and

8.1 Reports

This chapter describes the seeded reports and dashboards.

Topics:

- ALM BI Application
- Advantages of ALM BI
- Accessing the Standard Reports and Dashboard
- ALM BI List of Dashboards
- List of ALM Seeded Reports
- ALM Report Details

NOTE

FTP Reports do not work correctly in standalone ALM setup. You must install the FTP application to view the FTP reports correctly.

8.2 ALM BI Application

The ALM BI application integrates the results generated by the Oracle Asset Liability Management application with Oracle Business Intelligence, giving users the ability to perform queries on ALM Results. This ability enables the user to access seeded reports and dashboards and to quickly develop new reports on a wide variety of information.

Standard reports and dashboards are part of the installation of ALM BI. You can implement these reports as they are available, or modify them to the specifications of your users. Within minutes, you can access valuable information such as Gap Reports, Market Value Sensitivity, and Income Simulation results for quick decision making.

This chapter describes the advantages of ALM BI and discusses how to access seeded reports.

8.3 Advantages of ALM BI

ALM BI leverages OBIEE, to provide out of the box reporting of your Asset Liability Management results. It includes an ALM Reporting Data Mart, Transformation, and Data Movement processes to populate the data mart, the OBIEE Repository file containing all required data elements, join relationships, calculations and hierarchies, and the OBIEE Web Catalog containing definitions of the seeded reports and dashboards.

Through OBIEE, you have access to a robust reporting engine for managing all of your Business Intelligence needs. The key elements are:

- Tabular and Pivot Table reporting
- Drill down and Drill across the capability

- Dashboard publishing
- Graphing and Charting
- Export options, such as Excel, Word, PowerPoint, and PDF

8.4 Accessing the Standard Reports and Dashboards

After installing the ALM BI application, (for more information, see the <u>OFS ALM Installation and</u> <u>Configuration Guide</u>), you will be able to access the standard Dashboards and seeded reports by accessing the OBIEE end user URL and logging in to the application. When you sign-on to the application, you will be directed to your Home Page, which will show basic summary reports.

At the top of the window, you will see a drop-box list containing the listing of all of the seeded dashboards that you can select for navigating to the desired location. Within each dashboard, you will see the associated seeded reports, which are typically providing two views, For example, Base Currency and Consolidated Currency.

Depending on the data being processed, one or both views may be relevant.

From the dashboard, you will have the option to Modify any of the reports, or you can choose the option from the top of the page to navigate to the report writer, where you will be able to access all of the seeded reports. You will also be able to access the Presentation Layer from the report writer if you wish to begin creating new reports.

8.5 Getting Seeded Reports to Show Results

Each seeded dashboard contains a set of Prompts at the top of the page, which require selections for the reports to produce results. Make the appropriate selections for each prompt to correctly filter the query for your results

8.6 ALM BI List of Dashboards

The following dashboards are available in ALMBI.

- 01 ALM Home
- 02 Repricing Gap
- 03 Financial Results
- 04 Earnings At Risk
- 05 Liquidity Risk
- 06 Market Value
- 07 Value At Risk
- 08 Rates
- 09 Assumptions
- 10 Audit
- 11 IRRBB Reporting

Change Database Connection

• Dynamic Infodom Selection

Funds Transfer Pricing Reports

- Fund Transfer Pricing Assumptions Reports
- Fund Transfer Pricing Reports

8.7 List of ALM Seeded Reports

The following seeded reports are available in ALM BI

8.7.1.1 01 ALM Home

- 1. Liquidity Gap Summary in Base Currency
- 2. Repricing Gap Summary in Base Currency
- 3. Forecast Income Statement in Base Currency
- 4. Forecast Balance Sheet Detail in Base Currency
- 5. Forecast Balance Sheet Detail in Consolidated Currency
- 6. Historical Income and Balance Summary
- 7. Historical Income and Balance Detail
- 8. Balance Sheet Account Detail in Base Currency
- 9. Balance Sheet Account Detail in Consolidated Currency

8.7.1.2 02 Repricing Gap

- 10. Repricing Gap Summary in Base Currency
- **11.** Repricing Gap Summary in Consolidated Currency
- 12. Repricing Gap Across Dates in Base Currency
- **13.** Repricing Gap Across Dates in Consolidated Currency
- 14. Repricing Gap Detail in Base Currency
- 15. Repricing Gap Detail in Consolidated Currency

8.7.1.3 03 Financial Results

- 16. Forecast Income Statement in Base Currency
- **17.** Forecast Income Statement in Consolidated Currency
- **18.** Forecast Balance Sheet Summary in Base Currency
- 19. Forecast Balance Sheet Summary in Consolidated Currency
- 20. Net Interest Income Across Scenarios in Base Currency
- 21. Net Interest Income Across Scenarios in Consolidated Currency

- 22. Income Statement Detail in Base Currency
- **23.** Income Statement Detail in Consolidated Currency
- 24. Forecast Balance Sheet Detail in Base Currency
- **25.** Forecast Balance Sheet Detail in Consolidated Currency
- 26. Historical Income and Balance Summary
- 27. Historical Income and Balance Detail
- 28. Detail Cash Flow/Activity in Base Currency
- 29. Detail Cash Flow /Activity in Consolidated Currency
- 30. Balance Sheet Account Detail in Base Currency
- 31. Balance Sheet Account Detail in Consolidated Currency
- 32. Transfer Pricing Income Statement in Base Currency
- 33. Transfer Pricing Income Statement in Consolidated Currency

8.7.1.4 04 Earnings at Risk

- 34. Net Income
- **35.** EaR Frequency Distribution
- 36. Yearly EaR Frequency Distribution
- 37. EaR Distribution by Year Forecasted
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8.8 ALM Report Details

The following section provides information on report content for the majority of seeded reports. Some report details have been excluded in cases where report structure is redundant or where report content is intended for illustrative purposes only. All of the following content is available within the installed ALM BI web catalog by navigating to Answers and opening the desired report in edit mode.

8.8.1 Repricing Gap Summary in Base Currency

8.8.2 Repricing Gap Summary in Consolidated Currency

Report Name	IRR BucketWise Summary IRR BucketWise Summary Cons Currency	
Description	Summary Repricing Gap Report. This report is a view of repricing gap results shown at the level of Rate Sensitive Assets, Rate Sensitive Liabilities, NetGap, and Cumulative Gap.	
Dashboards Prompts	Prompt Interest Rate 01 Process Scenario Prompt Interest Rate 02 As of Date Currency Result Type Prompt Interest Rate 03 Dynamic Gap Date Bucket End Date	
Report Criteria	Time Buckets.Start Date Time Buckets.End Date Currency.Base Currency Repricing Gap.Gap Runoff (660) Asset	

	Repricing Gap.Gap Runoff (660) Liability
	Repricing Gap.Gap Runoff (660) Receivable
	Repricing Gap.Gap Runoff (660) Payable
	ifnull("Repricing Gap"."Gap Runoff (660) Asset (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Liability (Limit)",0.00)+ifnull("Repricing Gap"."Gap Runoff (660) Receivable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00)
	RSUM(sum(distinct (ifnull("Repricing Gap"."Gap Runoff (660) Asset (Limit)",0.00)- ifnull("Repricing Gap"."Gap Runoff (660) Liability (Limit)",0.00)+ifnull("Repricing Gap"."Gap Runoff (660) Receivable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00))) by "Currency"."Base Currency")
	ifnull("Repricing Gap"."Lower Limit Amount",0.00)
	ifnull("Repricing Gap"."Upper Limit Amount",0.00)
	ifnull("Repricing Gap"."Lower Limit Amount - Interset Rate Risk Cumulative Gap",0.00)
	ifnull("Repricing Gap"."Upper Limit Amount - Interset Rate Risk Cumulative Gap",0.00)
	case when (ifnull("Repricing Gap"."Gap Runoff (660) Asset (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Liability (Limit)",0.00)+ifnull("Repricing Gap"."Gap Runoff (660) Receivable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00)) between "Repricing Gap"."Lower Limit Amount" and "Repricing Gap"."Upper Limit Amount" then 1 else 0 end
	case when (RSUM(sum(distinct (ifnull("Repricing Gap"."Gap Runoff (660) Asset (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Liability (Limit)",0.00)+ifnull("Repricing Gap"."Gap Runoff (660) Receivable (Limit)",0.00)- ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00))) by "Currency"."Base Currency")) between "Repricing Gap"."Lower Limit Amount - Interset Rate Risk Cumulative Gap" and "Repricing Gap"."Upper Limit Amount - Interset Rate Risk Cumulative Gap" then 1 else 0 end
Conditions	Product.Account Type IN (100, 110, 300, 310, 800)
Compound	Title
Layout	Pivot Table
Dashboards	Prompt Interest Rate 01
Prompts	Process
	Scenario
	Prompt Interest Rate 02
	As of Date
	Currency
	Result Type
	Prompt Interest Rate 03
	Dynamic Gap Date
	Bucket End Date

8.8.3 Repricing Gap Across Dates in Base Currency

8.8.4 Repricing Gap Across Dates in Consolidated Currency

Report Name	IRR Across Period 11g IRR Across Period Consolidated Currency
Description	Summary Repricing Gap Report showing the net gap amount for a specific time period over historical time.
Dashboards Prompts	Prompt Interest Rate 01 Process Scenario Prompt Interest Rate 02 As of Date Currency Result Type Prompt Interest Rate 03 Dynamic Gap Date
Report Criteria	Time Buckets.Start Date Time Buckets.End Date Calendar - ALM Results.As-of-Date Currency.Base Currency ifnull("Repricing Gap"."Gap Runoff (660) Asset (Limit)",0.00) ifnull("Repricing Gap"."Gap Runoff (660) Liability (Limit)",0.00)+ifnull("Repricing Gap"."Gap Runoff (660) Receivable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00) rsum(sum(distinct((ifnull("Repricing Gap"."Gap Runoff (660) Asset (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Liability (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Receivable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00)-ifnull("Repricing Gap"."Gap Runoff (660) Payable (Limit)",0.00)))) by Currency."Base Currency") ifnull("Repricing Gap"."Lower Limit Amount",0.00) ifnull("Repricing Gap"."Upper Limit Amount",0.00)
Conditions	Product.Account Type IN (100, 110, 300, 310, 800)
Compound Layout	Title Pivot Table

8.8.5 Repricing Gap Detail in Base Currency

8.8.6 Repricing Gap Detail in Consolidated Currency

2	
Report Name	IRR BucketWise Detail
	IRR BucketWise Detail Cons Currency
Description	Detailed Repricing Gap Report showing the
	gap amount for individual Product
	Hierarchy Line Items
Dashboards Prompts	Prompt Interest Rate 01
	Process
	Scenario
	Prompt Interest Rate 02
	As of Date
	Currency
	Result Type
	Prompt Interest Rate 03
	Dynamic Gap Date
	Bucket End Date
Report Criteria	Time Buckets.Start Date
	Time Buckets.End Date
	Product.Product Name Level 19
	Product.Account Type < formula >: case when "Repricing Gap"."Leg
	Type" =0 then case WHEN
	Product."Account Type" = 100.00 then 'Rate
	Sensitive Assets' WHEN Product."Account Type" = 300.00 then 'Rate
	Sensitive Liabilities' else 'Others' end when "Repricing Gap"."Leg
	Type" =2 then case WHEN Product."Account Type" = 100.00 then 'Rate
	Sensitive Assets' WHEN Product."Account Type" = 300.00 then 'Rate
	Sensitive Liabilities' WHEN Product."Account Type" IN (110.00,
	800.00) then 'Off BS Receivable' else 'Others' end when "Repricing
	Gap"."Leg Type" =1 then case WHEN Product."Account Type" =

100.00 then 'Rate Sensitive Assets' WHEN Product."Account Type" = 300.00 then 'Rate Sensitive Liabilities' WHEN Product."Account Type" IN (310.00, 800.00) then 'Off BS Payable' else 'Others' end else 'Others' endProduct.Sort Order < formula >: case when "Repricing Gap"."Leg Type" =0 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 else 5 end when "Repricing Gap"."Leg Type" =2 then case WHEN Product."Account Type" = 300.00 then 2 else 5 end when "Repricing Gap"."Leg Type" =2 then case WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" =100.00 then 2 WHEN Product."Account Type" = 100.00 then 1 When "Repricing Gap"."Leg Type" =1 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle Pivot Table	1	
WHEN Product."Account Type" IN (310.00, 800.00) then 'Off BS Payable' else 'Others' end else 'Others' endProduct.Sort Order < formula >: case when "Repricing Gap"."Leg Type" =0 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 else 5 end when "Repricing Gap"."Leg Type" =2 then case WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 100.00 then 2 WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 100.00 then 2 WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
else 'Others' end else 'Others' endProduct.Sort Order < formula >: case when "Repricing Gap".'Leg Type" = 0 then case WHEN Product.''Account Type" = 100.00 then 1 WHEN Product.''Account Type" = 300.00 then 2 else 5 end when "Repricing Gap".'Leg Type" = 2 then case WHEN Product.''Account Type" = 100.00 then 1 WHEN Product.''Account Type" = 300.00 then 2 WHEN Product.''Account Type" = 300.00 then 3 else 5 end when "Repricing Gap".''Leg Type" =1 then case WHEN Product.''Account Type" = 110.00 then 1 WHEN Product.''Account Type" = 100.00 then 1 WHEN Product.''Account Type" = 300.00 then 2 WHEN Product.''Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
"Repricing Gap"."Leg Type" = 0 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 else 5 end when "Repricing Gap"."Leg Type" = 2 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 100.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 else 5 end when "Repricing Gap"."Leg Type" = 2 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" IN (110.00, 800.00) then 3 else 5 end when "Repricing Gap"."Leg Type" = 1 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
then 2 else 5 end when "Repricing Gap"."Leg Type" = 2 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" IN (110.00, 800.00) then 3 else 5 end when "Repricing Gap"."Leg Type" =1 then case WHEN Product."Account Type" = 100.00 then 1 WHEN Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
WHEN Product."AccountType" = 100.00 then 1 WHENProduct."Account Type" = 300.00 then 2WHEN Product."Account Type" IN (110.00,800.00) then 3 else 5 endwhen "Repricing Gap"."Leg Type" =1 thencase WHENProduct."Account Type" = 100.00 then 1WHEN Product."Account Type" = 300.00 then 2 WHENProduct."Account Type" IN (510.00,800.00) then 4 else 5 end else 5 endCurrency.Base CurrencyRepricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
Product."Account Type" = 300.00 then 2WHEN Product."Account Type" IN (110.00, 800.00) then 3 else 5 endwhen "Repricing Gap"."Leg Type" =1 then case WHENProduct."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
800.00) then 3 else 5 endwhen "Repricing Gap"."Leg Type" =1 then case WHENProduct."Account Type" = 100.00 then 1 WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
case WHENProduct."Account Type" = 100.00 then 1WHEN Product."AccountType" = 300.00 then 2 WHENProduct."Account Type" IN (310.00,800.00) then 4 else 5 end else 5 endCurrency.Base CurrencyRepricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
WHEN Product."Account Type" = 300.00 then 2 WHEN Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
Product."Account Type" IN (310.00, 800.00) then 4 else 5 end else 5 end Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		
Currency.Base Currency Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		· · ·
Repricing Gap.Gap Runoff (660)ConditionsNoneCompound LayoutTitle		800.00) then 4 else 5 end else 5 end
Conditions None Compound Layout Title		Currency.Base Currency
Compound Layout Title		Repricing Gap.Gap Runoff (660)
	Conditions	None
Pivot Table	Compound Layout	Title
		Pivot Table

8.8.7 Forecast Income Statement in Base Currency

8.8.8 Forecast Income Statement in Consolidated Currency

Report Name	Forecast Income Statement in Base Currency
	Forecast Income Statement in Consolidated Currency

Description	Income Simulation Forecast Report. Includes both current and new business.
Dashboards Prompts	 Prompt Financial Results 01 Process Scenario Prompt Financial Results 02 As of Date Currency Result Type Prompt Financial Results 03 Bucket End Date
Report Criteria	Time Buckets.Start DateTime Buckets.End DateProduct.Account TypeCurrency.Base CurrencyStandard Cash Flow Results.Interest IncomeStandard Cash Flow Results.InterestExpenseStandard Cash Flow Results.Off B/S IncomeStandard Cash Flow Results.Net InterestIncomeStandard Cash Flow Results.Net InterestIncomeStandard Cash Flow Results.Net Non-interest IncomeStandard Cash Flow Results.Net IncomeBefore TaxesStandard Cash Flow Results.Divdends (940)Standard Cash Flow Results.Divdends (940)Standard Cash Flow Results.Local Taxes(930)Standard Cash Flow Results.Local Taxes(935)Standard Cash Flow Results.Income AfterTaxesStandard Cash Flow Results.Non InterestIncome (455)Standard Cash Flow Results.Non InterestExpense (457)Standard Cash Flow Results.Net IncomeBefore Taxes
Conditions	"Product"."Account Type" IN (100, 110, 300, 310, 800, 350, 150, 375, 600),BOTTOMN("Time Buckets"."End Date",12) <= 12

Compound Layout	Title
	Pivot Table

8.8.9 Forecast Balance Sheet Summary in Base Currency

8.8.10 Forecast Balance Sheet Summary in Consolidated Currency

Report Name	Forecast Balance Sheet Summary in Base Currency Forecast Balance Sheet Summary in Cons Currency
Description	Balance Sheet Forecast Report. Provides views of both Ending and Average Balance, across time buckets.
Dashboards Prompts	 Prompt – Income Scenario2 Process Bench Scenario Prompt - Income Scenario3 Date Currency Result Type Prompt Financial Results 03 Bucket End Date
Report Criteria	Product < formula > case WHEN Product."Account Type" IN (100.00, 200.00) then 'Total Assets' WHEN Product."Account Type" IN (300, 400.00, 500.00) then 'Total Liabilities & Equity' end Product.Product Name Level 19 Standard Cash Flow Results.Average Balance (140) Standard Cash Flow Results.Ending Balance (100) Time Buckets.Start Date Time Buckets.End Date Currency.Base Currency
Conditions	Product.Account Type IN (100,200,300,400,500)

		l
Compound Layout	Title	
	View Selector	
	Pivot Table - Average and Ending Balance	1
	Pivot Table2 - Average Balance	ĺ
	Pivot Table3 - Ending Balance	
		İ.

8.8.11 Net Interest Income Across Scenarios in Base Currency

8.8.12 Net Interest Income Across Scenarios in Consolidated Currency

Report Name	Income - Scenario Report in Base Currency Income - Scenario Report in Consolidated Currency
Description	Forecast Income results across scenarios, including change versus bench scenario and percentage change versus bench scenario.
Dashboards Prompts	 Prompt Financial Results 01 Process Bench Scenario Prompt Financial Results 02 As of Date Currency Result Type Bucket End Date
Report Criteria	Process Scenario.Scenario Name Standard Cash Flow Results.Net Interest Income Standard Cash Flow Results.Net Interest Income (Delta to Bench) Standard Cash Flow Results.Net Interest Income (Pct to Bench) Standard Cash Flow Results.Interest CF (Bench) Currency.Base Currency
Conditions	BOTTOMN("Time Buckets"."End Date",12) <= 12

(Compound Layout	Title 3 Pivot Table 2 (Chart) Pivot Table

8.8.13 Income Statement Detail in Base Currency

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8.8.14 Income Statement Detail in Consolidated Currency

Report Name	Forecast Income Statement Detail Product in Base Graph 11g Forecast Income Statement Detail Product in Cons Graph 11g Forecast Income Statement Detail Product in Base Tab 11g Forecast Income Statement Detail Product in Cons Tab 11g
Description	Forecast Income Statement across time buckets with Product level detail.
Dashboards Prompts	 Prompt Financial Results 01 Process Scenario Prompt Financial Results 02 As of Date Currency Result Type Prompt Financial Results 03 Bucket End Date
Report Criteria	Time Buckets.Start Date Time Buckets.End Date Product.Account Type Product.Product Name Level19 Standard Cash Flow Results.Interest Accrued (440) Currency.Base Currency
Conditions	Product."Account Type" IN (100, 110, 300, 310, 800) Product"."Account Type" IN (350, 150) Product"."Account Type" IN (375) Product"."Account Type" IN (600)

	BOTTOMN("Time Buckets"."End Date",12) <= 12
Compound Layout	Title Pivot Table 2 (Chart) Pivot Table

8.8.15 Forecast Balance Sheet Detail in Base Currency

8.8.16 Forecast Balance Sheet Detail in Consolidated Currency

Report Name(s)	Forecast Balance Sheet Detail in Base Currency Forecast Balance Sheet Detail in Consolidated Currency
Description	Forecast Balance Sheet across time buckets, with Product level detail and option to choose Avg + End, Avg Only or End Only.
Dashboards Prompts	Prompt Financial Results 01 Prompt Financial Results 02 Prompt Financial Results 03
Report Criteria	Product < formula >: case WHEN "Product"."Account Type" IN(100.00, 200.00) then 'Total Assets' WHEN "Product"."Account Type" IN (300, 400.00, 500.00) then 'Total Liabilities' end Time Buckets.Start Date Time Buckets.End Date Product.Product Name Level18 Standard Cash Flow Results.Ending Balance (100) Currency.Base Currency
Conditions	Product.Account Type in (100,200,300,400,500)
Compound Layout	Title View Selector Pivot Table - Average and Ending Balance Pivot Table2 - Average Balance

Pivot Table3 - Ending Balance

8.8.17 Historical Income and Balance Summary

Report Name(s)	History Income Statement Summary
Description	Income Statement summary report for historical time periods.
Dashboards Prompts	Prompt - Hist Balance Sheet • As of Date • Currency
Report Criteria	Calendar - Fact Data.Calendar Date Time Buckets.Start Date Ledger Stat.Value (Avg Balance) Ledger Stat.Interest Income Ledger Stat.InterestExpense Ledger Stat.Off B/S Income Ledger Stat.Net Interest Income Ledger Stat.Non Interest Expense Ledger Stat.Non Interest Expense Ledger Stat.Net Non-interest Income Ledger Stat.Net Income Before Taxes Ledger Stat.Net Income Before Taxes Ledger Stat.Pederal Taxes Ledger Stat.Local Taxes Ledger Stat.Income After Taxes Currency.Currency Cd
Conditions	< None >
Compound Layout	Title Pivot Table

8.8.18 Historical Income and Balance Detail

Report Name(s)	History Income Statement Detail
Description	Income Statement detail report for historical time periods.

Dashboards Prompts	Prompt - Hist Balance Sheet • As of Date • Currency
Report Criteria	Calendar - Fact Data.Calendar Date Ledger Stat.FINANCIAL_ELEM_ID Product.Account Type Ledger Stat.Value#1 Currency.Currency Cd
Conditions	"Product"."Account Type" IN (100.00, 200.00, 300.00, 400.00, 500.00) BOTTOMN("Time Buckets"."End Date",12) <= 12 Ledget Stat"."Financial Elem Id" IN (100, 140)
Compound Layout	Title Pivot Table

8.8.19 Detail Cash Flow or Activity in Base Currency

8.8.20 Detail Cash Flow or Activity in Consolidated Currency

Report Name(s)	Detail Cash Flow Activity in Base Currency Detail Cash Flow Activity in Consolidated Currency
Description	Reporting against detail cash flow or Audit results, across time buckets.
Dashboards Prompts	 Prompt Financial Results 01 Process Scenario Prompt Financial Results with Product Leaf As of Date Currency Result Type Bucket End Date Product
Report Criteria	Calendar -ALM Results.As-of-Date

Process Scenario.Process Name
Process Scenario.Scenario Name
Time Bucket.Start Date
Time Bucket.End Date
Standard Cash Flow Results.Beginning
Balance (60)
Standard Cash Flow Results"."Beginning Net Rate (80)
Standard Cash Flow Results"."Reprice Balance (250)
Standard Cash Flow Results"."Before Reprice Net Rate (280)
Standard Cash Flow Results"."After Reprice Net Rate (290)
Standard Cash Flow Results.Payment Runoff - Positive
(190)+Standard Cash Flow Results.Maturity Runoff - Negative (197)
Standard Cash Flow Results"."Maturity Runoff - Positive
(195)"+"Standard Cash Flow Results"."Maturity Runoff - Negative
(197)
"Standard Cash Flow Results"."Prepay Runoff - Positive
(180)"+"Standard Cash Flow Results"."Prepay Runoff - Negative (182)"
Standard Cash Flow Results."Annual Prepay Rate (510)"
ifnull("Standard Cash Flow Results"."Total Runoff - Positive (210)" , 0)
+ ifnull("Standard Cash Flow Results"."Total Runoff - Negative (212)" ,
0)
"Standard Cash Flow Results"."Total Runoff Net Rate (230)"
"Standard Cash Flow Results"."Interest Cash Flow (430)"
"Standard Cash Flow Results"."Interest Credited (480)"
"Standard Cash Flow Results"."Total Runoff - Positive
(210)"+"Standard Cash Flow Results"."Total Runoff - Negative
(212)"+"Standard Cash Flow Results"."Interest Cash Flow

	(430)"+"Standard Cash Flow Results"."Interest Credited (480)"
	"Standard Cash Flow Results"."Interest Accrued (440)"
	"Standard Cash Flow Results"."Deferred Runoff (540)"
	"Standard Cash Flow Results"."New Add Balance (340)"
	"Standard Cash Flow Results"."New Add Net Rate (360)"
	"Standard Cash Flow Results"."Roll Add Balance (380)"
	"Standard Cash Flow Results"."Roll Add Net Rate (400)"
	"Standard Cash Flow Results"."New Add Balance (340)"+"Standard
	Cash Flow Results"."Roll Add Balance (380)"
	"Standard Cash Flow Results"."End Balance (100)"
	"Standard Cash Flow Results"."Ending Net Rate (120)"
	"Standard Cash Flow Results"."Fully Indexed Net Rate (330)"
	"Standard Cash Flow Results"."Average Balance (140)"
	"Standard Cash Flow Results"."Avg Net Rate (160)"
	"Standard Cash Flow Results"."Warm (500)"
	"Standard Cash Flow Results"."Interest Accrued Net (441)"
	"Standard Cash Flow Results"."Non Interest Expense (457)"
	"Standard Cash Flow Results"."Balance Before Prepay (515)"
	Currency.Currency Cd
Conditions	BOTTOMN("Time Buckets"."End Date",12) <= 12
Compound Layout	Title Pivot Table

8.8.21 Balance Sheet Account Detail in Base Currency

8.8.22 Balance Sheet Account Detail in Consolidated Currency

Report Name(s)	Balance Sheet Account Detail Base Currency, Balance Sheet Account Detail Cons Currency
Description	The report displays Current Book Balance, Current Par Balance, Market Value, Current Net Rate, YTM, and Modified Duration.
Dashboards Prompts	 Prompt Balance Sheet Process Process Prompt Balance Sheet Date Currency As of Date Currency
Report Criteria	Productdim, ifnull("Master Results"."Cur Book Balance",0.00), ifnull("Master Results"."Cur Par Balance",0.00), ifnull("Master Results"."Market Value",0.00), ifnull("Master Results"."Option Market Value (711)",0.00), "Master Results"."Cur Net Rate W", "Master Results"."Ytm W", "Master Results"."Modified Duration W", 'Amount in ' "Currency"."Cons Currency", case when "Product"."Product Name Level19"='Total Liabilities + Capital' then 2 when "Product"."Product Name Level19"= 'Total Assets' then 1 when "Product"."Product Name Level19"='Off Balance Sheet Total' then 3 end
Conditions	"Process Scenario"."Scenario Num" = 1,"Master Results"."Result Type Code" = 0
Compound Layout	Tittle Table

8.8.23 Transfer Pricing Income Statement in Base Currency

8.8.24 Transfer Pricing Income Statement in Consolidated Currency

Report Name(s)	Transfer Pricing Income Statement in Base Currency
Description	Report display TP Income Statement across time buckets with Product level detail.
Dashboards Prompts	Prompt - TP Process Scenario Process Scenario Prompt - TP Date Currency Result Bucket As of Date Currency Result Type Prompt - TP Bucket End date Bucket End Date
Report Criteria	'Assets', ifnull("Standard Cash Flow Results". "Interest Cash Flow (430) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow (430) Asset",0.00)-ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow (430) Liabilities",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow (430) Liabilities",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Liabilities",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Liabilities",0.00) - ifnull("Standard Cash Flow Results". "Interest Cash Flow (430) Liabilities",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset Liabilities",0.00), 'Liabilities', 1, "Time Buckets". "Start Date", "Time Buckets". "End Date", "Currency". "Base Currency", ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Asset",0.00), ifnull("Standard Cash Flow Results". "Interest Cash Flow Transfer Rate (437) Liabilities",0.00)
Compound Layout	Title Pivot Table Table

8.8.25 Net Income

Report Name(s)	Net Income
Description	Report display Earnings at Risk outputs for Average, Minimum, Maximum, and Average Std Dev.
Dashboards Prompts	Prompt EAR_002 • As of Date Prompt EAR Process • Process Prompt EAR Bucket End Date • Bucket End Date
Report Criteria	Stochastic Process Details.Process Name "Time Buckets"."End Date" "Earnings-at-Risk"."Rate Path Num" Avg("Earnings-at-Risk"."Net Income")*-1-STDDEV("Earnings-at- Risk"."Net Income") Avg("Earnings-at-Risk"."Net Income")*-1 Avg("Earnings-at-Risk"."Net Income")*-1+STDDEV("Earnings-at- Risk"."Net Income") MIN(-1*"Earnings-at-Risk"."Net Income" by "Dim Calendar - For Bucket End Dates"."Bucket End Date") MAX(-1*"Earnings-at-Risk"."Net Income" by "Dim Calendar - For Bucket End Dates"."Bucket End Date")
Compound Layout	Title Graph Table

8.8.26 EaR Frequency Distribution

Report Name(s)	EaR Frequency Distribution
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Description	The report displays the frequency distribution of EaR earnings results.
Dashboards Prompts	Prompt Earning at Risk Prompt EAR_002 • As of Date Prompt EAR Process • Process Prompt EAR Bucket End Date • Bucket End Date Prompt Earning at Risk • Set # of Bins Prompt EAR Leg Type • Product Type
Report Criteria	 "Earnings-at-Risk".Earnings BIN: floor(@{EAR_001}{20}*(Case when "Earnings-at-Risk".Earnings = min("Earnings-at-Risk".Earnings) then 0.01 when "Earnings-at-Risk".Earnings) then 0.99 else ("Earnings-at-Risk".Earnings) then 0.99 else ("Earnings-at-Risk".Earnings) then 0.99 else ("Earnings-at-Risk".Earnings)) / (max("Earnings-at-Risk".Earnings)) / (max("Earnings-at-Risk".Earnings)) / (max("Earnings-at-Risk".Earnings)) end))+1 ntile("Earnings-at-Risk".Earnings,10) COUNT(DISTINCT "Earnings-at-Risk"."Rate Path Num") "Earnings-at-Risk"."Rate Path Num"
Conditions	< None >
Compound Layout	Title Pivot Table Graph Pivot Table 2

8.8.27 Yearly EaR Frequency Distribution

Report Name(s)	Yearly EaR Frequency Distribution
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Description	The report displays the frequency distribution of EaR earnings results distributed by forecast year.
Dashboards Prompts	Prompt EAR_002 • As of Date Prompt EAR Process • Process Prompt EAR Bucket End Date • Bucket End Date Prompt Earning at Risk • Set # of Bins Prompt EAR Leg Type • Product Type
Report Criteria	"Calendar - ALM Results"."Per Name Year" "Earnings-at-Risk".Earnings "Earnings-at-Risk"."Rate Path Num" floor(@{EAR_001}{20}*(Case when"Earnings-at-Risk".Earnings = min("Earnings-at-Risk".Earnings) then 0.01 when "Earnings-at-Risk".Earnings) then 0.99 else ("Earnings-at-Risk".Earnings) then 0.99 else ("Earnings-at-Risk".Earnings) then 0.99 else ("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings)) end))+1 max("Earnings-at-Risk".Earnings) end))+1 max("Earnings-at-Risk".Earnings) then 0.01 when "Earnings-at-Risk".Earnings) then 0.01 when "Earnings-at-Risk".Earnings) then 0.01 when "Earnings-at-Risk".Earnings) = max("Earnings-at-Risk".Earnings) then 0.99 else ("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings) -MIN("Earnings-at-Risk".Earnings)) / (max("Earnings-at-Risk".Earnings)) -MIN("Earnings-at-Risk".Earnings)) end))+1))
Conditions	< None >
Compound Layout	Title Graph

Graph (2)
Graph (3)
Pivot Table
Pivot Table (3)

8.8.28 EaR Distribution by Year Forecasted

Report Name(s)	EaR Distrubution By Year Forecasted
Description	Reports displays earnings results with each year of forecast aligned for comparison.
Dashboards Prompts	Prompt EAR_002 • As of Date Prompt EAR Process • Process Prompt EAR Bucket End Date • Bucket End Date Prompt Earning at Risk • Set # of Bins Prompt EAR Leg Type • Product Type
Report Criteria	"Calendar - ALM Results"."Per Name Year" "Earnings-at-Risk".Earnings "Earnings-at-Risk".Rate Path Num" floor(@{EAR_001}{20}*(Case when "Earnings-at-Risk".Earnings = min("Earnings-at-Risk".Earnings by "Calendar - ALM Results"."Per Name Year") then 0.01 when "Earnings-at- Risk".Earnings = max("Earnings-at-Risk".Earnings by "Calendar - ALM Results"."Per Name Year") then 0.99 else ("Earnings-at- Risk".Earningsmin(" Earnings-at-Risk".Earnings by "Calendar - ALM Results"."Per Name Year") then 0.99 else ("Earnings-at- Risk".Earningsmin(" Earnings-at-Risk".Earnings by "Calendar - ALM Results"."Per Name Year")) / (max("Earnings-at- Risk".Earnings by "Calendar - ALM Results"."Per Name Year") - MIN("Earnings-at-Risk".Earnings

	by "Calendar - ALM Results"."Per Name Year")) end))+1
Conditions	< None >
Compound Layout	Title Pivot Table Pivot Table (2) Graph

8.8.29 Interest Rate Cloud

Report Name(s)	Interest Rate Cloud
Description	The report displays the 1m Interest Rates generated by the Monte Carlo process for all rate paths including forward rates.
Dashboards Prompts	 Prompt EAR_002_Interest_rate_clould As of Date Prompt EAR Bucket End Date_interest_rate_cloud Process Prompt EAR Bucket End Date Bucket End Date Prompt Interest Rate Cloud New Number of Rate Paths
Report Criteria	"Calendar - ALM Results"."As-of-Date" "Time Buckets"."Bucket Id" "Fact Stochastic Interest Rates"."Net Rate" "Fact Stochastic Interest Rates"."Rate Path Num"
Conditions	Fact Stochastic Interest Rates"."Rate Path Num" <= @{PATH}{100}
Compound Layout	Title

8.8.30 Income Distribution Min or Max or Avg

Report Name(s)	Net_Income_25_3
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Description	The report displays average earnings across all rates paths along with the minimum and maximum earnings results from the simulation over forecast time buckets.
Dashboards Prompts	Prompt EAR_002 - As of Date Prompt EAR Process- Process Prompt EAR Bucket End Date- Bucket End Date Prompt EAR Leg Type-Product Type Prompt EAR Product- Product
Report Criteria	"Stochastic Process Details"."Process Id" "Time Buckets"."End Date" "Earnings-at-Risk"."Rate Path Num" "Earnings-at-Risk"."Net Interest Income" AVG("Earnings-at-Risk"."Net Interest Income" by "Time Buckets"."End Date") Max("Earnings-at-Risk"."Net Interest Income" by "Time Buckets"."End Date") Min("Earnings-at-Risk"."Net Interest Income" by "Time Buckets"."End Date")
Conditions	< None >
Compound Layout	Title Graph

8.8.31 Net Income Distribution Min 3 or Max 3 or Avg

Report Name(s)	Net_Income_25_5
Description	The report displays average earnings across all rates paths along with top 3 and bottom 3 earnings results from the simulation over forecast time buckets.
Dashboards Prompts	Prompt - EAR_002 • As of Date Prompt - EAR Process • Process Prompt - EAR Bucket End Date • Bucket End Date

	1
Report Criteria	"Time Buckets"."End Date"
	"Earnings-at-Risk"."Rate Path Num"
	AVG("Earnings-at-Risk"."Net Interest Income" by "Time
	Buckets"."End Date")
	Max("Earnings-at-Risk"."Net Interest Income" by"Time Buckets"."End
	Date")
	Min("Earnings-at-Risk"."Net Interest Income" by "Time Buckets"."End
	Date")
	CASE WHEN RANK("Earnings-at-Risk"."Net Interest Income" BY
	"Time Buckets"."End Date") = 2 THEN "Earnings-at-Risk"."Net Income" END
	CASE WHEN RANK("Earnings-at-Risk"."Net Interest Income" BY
	"Time Buckets"."End Date") = (max (RANK("Earnings-at- Risk"."Net
	Interest Income" BY "Time Buckets"."End Date")) -1) THEN
	"Earnings-at-Risk"."Net Income" END
	CASE WHEN RANK("Earnings-at-Risk"."Net Interest Income" BY
	"Time Buckets"."End Date") = 3 THEN "Earnings-at-Risk"."Net
	Income" END
	CASE WHEN RANK("Earnings-at-Risk"."Net Interest Income" BY
	"Time Buckets"."End Date") = (max (RANK("Earnings-at- Risk"."Net
	Interest Income" BY"Time Buckets"."End Date")) -1) THEN
	"Earnings-at-Risk"."Net Income" END
Conditions	< None >
Compound Layout	Title
	Graph

8.8.32 Net Income Distribution

Report Name(s)	Net Income distribution
Description	Report displays earnings for all rate paths across time buckets.
Dashboards Prompts	Prompt - EAR_002

	 As of Date Prompt - EAR Process Process Prompt - EAR Bucket End Date Bucket End Date
Report Criteria	"Stochastic Process Details"."Process Id" "Time Buckets"."End Date" "Earnings-at-Risk"."Rate Path Num" "Earnings-at-Risk"."Net Income" AVG("Earnings-at-Risk"."Net Income" by "Time Buckets"."End Date")
Conditions	< None >
Compound Layout	Title Graph

8.8.33 EaR History by Product

8.8.34 EaR History by Portfolio

Report Name(s)	EaR History by Product, EaR History by Portfolio
Description	Report displays product wise or portfolio wise earnings at risk across time buckets or as of date.
Dashboards Prompts	Prompt EAR_002 • As of Date Prompt EAR Process • Process Prompt EAR Product • Product • Product Type Prompt EAR Bucket End Date • Bucket End Date
Report Criteria	"Earnings-at-Risk"."Earnings","Earnings-at-Risk"."Rate Path Num",RSUM("Earnings-at-Risk"."Earnings"),Currency."Cons Currency","Calendar - ALM Results"."As-of-Date","Dim Calendar - For Bucket End Dates"."Bucket End Date"

Conditions	rank("Earnings-at-Risk"."Earnings" by "Dim Calendar - For Bucket End Dates"."Bucket End Date") = @{EAR_RANK}{2}
Compound Layout	Title Pivot Table (3) Graph

8.8.35 Liquidity Gap Summary in Base Currency

8.8.36 Liquidity Gap Summary in Consolidated Currency

Report Name(s)	Liquidity Gap Summary in Base Currency Liquidity Gap Summary in Consolidated Currency
Description	The report displays a summary view of liquidity gap cash flows over liquidity gap time buckets.
Dashboards Prompts	Prompt As of Date • As of Date Prompt Liquidity Gap 01 Test1 11g • Process or Run • Scenario Prompt Liquidity Gap 01 Test3 11g • Legal Entity • Currency Type Prompt Liquidity Gap 02 New • Currency • Result Type Prompt Liquidity Gap 03 • Dynamic Gap Date Prompt - Bucket End Date • Bucket End Date
Report Criteria	"Time Buckets"."Start Date" "Time Buckets"."End Date" "Time Buckets"."Bucket Name" "Time Buckets"."Bucket Id" "Liquidity Risk Gap"."Total Inflows Base" "Liquidity Risk Gap"."Total Outflows Base" "Liquidity Risk Gap"."Net Liquidity Gap Base" "Liquidity Risk Gap"."Net Gap as % of Total Outflows Base"

	"Liquidity Risk Gap"."Cumulative Liquidity Gap Base" "Liquidity Risk Gap"."Gap Limit" "Liquidity Risk Gap"."Net Gap as % of Total Outflows Base"-"Liquidity Risk Gap"."Gap Limit"
Conditions	Product."Account Type" IN (100.00, 110.00, 300.00, 310.00, 800.00, 200.00, 400.00),BOTTOMN("Time Buckets"."End Date",12) <= 12
Compound Layout	Title Graph

8.8.37 Liquidity Gap Detail - Product in Base Currency

8.8.38 Liquidity Gap Detail - Product in Consolidated Currency

Report Name(s)	Liquidity Gap Detail - Product in Base Currency Liquidity Gap Detail - Product in Consolidated Currency
Description	The report displays the Gap Amount by Product across liquidity time buckets.
Dashboards Prompts	Prompt Liquidity Gap 01 Process Scenario Prompt Liquidity Gap 02 As of Date Currency Result Type Prompt Liquidity Gap 03 Product Dynamic Gap Date Prompt - Bucket End Date Bucket End Date
Report Criteria	"Time Buckets"."Start Date" "Time Buckets"."End Date" "Time Buckets"."Bucket Name" Case when Product."Account Type" in (100,110, 200) then 'Total Inflows' when Product."Account Type" in (800) and "Liquidity Risk Gap"."Leg Type"=2 then 'Total Inflows' when Product."Account Type" in (300,310, 400) then 'Total Outflows'

	when Product."Account Type" in (800) and "Liquidity Risk Gap"."Leg Type"=1 then 'Total Outflows' end Product."Product Name Level18" "Currency"."Base Currency" ifnull("Liquidity Risk Gap"."LR Gap Principal Runoff (1661)"+"Liquidity Risk Gap"."LR Interest CF Net (1672)",0)
Conditions	"Product"."Account Type" IN (100, 110, 300, 310, 800, 200, 400),BOTTOMN("Time Buckets"."End Date",12) <= 12
Compound Layout	Title Pivot Table

8.8.39 Liquidity Gap- Result Type in Base Currency

8.8.40 Liquidity Gap- Result Type in Consolidated Currency

Report Name(s)	Liquidity Gap- Result Type in Base Currency Liquidity Gap- Result Type in Consolidated Currency
Description	The report displays the Gap Amount by Result Type across liquidity time buckets.
Dashboards Prompts	 Prompt - Liquidity Gap 01 Process Scenario Prompt - Liquidity Gap 02 (Business Type) As of Date Currency Prompt Liquidity Gap 03 Business Type Dynamic Gap Date Prompt - Liquidity Gap 03 Business Type - End Date Bucket End Date
Report Criteria	"Time Buckets"."Start Date" "Time Buckets"."End Date" "Time Buckets"."Bucket Name" "Result Type"."Result Type" "Currency"."Base Currency" Liquidity Risk Gap."Net Liquidity Gap"

Conditions	Product."Account Type" IN (300.00, 310.00, 400.00, 800.00),Product."Account Type" IN (100.00, 110.00, 200.00, 800.00),Product."Account Type" IN (100.00, 110.00, 200.00, 800.00,300.00,310.00.400.00),BOTTOMN("Time Buckets"."End Date",12) <= 12
Compound Layout	Title Pivot Table 3

8.8.41 Distribution Profile of Term Deposits

Report Name(s)	Distribution Profile of Term Deposits
Description	The report displays the balance of Term Deposit funding across Organization Unit.
Dashboards Prompts	 Prompt - Distribution Profile of Term Deposits As of Date Currency Prompt for Term Deposits Product Name
Report Criteria	Remaining Term Bucket."Bucket Name" Organizational Unit."Org Unit Name Level16" Organizational Unit."Org Unit Leaf Name" ifnull("Account Summary"."Cur Net Book Bal C"/1000000,0) "Currency"."Base Currency" Liquidity Risk Gap."Net Liquidity Gap"
Conditions	"Account Summary"."Remaining Term Bucket Number Char" IN ('1', '2', '3', '4', '5', '6', '7', '8') and UPPER("Instrument Type"."Instrument Type") = 'TERM DEPOSITS' and MIs Cd is equal to / is in US
Compound Layout	Title Pivot Table Pivot Table 2 Pivot Table 3

8.8.42 Market Value Summary in Base Currency

8.8.43 Market Value Summary in Consolidated Currency

Report Name(s)	Market Value Summary in Base Currency Market Value Summary in Consolidated Currency
Description	Report displays summary Market Value and Market Value of Equity results over historical time.
Dashboards Prompts	Prompt Market Value 1 Process Scenario Prompt Market Value As of Date Currency Start Date Index Product Type
Report Criteria	Calendar - ALM Results."As-of-Date" "Master Results"."Market ValueN (A)" "Master Results"."Market ValueN (L)" Master Results."Net Market Value" Product."Account Type" Currency."Base Currency" "Master Results"."Market Value (Off B/s Payable)","Master Results"."Market Value (off B/s Receivable)"
Conditions	"Product"."Account Type" IN (100, 110, 200, 300, 310, 400, 800),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title Pivot Table (2) Pivot Table

8.8.44 Market Value of Equity in Base Currency

8.8.45 Market Value of Equity in Consolidated Currency

Report Name(s)	Market Value of Equity Pivot
	Market Value of Equity Pivot in Cons Currency
	Market Value of Equity Graph,
	Market Value of Equity Graph - Pivot,

	Market Value of Equity Cons Currency Graph
	Market Value of Equity Cons Currency Graph - pivot
Description	The report displays Market Value Results across scenarios with change versus bench scenario comparison.
Dashboards Prompts	Prompt Market Value 1
	Prompt Market Value
Report Criteria	Calendar - ALM Results."As-of-Date" Product."Account Type"
	Currency."Base Currency" ')'
	Process Scenario."Scenario Name"
	case when "Process Scenario (Bench)"."Scenario Name"="Process
	Scenario"."Scenario Name" then 1 end
	Master Results." Net Market Value"
	Master Results." Net Market Value (Delta To Bench)"
	Master Results."Market Value (Net Pct To Bench)"
	CASE WHEN (Product."Account Type" IN (100, 200)) THEN 'Market Value (Asset)' ELSE CASE WHEN (Product."Account Type" IN (300, 400)) THEN 'Market Value (Liabilities)' ELSE CASE WHEN (Product."Account Type" IN (110) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=2))) THEN 'Market Value (off B/s Receivable)' ELSE CASE WHEN (Product."Account Type" IN (310) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=2))) THEN 'Market Value (off B/s Receivable)' ELSE CASE WHEN (Product."Account Type" IN (310) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=1))) THEN 'Market Value (off B/s Payable)' END END END END
Conditions	CAST(Product."Account Type" as integer) IN (100, 200, 300, 400, 110, 310, 800),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Graph
. ,	Pivot Table
	Pivot Table (2)

8.8.46 Net Duration Summary in Base Currency

8.8.47 Net Duration Summary in Consolidated Currency

Report Name(s)	Duration Summary in Base Currency
	Duration Summary in Consolidated Currency

Description	The report displays summary Duration and Duration of Equity results over historical time.
Dashboards Prompts	Prompt Market Value 1 Process Scenario Prompt Market Value As of Date Currency Start Date Index Product Type
Report Criteria	Calendar - ALM Results."As-of-Date" Product."Account Type" Currency."Base Currency" "Master Results"."Duration of Equity", "Master Results"."Duration Gap" "Master Results"."Market ValueN (A)" "Master Results"."Market ValueN (L)" "Master Results"."Market Value (Off B/s Payable)" "Master Results"."Market Value (off B/s Receivable)" "Master Results"."Net Duration of Equity" "Master Results"."Net Duration Gap"
Conditions	Product."Account Type" IN (100, 110, 200, 300, 310, 400, 800),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title Pivot Table (2) Pivot Table

8.8.48 Net Duration of Equity in Base Currency

8.8.49 Net Duration of Equity in Consolidated Currency

Report Name(s)	Duration of Equity Duration of Equity Cons Currency
Description	The report displays Duration Results across scenarios with change versus bench scenario comparison.

Dashboards Prompts	Prompt Market Value 1 Process Scenario Prompt Market Value As of Date Currency Start Date Index Product Type
Report Criteria	Calendar - ALM Results."As-of-Date" Product."Account Type" Currency."Base Currency" ')' Process Scenario."Scenario Name" case when "Process Scenario (Bench)"."Scenario Name" = "Process Scenario"."Scenario Name" then 1 end Master Results."Net Duration" Master Results."Net Duration (Delta To Bench)"
Conditions	< None >
Compound Layout	Title Pivot Table (2) Pivot Table (3)

8.8.50 Market Value Detail in Base Currency

8.8.51 Market Value Detail in Consolidated Currency

Report Name(s)	Market Value Detail Product Wise Market Value Detail Product Wise Cons Currency
Description	Report displays market value results for detailed products.
Dashboards Prompts	Prompt Market Value 1 • Process • Scenario Prompt Market Value • As of Date • Currency

	Start Date IndexProduct Type
Report Criteria	Calendar - ALM Results."As-of-Date" Product."Account Type" Product."Product Name Level19" Master Results."Market Value" CASE WHEN (Product."Account Type" IN (100, 200)) THEN 'Market Value (Assets)' ELSE CASE WHEN (Product."Account Type" IN (300, 400)) THEN 'Market Value (Liabilities)' ELSE CASE WHEN (Product."Account Type" IN (110) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=2))) THEN 'Market Value (Off B/s Receivable)' ELSE CASE WHEN (Product."Account Type" IN (310) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=1))) THEN 'Market Value (Off B/s Payable)' END END END END , "Currency"."Base Currency"
Conditions	Product."Account Type" IN (100.00, 200.00, 300.00, 400.00, 800.00, 110.00, 310.00),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title (2) Pivot Table

8.8.52 Market Value Detail by Scenario in Base Currency

8.8.53 Market Value Detail by Scenario in Consolidated Currency

Report Name(s)	Market Value of Equity - Detail Market Value of Equity Cons Currency Detail
Description	Report displays market value results for a selected product with comparison across scenarios.
Dashboards Prompts	Prompt Market Value 1 Process Scenario Prompt Market Value As of Date Currency Start Date Index Product Type

Report Criteria	Calendar - ALM Results."As-of-Date"
	Product."Product Name Level19"
	case when "Process Scenario (Bench)"."Scenario Name"="Process
	Scenario"."Scenario Name" then 1 end
	Master Results."Market Value"
	Master Results."Market Value (Bench)"
	Master Results."Market Value (Delta To Bench)"
	Master Results."Market Value (Pct To Bench)" "Currency"."Base Currency",
	CASE WHEN (Product."Account Type" IN (100, 200)) THEN 'Market Value (Asset)' ELSE CASE WHEN (Product."Account Type" IN (300, 400)) THEN 'Market Value (Liabilities)' ELSE CASE WHEN (Product."Account Type" IN (110) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=2))) THEN 'Market Value (off B/s Receivable)' ELSE CASE WHEN (Product."Account Type" IN (310) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=1))) THEN 'Market Value (off B/s Payable)' END END END END
Conditions	"Product"."Account Type" IN (100, 110, 200, 300, 310, 400, 800),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title Pivot Table

8.8.54 Duration Detail in Base Currency

8.8.55 Duration Detail in Consolidated Currency

Report Name(s)	Duration Detail Product Wise in Base Currency Duration Detail Product Wise Cons Currency
Description	The report displays Duration results for detailed products.
Dashboards Prompts	Prompt Market Value 1 • Process • Scenario Prompt Market Value • As of Date • Currency

	Start Date IndexProduct Type
Report Criteria	Calendar - ALM Results."As-of-Date" Product."Account Type" Product."Product Name Level19" Master Results.Duration R Currency."Base Currency",CASE WHEN (Product."Account Type" IN (100, 200)) THEN 'Duration (Assets)' ELSE CASE WHEN (Product."Account Type" IN (300, 400)) THEN 'Duration (Liabilities)' ELSE CASE WHEN (Product."Account Type" IN (110) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=2))) THEN 'Duration (Off B/s Receivable)' ELSE CASE WHEN (Product."Account Type" IN (310) OR (Product."Account Type" IN (800) AND ("Master Results"."Leg Type"=1))) THEN 'Duration (Off B/s Payable)' END END END END
Conditions	Product."Account Type" IN (100.00, 200.00, 110.00, 310.00, 300.00, 400.00, 800.00),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title (2) Pivot Table

8.8.56 Duration Detail by Scenario in Base Currency

8.8.57 Duration Detail by Scenario in Consolidated Currency

Report Name(s)	Duration of Equity Detail Market Value of Equity Cons Currency Detail
Description	The report displays Duration results for a selected product with comparison across scenarios.
Dashboards Prompts	Prompt Market Value 1 Process Scenario Prompt Market Value As of Date Currency Start Date Index Product Type

Report Criteria	Calendar - ALM Results."As-of-Date"
	Currency."Base Currency"
	Product."Product Name Level19"
	Process Scenario."Scenario Name"
	case when "Process Scenario (Bench)"."Scenario Name"="Process
	Scenario"."Scenario Name" then 1 end
	Master Results.Duration
	Master Results."Duration (Bench)"
	Master Results."Duration (Delta To Bench)"
	Master Results."Duration (Pct To Bench)"
Conditions	"Product"."Account Type" IN (100, 110, 200, 300, 310, 400, 800),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title
	Pivot Table

8.8.58 Market Value Detail in Base Currency

8.8.59 Market Value Detail in Consolidated Currency

Report Name(s)	Market Value Detail
Description	The report displays Current balance, Market Value, MV Price, Current Rate and duration.
Dashboards Prompts	Prompt- Market Value Detail1 Process Scenario Product Type Prompt Market Value - Overview As of Date Currency Start Date Index
Report Criteria	Product."Product Leaf Name",Product."Product Name Level19","Master Results"."Cur Par Bal","Master Results"."Market Value",("Master Results"."Market Value" /"Master Results"."Cur Par Bal")*100,"Master Results"."Cur Net

	Rate W"*100,"Master Results".Duration/"Master Results"."Market Value"
Conditions	Product."Account Type" IN (100.00, 110.00, 300.00, 310.00, 200.00, 400.00, 800.00),"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title, Pivot Table

8.8.60 Ranked Market Value in Base Currency

8.8.61 Ranked Market Value in Consolidated Currency

Report Name(s)	Ranked Market Value in Base Currency Ranked Market Value in Consolidated Currency.
Description	The report displays a ranking of Products based on Market or Book ratio.
Dashboards Prompts	Prompt MV Ranks 1
	Process
	Scenario
	Prompt Market Value
	As of Date
	Currency
	Start Date Index
	Product Type
	Prompt - Top N Rank
	Top N Rank
Report Criteria	Product."Product Leaf Name"
	Master Results."Market Value (Rank)"
	Master Results."Market Value"
	Master Results."Cur Par Bal"+"Master Results"."Cur Defer Bal C"
	Master Results."Market Value"/("Master Results"."Cur Par
	Bal"+"Master Results"."Cur Defer Bal C")*100
	Master Results.Duration
Conditions	"Master Results"."Market Value (Rank)" <= @{TEST}{5},"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title

Table
Table
Graph
e.ap.

8.8.62 Ranked Duration in Base Currency

8.8.63 Ranked Duration in Consolidated Currency

Report Name	Ranked Duration in Base Currency Ranked Duration in Consolidated Currency
Description	The report displays a ranking of Products based on Duration.
Dashboards Prompts	Prompt - Duration Ranks 1 • Process • Scenario Prompt Market Value • As of Date • Currency • Start Date Index • Product Type Prompt - Top N Duration • Top NDuration
Report Criteria	Product."Product Leaf Name" Master Results."Duration (Rank)" Master Results."Market Value" Master Results."Cur Par Bal"+"Master Results"."Cur Defer Bal C" Master Results."Market Value"/("Master Results"."Cur Par Bal"+"Master Results"."Cur Defer Bal C")*100 Master Results.Duration
Conditions	Add "Master Results"."Duration (Rank)" <= @{RANK}{5},"Master Results"."Start Date Index" = @{MKT1}{1}
Compound Layout	Title Table Graph

8.8.64 Value at Risk Probabilities

Report Name	VaR Probabilities
Description	The report displays Total VaR results by Probability Decile.
Dashboards Prompts	Prompt VaR Probabilities Dtl • As of Date • Process • Product Type
Report Criteria	Stochastic Process Details."Process Type And Id" cast("Value- at-Risk"."Var Term" as char) ' - ' "Value-at-Risk"."Var Term Mult" cast("Value-at-Risk"."Var Term" as char(2)) ' - ' "Value-at-Risk"."Var Term Mult" Value-at-Risk."Value At Risk" Value-at-Risk."Probability Decile" Value-at-Risk."Avg Probability" Value-at-Risk."Gross Probability"
Conditions	< None >
Compound Layout	Title Graph Graph (2) Pivot Table

8.8.65 Value at Risk Probabilities Detail

Report Name	VaR Probabilities DTL
Description	The report displays VaR results by Probability Decile.
Dashboards Prompts	Prompt VaR Probabilities Dtl • As of Date • Process • Product Type
Report Criteria	Stochastic Process Details."Process Name" Value-at-Risk."Rate Path Num" cast("Value-at-Risk"."Var Term" as char(3)) ' - '

	"Value-at-Risk"."Var Term Mult" Value-at-Risk."Value At Risk" Value-at-Risk."Avg Probability"
Conditions	< None >
Compound Layout	Title Graph Pivot Table

8.8.66 VaR History

Report Name	VaR History
Description	The report displays Product-wise or Portfolio wise cumulative value at risk As of Date.
Dashboards Prompts	 Prompt VaR Probabilities As of Date Process Product Type Confidence Level
Report Criteria	"Calendar - ALM Results". "As-of-Date", "Currency". "Cons Currency" "Value-at-Risk"."Value At Risk" VaR_' cast("Value-at-Risk" "Confidence Level"*100 as char) "Product"."Product Leaf Name"
Conditions	< None >
Compound Layout	

8.8.67 IRC History Across Term

Report Name	IRC History Across Term
Description	Report displays interest rates for a selected IRC over historical time.
Dashboards Prompts	Prompt IRC Name and Currency Currency

	 IRC IRC Term Prompt Historical Dates Effective Date
Report Criteria	Calendar - Fact Data."Calendar Date" - Interest Rate Curve Master."Iso Currency Cd" - Interest Rate Curve Master."Irc Name" - Interest Rate Curve Master."Irc Term" - IRC Rates (History)."Interest Rate (Avg)"
Conditions	"Calendar - Fact Data"."Calendar Date" IN (date '1992-06-01', date '1992-06-09', date '1992-07-13', date '1992-07-19')
Compound Layout	Title Pivot Table

8.8.68 IRC History Across Dates

Report Name	IRC History Across Term
Description	Report displays interest rates for a selected IRC over historical time.
Dashboards Prompts	Prompt IRC Name and Currency Currency IRC IRC Term Prompt Historical Dates Effective Date
Report Criteria	Calendar - Fact Data."Calendar Date" - Interest Rate Curve Master."Iso Currency Cd" - Interest Rate Curve Master."Irc Name" - Interest Rate Curve Master."Irc Term" - IRC Rates (History)."Interest Rate (Avg)"
Conditions	"Calendar - Fact Data"."Calendar Date" IN (date '1992-06-01', date '1992-06-09', date '1992-07-13', date '1992-07-19')
Compound Layout	Title Pivot Table

Report Name	IRC Forecast Across Term
Description	Report displays interest rates for a selected IRC over the forecast time buckets.
Dashboards Prompts	Prompt IRC Name and Currency • Currency • IRC • IRC • IRC Term Prompt - Process Scenario • Process • Scenario Prompt - Buckets(end date) • Bucket End Date
Report Criteria	Time Buckets."End Date" - Interest Rate Curve Master."Iso Currency Cd" - Interest Rate Curve Master."Irc Name" - Interest Rate Curve Master."Irc Term" Calendar - ALM Results."As-of-Date" - Interest Rate Curve Master."Irc Term (# Of Days)" - IRC Rates (Forecast)."Interest Rate Fcst (Avg)"
Conditions	< None >
Compound Layout	Title Pivot Table

8.8.69 IRC Forecast Across Term

8.8.70 IRC Forecast Across Dates

Report Name(IRC Forecast Across Dates
Description	Report plots individual term points for a selected IRC over Forecast time.
Dashboards Prompts	Prompt - IRC Name and Currency • Currency • IRC

	 IRC Term Prompt - Historical Dates Effective Date Prompt - Process Scenario. Process Scenario Prompt - Buckets (End date) Bucket End Date
Report Criteria	Time Buckets."End Date" - Interest Rate Curve Master."Iso Currency Cd" - Interest Rate Curve Master."Irc Name" - Interest Rate Curve Master."Irc Term" - IRC Rates (Forecast)."Interest Rate Fcst (Avg)" Calendar - ALM Results."As-of-Date"
Conditions	< None >
Compound Layout	Title Pivot Table

8.8.71 IRC Benchmark

Report Name	IRC Bench Rep
Description	The report compares forecast rates per scenario to benchmark scenario rates.
Dashboards Prompts	Prompt - Forecast Date • As of Date Prompt - IRC Name and Currency • Currency • IRC • IRC Term Prompt - Process Scenario • Process • Scenario Prompt - Buckets(End date) • Bucket End Date
Report Criteria	Time Buckets."End Date" Process Scenario."Process Name"

	Process Scenario."Scenario Num" Process Scenario."Scenario Name" - IRC Rates (Forecast)."Interest Rate Fcst (Avg)" - IRC Rates (Forecast)."Interest Rate Fcst (Bench Avg)" - IRC Rates (Forecast)."Interest Rate Fcst (Pct To Bench)"
Conditions	< None >
Compound Layout	Title Graph Graph(2) Graph(3) Graph(4)

8.8.72 IRC Forecast x Days

Report Name	IRC Fcst Over Time 11g
Description	The report shows Forecast Rates - (entire yield curve) for selected scenarios across time.
Dashboards Prompts	Prompt - Forecast Date • As of Date Prompt - IRC Name and Currency • Currency • IRC • IRC Term Prompt - Process Scenario • Process • Scenario Prompt - Buckets(End date) • Bucket End Date
Report Criteria	 - IRC Rates (Forecast)."Interest Rate Fcst (Avg)" - Interest Rate Curve Master."Irc Term" Time Buckets."Start Date" Time Buckets."End Date" - Interest Rate Curve Master."Irc Term (# Of Days)" - Interest Rate Curve Master."Irc Name" Process Scenario."Process Name" Process Scenario."Process Id" - Interest Rate Curve Master."Iso Currency Cd"

Conditions	< None >
Compound Layout	Title Pivot Table(2) Pivot Table(3) Pivot Table

8.8.73 IRC History and Forecast

Report Name	IRC History and Forecast
Description	The report shows historical rates and forecast rates on a single graph.
Dashboards Prompts	 Prompt - Historical Dates Effective Date Prompt - Process Scenario Process Scenario Prompt - Buckets(End date) Bucket End Date Prompt - IRC Name and Currency (single selection) Currency IRC IRC Term
Report Criteria	Calendar - Fact Data."Calendar Date" Time Buckets"."End Date" - IRC Rates (Forecast)."Interest Rate Fcst (Avg)" - IRC Rates (History)."Interest Rate (Avg)" < None >
Compound Layout	Title Graph

8.8.74 Economic Indicator History and Forecast

Report Name	Eco Ind History and Forecast
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Description	The report shows historical and forecast Economic Indicators on a single graph.
Dashboards Prompts	 Prompt - Historical Dates Effective Date Prompt - Process Scenario Process Scenario Prompt - Buckets(End date) Bucket End Date Prompt - Economic Indicator Names (single selection) Economic Indicator
Report Criteria	Calendar - Fact Data."Calendar Date" - Economic Indicator (History)."Economic Indicator Value Chg" Time Buckets."End Date" - Economic Indicator (Forecast)."Economic Indicator Value Chg"
Conditions	< None >
Compound Layout	Title Graph

8.8.75 FX Rates History and Forecast

Report Name	FX History and Forecast
Description	The report shows historical and forecast Currency Rates on a single graph.
Dashboards Prompts	Prompt - Historical Dates • Effective Date Prompt - Process Scenario • Process • Scenario Prompt - Buckets(End date) • Bucket End Date Prompt FX Currency (From-To) • Currency

Report Criteria	Calendar - Fact Data."Calendar Date" - Exchange Rates (History)."Fx Rate Hist (Avg)" Time Buckets."End Date" - Exchange Rates (Forecast)."Fx Rate Audit"
Conditions	< None >
Compound Layout	Title Graph

8.8.76 FX History

Report Name	FX History
Description	The report shows historical FX Rates (average, moving average, minimum, and maximum).
Dashboards Prompts	Prompt FX Currency Hist • Effective Date • Currency • Month
Report Criteria	 Exchange Rate Master."From -To Currency" Calendar - Fact Data."Calendar Date" Exchange Rates (History)."Fx Rate Hist (Avg)" Exchange Rates (History)."Fx Rate Hist (Mavg)" Exchange Rates (History)."Fx Rate Hist (Min)" Exchange Rates (History)."Fx Rate Hist (Max)"
Conditions	< None >
Compound Layout	Title Pivot Table Pivot Table(2)

8.8.77 FX History Month

Report Name	FX History Month	

Description	The report shows historical FX Rates (Fx Rate Hist (Avg) and Fx Rate Hist (Mavg)).
Dashboards Prompts	Prompt FX Currency Hist • Effective Date • Currency • Month
Report Criteria	Exchange Rate Master"."From -To Currency","- Exchange Rates (History)"."Fx Rate Hist (Avg)","- Exchange Rates (History)"."Fx Rate Hist (Mavg)","Calendar - Fact Data"."Per Name Month"
Conditions	<none></none>
Compound Layout	Title,Pivot Table (3) Pivot Table (4)

8.8.78 FX Forecast Scenario

Report Name	FX Forecast Scenario
Description	Report shows FX Rate Audit.
Dashboards Prompts	Prompt FX Currency • As of Date • Currency Prompt - Process Scenario • Process • Scenario Prompt - Buckets(End date) • Bucket End Date
Report Criteria	"Calendar - ALM Results"."As-of-Date","Time Buckets"."Start Date","Time Buckets"."End Date","- Exchange Rate Master"."From -To Currency","- Exchange Rates (Forecast)"."Fx Rate Audit","Process Scenario"."Scenario
Conditions	<none></none>
Compound Layout	Title Pivot Table

8.8.79 FX Forecast

Report Name	FX Forecast
Description	Report shows forecast FX Rates.
Dashboards Prompts	Prompt FX Currency • As of Date • Currency Prompt - Process Scenario • Process • Scenario Prompt - Buckets(End date) • Bucket End Date
Report Criteria	Calendar - ALM Results."As-of-Date" Time Buckets."Start Date" Time Buckets."End Date" - Exchange Rate Master."From -To Currency" - Exchange Rates (Forecast)."Fx Rate Audit"
Conditions	< None >
Compound Layout	Title Pivot Table Pivot Table(2)

8.8.80 Economic Indicator History

Report Name	Key Economic Indicators - History
Description	Report shows historical Economic Indicators.
Dashboards Prompts	 Prompt - Economic Indicator Names Economic Indicator Prompt - Historical Dates End Date
Report Criteria	Calendar - Fact Data."Calendar Date" - Economic Indicator (History)."Economic Indicator Value Chg" - Economic Indicator Master."Economic Indicator Name"

Conditions	< None >
Compound Layout	Title Graph

8.8.81 Economic Indicator Forecast

Report Name	Key Economic Indicators - Fcst
Description	Report shows forecast Economic Indicators.
Dashboards Prompts	 Prompt - Economic Indicator Names Economic Indicator Prompt - Process Scenario Process Scenario Prompt - Buckets (End date) Bucket End Date
Report Criteria	Calendar - ALM Results."As-of-Date" Time Buckets."End Date" - Economic Indicator (Forecast)."Economic Indicator Value Chg" - Economic Indicator Master."Economic Indicator Name"
Conditions	< None >
Compound Layout	Title Pivot Table

8.8.82 IRC vs Related Economic Indicators vs FX - Historical

Report Name	IRC Fcst vs Related Economic Indicators Fcst vs FX Fcst
Description	Report compares the Forecast Interest Rates, Forecast Currency Rates and Forecast Economic Indicators across time buckets.

IRC vs Related Economic Indicators vs FX - Forecast

Dashboards Prompts	Prompt - IRC Name and Currency
	Currency
	• IRC
	IRC Term
	Prompt FX Currency (From-To)
	Currency
	Prompt - Economic Indicator Names
	Economic Indicator
	Prompt - Historical Dates
	Effective Date
	Prompt - Forecast Date
	As of Date
	Prompt - Process Scenario
	Process
	• Scenario
	Prompt - Buckets(End date)
	Bucket End Date
Report Criteria	Economic Indicator (Forecast)."Economic Indicator Value Chg"
	Economic Indicator Master."Economic Indicator Name"
	IRC Rates (Forecast)."Interest Rate Fcst (Avg)"
	Exchange Rate Master."From -To Currency"
	IRC Rates (Forecast)."Interest Rate Fcst (Avg)"
	Interest Rate Curve Master."Irc Name"
	Calendar - ALM Results."As-of-Date"
	Time Buckets."End Date"
Conditions	< None >
Compound Layout	Title
	Pivot Table

8.8.83 ALM Process Deterministic Assumption Map

Report Name	Assumptions - RM Std Assumption Map
Description	Report displays the deterministic ALM Processes with related embedded assumption rules.
Dashboards Prompts	< None >
Report Criteria	Process Assumption Matrix."Result Sys Id"

	Process Assumption Matrix."Result Header Desc Short" Process Assumption Matrix."Leaf Characteristics Desc Short" Process Assumption Matrix."Discount Rate Desc Short" Process Assumption Matrix."Pre Payments Desc Short" Process Assumption Matrix."Rates Desc Short" Process Assumption Matrix."Rices Desc Short" Process Assumption Matrix."Pricing Margin Desc Short" Process Assumption Matrix."Forecast Bal Desc Short" Process Assumption Matrix."Transactions Desc Short" Process Assumption Matrix."Transactions Desc Short" Process Assumption Matrix."Formula Leaves Desc Short" Process Assumption Matrix."Filter Desc Short"
Conditions	Process Assumption Matrix.Rates Sys ID <> -1
Compound Layout	Title Table

8.8.84 ALM Process Stochastic Assumption Map

Report Name	Assumptions - RM Stoch Assumption Map
Description	Report displays stochastic ALM Processes with related embedded assumption rules.
Dashboards Prompts	Prompt - Process Def Folder Name • Folder Name
Report Criteria	Process Assumption Matrix."Result Sys Id" Process Assumption Matrix."Result Header Desc Short" Process Assumption Matrix."Pre Payments Desc Short" Process Assumption Matrix."Pricing Margin Desc Short" Process Assumption Matrix."Forecast Bal Desc Short" Process Assumption Matrix."Maturity Auxiliary Desc Short" Process Assumption Matrix."Transactions Desc Short" Process Assumption Matrix."Formula Leaves Desc Short" Process Assumption Matrix."Formula Leaves Desc Short"
Conditions	Process Assumption Matrix.Rates Sys ID = -1
Compound Layout	Title Table

8.8.85 Maturity Strategies

Report Name	Assumptions - Maturity Strategies
Description	Report displays Maturity Mix assumptions.
Dashboards Prompts	 Prompt - Maturity Auxiliary Desc Maturity Mix Name Prompt - Folder Name FolderName Prompt - Maturity Currency Name Currency
Report Criteria	"Product - Assumptions"."Product Name" "Product - Assumptions"."Is Leaf" "Product - Assumptions"."Display Order Number" Maturity Auxiliary."Maturity Term" Maturity Auxiliary."Amrt Term" Maturity Auxiliary."Alloc Percent"
Conditions	< None >
Compound Layout	Title Graph Table

8.8.86 Pricing Margins

Report Name	Assumptions – Pricing Margins
Description	Report displays Maturity Mix assumptions.
Dashboards Prompts	 Prompt - Pricing Folder Name Folder Name Prompt Product Hierarchy Name Product Hierarchy Name Prompt - Pricing Margin Rule Pricing Margin Rule Prompt - Pricing Margin Currency Name Currency
Report Criteria	Pricing Margin."Pricing Margin Desc Short"

	"Product - Assumptions"."Product Name" "Product - Assumptions"."Is Leaf" "Product - Assumptions"."Display Order Number" Pricing Margin.Bucket Pricing Margin."Gross Rate" Pricing Margin."Net Rate"
Conditions	< None >
Compound Layout	Title Graph Pivot Table
Report Name(s)	Assumptions – Pricing Margins

8.8.87 Discount Methods

Report Name	Assumptions - Discount Rates
Description	Report displays the Discount Method assumptions.
Dashboards Prompts	 Prompt - Discount Folder Name Folder Name Prompt - Product Hierarchy Name Product Hierarchy Name Prompt - Discount Desc Discount Methods Name Prompt - Discount Rate Currency Name Currency
Report Criteria	"Discount Rate"."Discount Desc Short" "Product - Assumptions"."Product Name" Product - Assumptions."Is Leaf" Product - Assumptions."Display Order Number" Discount Rate."Ccy Cd" Discount Rate."Discount Rate Method" - Interest Rate Curve Master."Irc Name" Discount Rate."Interest Component Type" Discount Rate."Switches Description" Discount Rate."Rate Spread"
Conditions	< None >

Compound Layout	Title Table

8.8.88 Product Characteristics

Report Name	Assumptions - RM Product Characteristics
Description	Report displays Product Characteristic assumptions.
Dashboards Prompts	Prompt - Product Folder Name
	Folder Name
	Prompt - Product Hierarchy Name
	Product Hierarchy Name
	Prompt - Product Characteristics
	Product Characteristics Name
	Prompt - Product Char Currency Name
	Currency
Report Criteria	Product Characteristics."Product Characteristics Desc"
	"Product - Assumptions"."Product Name"
	Product - Assumptions."Is Leaf"
	Product - Assumptions."Display Order Number"
	Currency."Currency Cd"
	Product Characteristics."Gross Rates Flg"
	Product Characteristics."Model With Gross Rates"
	Product Characteristics."Interest Credited"
	Product Characteristics."Percent Taxable"
	Product Characteristics."Currency Gain Loss Basis"
	Product Characteristics."Pay Equivalent Compound Conversion"
	Product Characteristics."Interest Rate Cd"
	Product Characteristics."Amortization Type Code"
	Product Characteristics."Adjustable Type Code"
	Product Characteristics."Interest Type"
	Product Characteristics."Reprice Freq X Mult"
	Product Characteristics."Payment Freq X Mult"
Conditions	< None >
Compound Layout	Title
	Table

8.8.89 Prepayments

Report Name	Assumptions - Prepayments
Description	This report displays the Prepayment assumptions.
Dashboards Prompts	 Prompt - Prepayments_Id Folder Name Product Hierarchy Name Product Hierarchy Name Prompt - Prepay Folder Name Prepayment Name Prompt - Prepayment Currency Name Currency
Report Criteria	"Prepayment"."Prepayment Desc Short", "Product - Assumptions"."Product Id", "Product - Assumptions"."Product Name", "Product - Assumptions"."Is Leaf", "Prepayment"."Ccy Cd", case when "Prepayment"."Cash Flow Treatment Cd" in (1,0) then 'Prepayments' else case when "Prepayment"."Cash Flow Treatment Cd" in (-1) then 'Early Redemption' else null end end, "Prepayment"."Calc Method", case when "Prepayment"."Redemption Tenor Indicator" in (0) then 'User Payment Dates' when "Prepayment"."Redemption Tenor Indicator" in (1) then 'User Defined Redemption Tenors' when "Prepayment"."Redemption Tenor Indicator" in (2) then 'User Defined Prepayment Tenors' else 'Not Applicable' end, "Prepayment"."Quote", case when "Prepayment"."Folder Name PMTS", "Prepayment"."Ppmt Sys Id", case when "Prepayment"."Seasonality FIg"=0 then 'No' when "Prepayment"."Seasonality FIg"=1 then 'Yes' else 'Not Applicable' end, "Product - Assumptions"."Display Order Number" Following drill-down reports are available under Prepayment Assumption. These reports will be displayed after clicking on Product Name link. These are based on following column names: Portfolio, Calculation method, Redemption tenor
Conditions	< None >
Compound Layout	Title Table

8.8.89.1 Early Redemption (Constant Method - User defined Tenors)

Report Name	Assumptions - Early Redemption (Constant Method - User defined Tenors)
Report Criteria	"Prepayment"."Calc Method", Case when "Prepayment"."Cash Flow Treatment Type" null then 'Not Applicable' else "Prepayment"."Cash Flow Treatment Type" end, "Prepayment"."Balance Type", "Prepayment"."Prepayment Rate Type", "Prepayment"."Start Date (User Defined Tenors)", "Prepayment"."End Date (User Defined Tenors)", "Prepayment"."Tenor", "Prepayment"."Multiplier", "Prepayment"."Constant Prepayment Rate (User Defined Tenors)", "Prepayment"."January Coefficient", "Prepayment"."Prepayment Desc Short", "Prepayment"."Febuary Coefficient", "Prepayment"."March Coefficient", "Prepayment"."Febuary Coefficient", "Prepayment"."March Coefficient", "Prepayment"."June Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."September Coefficient", "Prepayment"."October Coefficient", "Prepayment"."November Coefficient", "Prepayment"."December Coefficient", "Prepayment"."November Coefficient", "Prepayment"."Seasonality Flg", "Prepayment"."Sequence Number", "Prepayment"."Repeat", "Product - Assumptions"."Product Id", "Product - Assumptions"."Product Name", "Prepayment"."Pomt Sys Id"

8.8.89.2 Early Redemption (Constant Method)

Report Name	Assumptions - Early Redemption (Constant Method)
Report Criteria	"Prepayment"."Calc Method", Case when "Prepayment"."Cash Flow Treatment Type" null then 'Not Applicable' else "Prepayment"."Cash Flow Treatment Type" end, "Prepayment"."Start Date (User Prepayments Date)", "Prepayment"."End Date (User Prepayments Date)", "Prepayment"."Constant Prepayment Rate (User Prepayments Dates)", "Prepayment"."Constant Prepayment Rate (User Prepayments Dates)", "Prepayment"."January Coefficient", "Prepayment"."Febuary Coefficient", "Prepayment"."March Coefficient", "Prepayment"."April Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."September Coefficient", "Prepayment"."October Coefficient", "Prepayment"."November Coefficient", "Prepayment"."December Coefficient", "Prepayment"."Ccy Cd", "Prepayment"."Prepayment Desc Short", "Prepayment"."Ppmt Sys Id"

8.8.89.3 Early Redemption (Prepayment Model)

Report Name	Assumptions - Early Redemption (Prepayment Model)
Report Criteria	"Prepayment"."Calc Method", "Prepayment"."Cash Flow Treatment Type", "Prepayment"."Start Date (User Prepayments Date)", "Prepayment"."End Date

(User Prepayments Date)", "Prepayment"."Prepayment Model Coefficient", case when "Prepayment"."Prepayment Model category Cd" is null then 'Not applicable' else "Prepayment". "Prepayment Model Category" end, case when "Prepayment"."Prepayment Model Sys Id" in (0) then 'Not Applicable' else "Prepayment"."Prepayment Model Name" end, '['||"Prepayment"."Currency Code (IRCS)"||']'||' '||"Prepayment"."IRC Name"||' '||'('||cast("Prepayment"."IRC Code" as char)||')', "Prepayment"."Rate Spread", "Prepayment"."Rate Term", Case when "Prepayment"."Seasonality Flg" in (0) then 'No' else 'Yes' end, "Prepayment"."January Coefficient", "Prepayment"."Febuary Coefficient", "Prepayment"."March Coefficient", "Prepayment"."April Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."July Coefficient", "Prepayment"."August Coefficient", "Prepayment"."September Coefficient", "Prepayment"."October Coefficient", "Prepayment"."November Coefficient", "Prepayment"."December Coefficient", "Prepayment"."Ccy Cd", "Prepayment"."Prepayment Desc Short", "Product -Assumptions"."Product Id", "Product - Assumptions"."Product Name", "Prepayment"."Ppmt Sys Id"

8.8.89.4 Prepayment (Arctangent)

Report Name	Assumptions - Prepayment (Arctangent)
Report Criteria	"Prepayment"."Calc Method", Case when "Prepayment"."Cash Flow Treatment Type" null then 'Not Applicable' else "Prepayment"."Cash Flow Treatment Type" end, "Prepayment"."Start Date (User Prepayments Date)", "Prepayment"."End Date (User Prepayments Date)", case when "Prepayment"."Prepayment Model category Cd" is null then 'Not applicable' else "Prepayment"."Prepayment Model Category" end, case when "Prepayment"."Prepayment Model Sys Id" in (0) then 'Not Applicable' else "Prepayment"."Prepayment Model Name" end, "Prepayment"."Constant Coe.K 1", "Prepayment"."Constant Coe.K 2", "Prepayment"."Constant Coe.K 3", "Prepayment"."Constant Coe.K 4", '[' "Prepayment"."Currency Code (IRCS)" ']' ' ' "Prepayment"."IRC Name" ' ' '(' cast("Prepayment"."IRC Code" as char) ')', "Prepayment"."Rate Spread", "Prepayment"."Rate Term", Case when "Prepayment"."Seasonality Flg" in (0) then 'No' else 'Yes' end, "Prepayment"."January Coefficient", "Prepayment"."April Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."July Coefficient", "Prepayment"."June Coefficient", "Prepayment"."September Coefficient", "Prepayment"."October Coefficient", "Prepayment"."November Coefficient", "Prepayment"."December Coefficient", "Prepayment"."Prepayment Desc Short", "Prepayment"."Cy Cd", "Product - Assumptions"."Product Id", "Product - Assumptions"."Product Name", "Prepayment"."Ppmt Sys Id"

8.8.89.5 **Prepayments (Constant Method - User defined Tenors)**

Report Name

Assumptions - Prepayments (Constant Method - User defined Tenors)

Report Criteria	"Prepayment". "Calc Method", Case when "Prepayment". "Cash Flow Treatment Type" null then 'Not Applicable' else "Prepayment". "Cash Flow Treatment Type" end, "Prepayment". "Balance Type", "Prepayment". "Prepayment Rate Type", "Prepayment". "Start Date (User Defined Tenors)", "Prepayment". "End Date (User Defined Tenors)", "Prepayment". "Tenor", "Prepayment". "Multiplier", "Prepayment". "Constant Prepayment Rate (User Defined Tenors)", "Prepayment". "Constant Prepayment Rate (User Defined Tenors)", "Prepayment". "January Coefficient", "Prepayment". "Febuary Coefficient", "Prepayment". "March Coefficient", "Prepayment". "April Coefficient", "Prepayment". "May Coefficient", "Prepayment". "June Coefficient", "Prepayment". "July Coefficient", "Prepayment". "June Coefficient", "Prepayment". "September Coefficient", "Prepayment". "October Coefficient", "Prepayment". "November Coefficient", "Prepayment". "December Coefficient", "Prepayment". "November Coefficient", "Prepayment". "December Coefficient", "Prepayment". "Seasonality Flg" in (0) then 'No' when "Prepayment". "Seasonality Flg" in (1) then 'Yes' else 'Not Applicable' end, "Prepayment". "Sequence Number", "Prepayment". "Sequence Number", "Prepayment". "Repeat", "Product - Assumptions". "Product Id", "Prepayment". "Product - Assumptions". "Product Name",
	Assumptions"."Product Id", "Product - Assumptions"."Product Name", "Prepayment"."Ppmt Sys Id"

8.8.89.6 Prepayments (Constant Method)

Report Name	Assumptions - Prepayments (Constant Method)
Report Criteria	"Prepayment"."Calc Method", Case when "Prepayment"."Cash Flow Treatment Type" null then 'Not Applicable' else "Prepayment"."Cash Flow Treatment Type" end, "Prepayment"."Start Date (User Prepayments Date)", "Prepayment"."End Date (User Prepayments Date)", "Prepayment"."Constant Prepayment Rate (User Prepayments Dates)", "Prepayment"."January Coefficient", "Prepayment"."Febuary Coefficient", "Prepayment"."March Coefficient", "Prepayment"."April Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."July Coefficient", "Prepayment"."August Coefficient", "Prepayment"."September Coefficient", "Prepayment"."October Coefficient", "Prepayment"."November Coefficient", "Prepayment"."December Coefficient", "Prepayment"."November Coefficient", "Prepayment"."Ccy Cd", case when "Prepayment"."Seasonality Flg"=0 then 'No' when "Prepayment"."Seasonality Flg"=1 then 'Yes' else 'Not Applicable' end, "Product - Assumptions"."Product Id", "Prepayment"."Product - Assumptions"."Pomt Sys Id"

8.8.89.7 Prepayments (Prepayment Model)

Report Name	Assumptions - Prepayments (Prepayment Model)
Report Criteria	"Prepayment"."Calc Method", Case when "Prepayment"."Cash Flow Treatment Type" null then 'Not Applicable' else "Prepayment"."Cash Flow Treatment Type" end, "Prepayment"."Start Date (User Prepayments Date)", "Prepayment"."End Date (User Prepayments Date)", "Prepayment"."Prepayment Model Coefficient",

case when "Prepayment"."Prepayment Model category Cd" is null then 'Not applicable' else "Prepayment". "Prepayment Model Category" end, case when "Prepayment"."Prepayment Model Sys Id" in (0) then 'Not Applicable' else "Prepayment"."Prepayment Model Name" end, '[']|"Prepayment"."Currency Code (IRCS)"||']'||''||"Prepayment"."IRC Name"||''||'('||cast("Prepayment"."IRC Code" as char)||')', "Prepayment"."Rate Spread", "Prepayment"."Rate Term", Case when "Prepayment"."Seasonality Flg" in (0) then 'No' when "Prepayment"."Seasonality Flg" in (1) then 'Yes' else 'Not applicable' end, "Prepayment"."January Coefficient", "Prepayment"."Febuary Coefficient", "Prepayment"."March Coefficient", "Prepayment"."April Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."July Coefficient", "Prepayment"."August Coefficient", "Prepayment"."September Coefficient", "Prepayment"."October Coefficient", "Prepayment"."November Coefficient", "Prepayment"."December Coefficient", "Prepayment"."Prepayment Desc Short", "Prepayment"."Ccy Cd", "Product - Assumptions"."Product Id", "Product -Assumptions"."Product Name", "Prepayment"."Ppmt Sys Id"

8.8.89.8 Prepayments (PSA)

Report Name	Assumptions - Prepayments (PSA)
Report Criteria	"Prepayment"."Calc Method", Case when "Prepayment"."Cash Flow Treatment Type" null then 'Not Applicable' else "Prepayment"."Cash Flow Treatment Type" end, "Prepayment"."Start Date (User Prepayments Date)", "Prepayment"."End Date (User Prepayments Date)", "Prepayment"."PSA Speed", case when "Prepayment"."Prepayment Model category Cd" is null then 'Not applicable' else "Prepayment"."Prepayment Model Category" end, case when "Prepayment"."Prepayment Model Sys Id" in (0) then 'Not Applicable' else "Prepayment"."Prepayment Model Sys Id" in (0) then 'Not Applicable' else "Prepayment"."Prepayment Model Name" end, Case when "Prepayment"."Seasonality Flg" in (0) then 'No' when "Prepayment"."Seasonality Flg" in (1) then 'Yes' else 'Not Applicable' end, "Prepayment"."January Coefficient", "Prepayment"."Febuary Coefficient", "Prepayment"."March Coefficient", "Prepayment"."April Coefficient", "Prepayment"."May Coefficient", "Prepayment"."June Coefficient", "Prepayment"."July Coefficient", "Prepayment"."August Coefficient", "Prepayment"."September Coefficient", "Prepayment"."October Coefficient", "Prepayment"."November Coefficient", "Prepayment"."December Coefficient", "Prepayment"."November Coefficient", "Prepayment"."Prepayment Desc Short", "Prepayment"."Ppmt Sys Id"

8.8.90 Prepayment Models

Report Name	Assumptions - Prepayment Table
Description	This report displays the Prepayment Model assumptions.

Dashboards Prompts	Prompt - Prepayments • Folder Name Prompt - Prepay Folder Name • Prepayment Model Name
Report Criteria	Prepayment."Prepayment Desc Short" Prepayment."Origination Term" Prepayment."Reprice Term" Prepayment."Remaining Term" Prepayment."Expired Term" Prepayment."Term To Reprice" Prepayment."Coupon Rate" Prepayment."Coupon Rate" Prepayment."Market Rate" Prepayment."Rate Difference" Prepayment."Rate Ratio" Prepayment."Ppmt Rate"
Conditions	< None >
Compound Layout	Title Table

8.8.90.1 Assumptions - Forecast Balance

Report Name	Forecast Balances
Description	This report displays the data from Forecast Balance Table.
Dashboards Prompts	 Prompt - Forecast Strategies Folder Name FolderName Prompt - Forecast Balances Rule Forecast Balance Rule Prompt- Currency Name Currency Name
Report Criteria	Case when "Forecast Balances"."Leaf Num Id" = 2 then "Forecast Balances"."GI Account Name" when "Forecast Balances"."Leaf Num Id" = 3 then "Forecast Balances"."Common Coa Name" when "Forecast Balances"."Leaf Num Id" = 4 then "Forecast Balances"."Product Name" end,"Forecast Balances"."Booking","Forecast Balances"."Fbal Method","Forecast Balances"."Rate Volume Rel Cd","Forecast Balances"."Rate Node","Forecast Balances"."Rate Dependency Pattern Name","Currency"."Currency Cd"

Conditions	<none></none>
Compound Layout	Title, Table

8.8.91 Transaction Strategies

Report Name	Transaction Strategies
Description	This report displays the data of Transaction Strategies Table.
Dashboards Prompts	 Prompt - Transaction Strategies Folder Name FolderName Prompt - Transaction Strategies Rule Transaction Strategies Ru Prompt Transaction Strategies - Currency Currency Prompt- Balance Type Balance

Report Criteria	"Transaction Strategies"."Product Name","Transaction
	Strategies"."Ccy Code","Transaction Strategies"."Rate
	Selection", "Transaction Strategies". "Rate Tiers", "Transaction
	Strategies"."Adj Type P","Transaction Strategies"."Adj Type
	R","Transaction Strategies"."Binary rate P","Transaction
	Strategies"."Binary rate R","Transaction Strategies"."Ccy Code
	P", "Transaction Strategies". "Ccy Code R", "Transaction
	Strategies". "Derivative Subtype Code", "Transaction
	Strategies"."Derivative Type Code","Transaction
	Strategies"."Exchange of Principal","Transaction
	Strategies". "Gross Margin P", "Transaction Strategies". "Gross
	Rate R", "Transaction Strategies". "Gross Rate P", "Transaction
	Strategies"."Gross Rate R", "Transaction Strategies"."Initial Ra
	Pricing Option P", "Transaction Strategies". "Initial Rate Pricing
	Option R", "Transaction Strategies". "Int Rate Code P", "Transaction Strategies". "Int Rate Code R", "Transaction
	Strategies". "Min Rate Change P", "Transaction Strategies". "Mi
	Rate Chnage R",
	"Transaction Strategies"."Net Margin P","Transaction
	Strategies"."Net Margin R","Transaction Strategies"."Net Rate
	P","Transaction Strategies"."Net Rate R","Transaction
	Strategies"."Principal P", "Transaction Strategies"."Principal
	R", "Transaction Strategies". "Purchase Sale Ind P", "Transactio
	Strategies"."Rate Cap Life P", "Transaction Strategies"."Rate C
	Life R", "Transaction Strategies". "Rate Chg Round Pct
	P","Transaction Strategies"."Rate Chg Round Pct
	R","Transaction Strategies"."Rate Decrease Life P","Transacti
	Strategies"."Rate Floor Life P","Transaction Strategies"."Rate Floor Life R","Transaction Strategies"."Rate Increase Life
	P","Transaction Strategies". "Rate Increase Life R", "Transaction
	Strategies"."Rate Increase Period P","Transaction
	Strategies"."Rate Increase Period R","Transaction
	Strategies"."Rate Set Lag Mult P","Transaction Strategies"."Rate Set Lag Mult P", "Transaction Set Lag Mult P", "Transaction Strategies"."Rate Set Lag Mult P", "Transaction Strategies"."Rate Set Lag Mult P", "Transaction Set Lag Mult
	Set Lag Mult R", "Transaction Strategies". "Rate Set Lag
	P", "Transaction Strategies". "Rate Set Lag R", "Transaction
	Strategies"."Rep Freq Mult P","Transaction Strategies"."Rep
	Freq Mult R",
	"Transaction Strategies"."Rep Freq P",
	"Transaction Strategies"."Rep Freq R",
	"Transaction Strategies"."Pmt Freq",
	"Transaction Strategies"."Pmt Freq Mult",
	"Transaction Strategies"."Amort Type",
	"Transaction Strategies"."Int Type",
	"Transaction Strategies"."Premium Percentage",
	"Transaction Strategies"."Deferred balance",
	"Transaction Strategies"."Min Bal Amot Swap",
	"Transaction Strategies"."Comp Basis",
	"Transaction Strategies"."Accr Basis",
	"Transaction Strategies"."payment Pattern Code",

	"Transaction Strategies"."Holiday Rolling Convention Code", "Transaction Strategies"."Origination Date", "Transaction Strategies"."Original Term",
	"Transaction Strategies"."Original Term Mult",
	"Transaction Strategies"."Amort Term",
	"Transaction Strategies"."Amort Term Mult",
	"Transaction Strategies"."Amort Method Code",
	"Transaction Strategies"."Net Margin Flag",
	"Transaction Strategies"."Product Id",
	"Transaction Strategies"."Rate Pricing Option",
	"Transaction Strategies"."Segment Code",
	"Transaction Strategies"."Short Desc","Transaction Strategies"."Is Offbalance"
	Transaction Strategies"."Amort Type",
	"Transaction"
Conditions	"Transaction Strategies"."Is Offbalance" = 'Y'
Compound Layout	Title
	Table

8.8.92 Forecast Rates - Interest Rates

Report Name	Assumptions - Forecast Rates
Description	This report displays the IRC Name, IRC Term Point, Forecast Type, and Minimum Rate.
Dashboards Prompts	 Prompt - Forecast Rates Folder Name FolderName Prompt - Forecast Interest rates Currency Name Currency Name Prompt - Forecast Rates Rule Forcast Rates Rule Prompt - IRC NAME IRC Name Prompt - Scenario Name Scenario Name Prompt - IRC Term Point IRC Term Point
Report Criteria	"Forecast Rates"."Irc Name",

	"Forecast Rates"."Iso Currency Cd", "Forecast Rates"."IRC Term Point",
	"Forecast Rates"."Fcast lrc Method","Forecast Rates"."Forecast Interpolate Method",
	"Forecast Rates"."Minimum Rate",
	"Forecast Rates"."Scenario Name",
	Following drill-down reports are available under Forecast - Interest Rate Assumption. These reports will be displayed after clicking on IRC Name link. These are based the on Forecast Type column name.
Conditions	<none></none>
Compound Layout	Title, Table

8.8.92.1 Forecast Rates (Change from base)

Report Name	Assumptions - Forecast Rates (Change from base)
Report Criteria	"Forecast Rates"."Short Desc", "Forecast Rates"."Irc Name", "Forecast Rates"."Iso Currency Cd", "Forecast Rates"."Fcast Irc Method", "Forecast Rates"."Forecast Interpolate Method", "Forecast Rates"."Scenario Name", "Forecast Rates"."Interest Rate Change (Change from base)", cast("Forecast Rates"."Interest Rate Term (Change from base)" as char) ' ' "Forecast Rates"."Interest Rate Term Multiplier (Change from base)"

8.8.92.2 Forecast Rates (Direct Input)

Report Name	Assumptions - Forecast Rates (Direct Input)
Report Criteria	"Forecast Rates"."Short Desc", "Forecast Rates"."Irc Name", "Forecast Rates"."Iso Currency Cd", "Forecast Rates"."Fcast Irc Method", "Forecast Rates"."Forecast Interpolate Method", "Forecast Rates"."Scenario Name", "Forecast Rates"."Bucket Number (Direct Input)", "Forecast Rates"."Interest Rate (Direct Input)", cast("Forecast Rates"."Interest Rate Term (Direct Input)" as char) ' ' "Forecast Rates"."Interest Rate Term Multiplier (Direct Input)"

8.8.92.3 Forecast Rates (Implied Forward)

Report Name	Assumptions - Forecast Rates (Implied Forward)
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Report Criteria "Forecast Rates"."Short Desc", "Forecast Rates"."Irc Name", "Forecast R Currency Cd", "Forecast Rates"."Fcast Irc Method", "Forecast Rates"."F. Interpolate Method", "Forecast Rates"."Scenario Name", "Forecast Rates"."Interpolate Method", "Forecast Rates"."Scenario Name", "Forecast Rates"."Rates"."Interest Rate Change (Implied Forward)", cast("Forecast Rates"."Interest Rate Rate Term (Implied Forward)" as char) ' ' "Forecast Rates"."Interest Rates"."Interest Rates"."	orecast "."Interest
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8.8.92.4 Forecast Rates (Structured Change)

Report Name	Assumptions - Forecast Rates (Structured Change)
Report Criteria	"Forecast Rates"."Short Desc", "Forecast Rates"."Irc Name", "Forecast Rates"."Iso Currency Cd", "Forecast Rates"."Fcast Irc Method", "Forecast Rates"."Forecast Interpolate Method", "Forecast Rates"."Scenario Name", "Forecast Rates"."From Bucket Number (Structured Change)", "Forecast Rates"."To Bucket Number (Structured Change Bucket)", cast("Forecast Rates"."Interest Rate Term (Structured Change)" as char) ' ' "Forecast Rates"."Interest Rate Term Multiplier (Structured Change)", "Forecast Rates"."Interest Rate Term Multiplier (Structured Change)", "Forecast Rates"."Interest Rate Change (Structured Change)"

8.8.92.5 Forecast Rates (Yield Curve Twist)

Report Name	Assumptions - Forecast Rates (Yield Curve Twist)
Report Criteria	"Forecast Rates"."Short Desc", "Forecast Rates"."Irc Name", "Forecast Rates"."Iso Currency Cd", "Forecast Rates"."Fcast Irc Method", "Forecast Rates"."Forecast Interpolate Method", "Forecast Rates"."Scenario Name", "Forecast Rates"."From Bucket Number (Yield Curve Twist)", "Forecast Rates"."To Bucket Number (Yield Curve Twist)", cast("Forecast Rates"."Anchor Point Term" as char) ' ' "Forecast Rates"."Anchor Point Term Multiplier", "Forecast Rates"."Anchor Point Rate", cast("Forecast Rates"."Long Point Term" as char) ' ' "Forecast Rates"."Long Point Multiplier", cast("Forecast Rates"."Short Point Term" as char) ' ' "Forecast Rates"."Short Point Multiplier", "Forecast Rates"."Short Point Rate"

8.8.93 Forecast Rates - Currency Rates

Report Name		Assumptions - Forecast Rates Currency
Description		This report displays the Forecast Type, Minimum Rate, Currency Name, and Scenario Name.
Dashboards Pror	npts	Prompt - Forecast Rates Currency Folder Name

	 FolderName Prompt - Forecast Rates Currency Rule Forecast Rates Currency Rule Name Prompt - Forecast Rates Currency Name Currency Name Prompt - Forecast Rates Currency Scenario Scenario Name
Report Criteria	"Forecast Rate Currency"."Scenario Name", "Forecast Rate Currency"."From Currency Cd", "Forecast Rate Currency"."Fcast Xrate Method", "Forecast Rate Currency"."Minimum Rate" Following drill-down reports are available under Forecast - Currency Rate Assumption. These reports will be displayed after clicking on Currency link. These are based on Forecast Type column name.
Conditions	<none></none>
Compound Layout	Title Table

8.8.93.1 Forecast Rates Currency (Direct Input)

Report Name	Assumptions - Forecast Rates Currency (Direct Input)
Report Criteria	"Forecast Rate Currency"."Short Desc", "Forecast Rate Currency"."Scenario Name", "Forecast Rate Currency"."From Currency Cd", "Forecast Rate Currency"."Fcast Xrate Method", "Forecast Rate Currency"."From Bucket Number (Structured Change)", "Forecast Rate Currency"."To Bucket Number (Structured Change)", "Forecast Rate Currency"."Exchange Rate Change (Structured Change)"

8.8.93.2 Forecast Rates Currency (Structured Change)

Report Name	Assumptions - Forecast Rates Currency (Structured Change)
Report Criteria	"Forecast Rate Currency"."Short Desc", "Forecast Rate Currency"."Scenario Name", "Forecast Rate Currency"."From Currency Cd", "Forecast Rate Currency"."Fcast Xrate Method", "Forecast Rate Currency"."From Bucket Number (Structured Change)", "Forecast Rate Currency"."To Bucket Number (Structured Change)", "Forecast Rate Currency"."Exchange Rate Change (Structured Change)"

Report Name	Assumptions - Forecast Rates El
Description	This report displays the data from Forecast Rates El table.
Dashboards Prompts	Prompt - Forecast Rates Currency Folder Name
	Folder Name
	Prompt - Forecast Rates Currency Rule
	Forecast Rate Rule Name
	Prompt - Forecast Rates Scenario Name
	Scenario Name
	Prompt - Forecast Rates Economic Indicator Name
	Economic Indicator Name
Report Criteria	"Forecast Rates El"."Scenario Name",
	"Forecast Rates El"."Economic Indicator Name",
	"Forecast Rates El"."Forecast Type",
	"Forecast Rates El"."Minimum Rate"
	Following drill-down reports are available under Forecast -
	Economic Indicator Assumption. These reports will be
	displayed after clicking on Economic Indicator Name link.
	These are based on Forecast Type column name.
Conditions	<none></none>
Compound Layout	Title
	Table

8.8.93.3 Forecast Rates - Economic Indicator

8.8.93.4 Forecast Rates El (Direct Input)

Report Name	Assumptions - Forecast Rates El (Direct Input)
Report Criteria	"Forecast Rates El"."Short Desc", "Forecast Rates El"."Scenario Name", "Forecast Rates El"."Economic Indicator Name", "Forecast Rates El"."Forecast Type", "Forecast Rates El"."Bucket Number (Direct Input)", "Forecast Rates El"."Economic Indicator Value (Direct Input)"

Report Name	Assumptions - Forecast Rates EI (Structured Change)
Report Criteria	"Forecast Rates El"."Short Desc", "Forecast Rates El"."Scenario Name", "Forecast Rates El"."Economic Indicator Name", "Forecast Rates El"."Forecast Type", "Forecast Rates El"."From Bucket Number (Structured Change)", "Forecast Rates El"."To Bucket Number (Structured Change)", "Forecast Rates El"."Economic Indicator Value Change (Structured Change)"

8.8.93.5 Forecast Rates El (Structured Change)

8.8.94 Rate Dependency Pattern

Report Name	Rate Dependency Condition for Pattern
Description	It displays the RDP Rule.
Dashboards Prompts	 Prompt - RDP Folder Name FolderName Prompt RDP Pattern Type Rate Dependency Pattern Type Prompt RDP rule Rate Dependency Pattern Rule Name
Report Criteria	'@{RULE}'
Conditions	<none></none>
Compound Layout	Title Table

8.8.95 Behavior Pattern Rule

Report Name	Behavior Pattern Rule
Description	This report displays the all behavior pattern rules configured in ALM.
Dashboards Prompts	 Prompt - FolderName Folder Name Prompt - Product Hierarchy Name Product Hierarchy Name

	NameofBehaviorPatternRule Behavior Pattern Rule Name
Report Criteria	"Product - Assumptions"."Product Name" "Currency"."Currency Name" "Behaviour Pattern Rule Fact"."Pattern Code" "Behaviour Pattern Master"."Pattern Name"
Conditions	
Compound Layout	Title Table

8.8.96 Forecast Rate - Behavior Pattern Rule

Report Name	Behavior Pattern Rule
Description	This report displays the behavior pattern rules mapped to a forecast rate scenario.
Dashboards Prompts	Prompt - FolderName • Folder Name NameofForecastRatesRule • Forecast Rates Rule Name
Report Criteria	"Forecast Rates (BPR)"."Scenario Name" "Behaviour Pattern Rule (Forecast Rates)"."Pattern Code" "Behaviour Pattern Master"."Pattern Name"
Conditions	
Compound Layout	Title Table

8.8.97 Process Errors

Report Name	Audit - Process Errors
Description	This report displays the results from the Process Errors table.

Dashboards Prompts	Prompt - Process Error_new Process Name Identifier Number
Report Criteria	Dim Process(For Process Errors)."Process Name" Dim Process(For Process Errors)."Process Id" Process Errors Master."Error Description" Process Errors Master."Error Code" Process Errors Master.Severity Product."Product Leaf Name" Process Errors Master."Table Name" Process Errors Master."Id Number" Process Errors Master."Field Name" Process Errors Master."Field Name" Process Errors Master."Field Value"
Conditions	< None >
Compound Layout	Title Table

8.8.98 Detail Cash Flows

Report Name	Audit - Detail Cash Flows
Description	This report displays the results from the detail cash flow - audit table.
Dashboards Prompts	Prompt - Process Cash Flow 1 Process Scenario Prompt - Process Cash Flow As of Date Cash Flow Date Record Sequence Identifier Number
Report Criteria	Process Scenario."Process Name" Process Cash Flows Master."Id Number" Product."Product Leaf Name" Process Cash Flows Master."Cashflow Date" Process Cash Flows Details."End Balance"

Process Cash Flows Details."Ending Gross Rate"/"Process Cash Flows Details"."End Balance"*100 Process Cash Flows Details."Ending Net Rate"/"Process Cash Flows Details"."End Balance"*100 Process Cash Flows Details."Ending Transfer Rate"/"Process Cash Flows Details"."End Balance"*100 Process Cash Flows Details."Prepay Runoff - Positive" Process Cash Flows Details."Maturity Runoff - Positive" Process Cash Flows Details."Maturity Runoff - Positive" Process Cash Flows Details."Total Runoff - Positive" Process Cash Flows Details."Total Runoff - Positive" Process Cash Flows Details."Total Runoff ross Rate"/"Process Cash Flows Details"."Total Runoff - Positive"*100 Process Cash Flows Details."Total Runoff Net Rate"/"Process Cash Flows Details"."Total Runoff - Positive"*100 Process Cash Flows Details."Total Runoff Transfer Rate"/"Process Cash Flows Details"."Total Runoff - Positive"*100 Process Cash Flows Details."Before Repricing Balance" Process Cash Flows Details."Before Repricing Gross Rate"/"Process Cash Flows Details."Repricing Balance"*100 Process Cash Flows Details."Before Repricing Net Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."Before Repricing Net Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."Before Repricing Net Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."After Repricing Net Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."Fully Indexed Gross Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."Fully Indexed Net Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."Fully Indexed Net Rate"/"Process Cash	1	1
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Flows Details"."End Balance"*100 Process Cash Flows Details."Ending Transfer Rate"/"Process Cash Flows Details"."End Balance"*100 Process Cash Flows Details."Prepay Runoff - Positive" Process Cash Flows Details."Payment Runoff - Positive" Process Cash Flows Details."Maturity Runoff - Positive" Process Cash Flows Details."Total Runoff - Positive" Process Cash Flows Details."Total Runoff forss Rate"/"Process Cash Flows Details"."Total Runoff - Positive"*100 Process Cash Flows Details."Total Runoff Net Rate"/"Process Cash Flows Details"."Total Runoff - Positive"*100 Process Cash Flows Details."Total Runoff Transfer Rate"/"Process Cash Flows Details"."Total Runoff - Positive"*100 Process Cash Flows Details."Total Runoff Transfer Rate"/"Process Cash Flows Details"."Total Runoff - Positive"*100 Process Cash Flows Details."Repricing Balance" Process Cash Flows Details."Repricing Balance" Process Cash Flows Details."Repricing Balance" Process Cash Flows Details."Before Repricing Gross Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."After Repricing Net Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."After Repricing Net Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."After Repricing Net Rate"/"Proces Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."After Repricing Net Rate"/"Proces Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."Fully Indexed Gross Rate"/"Process Cash Flows Details"."Repricing Balance"*100 Process Cash Flows Details."Fully Indexed Met Rate"/"Process Cash		De
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Flows Details"."Repricing Balance"*100		Fl
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Process Cash Flows Details."Interest Cash Flow Gross"		Pr
Process Cash Flows Details."Discount Rate"		Pr
Process Cash Flows Details."Annual Prepayment Rate"/"Process Cash		
Flows Details"."Balance Before Prepay"*100		FI

	Process Cash Flows Details."Balance Before Prepay" Process Cash Flows Details."Market Value" Process Cash Flows Details.Duration/"Process Cash Flows Details"."Market Value" "Process Cash Flows Details"."Inflation Adjustment to Interest (179)" "Process Cash Flows Details"."Inflation Adjustment to Principal (178)"
Conditions	< None >
Compound Layout	Title Pivot Table

8.8.99 Ledger to Instrument Reconciliation Report

Report Name	Ledger to Instrument Reconciliation Report
Description	This report shows the instrument and ledger data.
Dashboards Prompts	Prompt - AsofDateLR • As of Date Prompt - OrgUnit • Organizational Unit Prompt - Instrument to Ledger Balance • Instrument Balance Prompt - Currency • Currency
Report Criteria	"Product"."Product Name Level19", "Product"."Account Type", "Product"."Product Leaf Name", ifnull(CASE WHEN "Product"."Account Type" IN (100,200) THEN (ifnull (CASE WHEN '@{LBal}{Ending}' ='Ending' THEN FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) ELSE FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) END,0) - ifnull (CASE WHEN '@{LBal}{Ending}'='Ending' THEN "Account Summary"."Eop Book Bal" ELSE "Account Summary"."Avg Book Bal" END,0)) WHEN "Product"."Account Type" IN (300,400) THEN (ifnull (CASE WHEN '@{LBal}{Ending}' ='Ending' THEN FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) ELSE FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) END,0)- ifnull (CASE WHEN '@{LBal}{Ending}'='Ending' THEN "Account

Summary"."Eop Book Bal" ELSE "Account Summary"."Avg Book Bal" END,0)) END,0)/1000000,

ifnull(ABS(((CASE WHEN "Product"."Account Type" IN (100,200) THEN (ifnull (CASE WHEN '@{LBal}{Ending}' ='Ending' THEN FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) ELSE FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) END,0) - ifnull (CASE WHEN '@{LBal}{Ending}'='Ending' THEN "Account Summary"."Eop Book Bal" ELSE "Account Summary"."Avg Book Bal" END,0))WHEN "Product"."Account Type" IN (300,400) THEN (ifnull (CASE WHEN '@{LBal}{Ending}' ='Ending' THEN FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) ELSE FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) END,0) - ifnull (CASE WHEN '@{LBal}{Ending}'='Ending' THEN "Account Summary"."Eop Book Bal" ELSE "Account Summary"."Avg Book Bal" END,0))END)/ifnull (CASE WHEN '@{LBal}{Ending}' ='Ending' THEN FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) ELSE FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) END,0))*100),0), ifnull(case when '@{LBal}{Ending}'='Ending' then

FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) else FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) end,0)/1000000, ifnull(case when '@{LBal}{Ending}'='Ending' then "Account Summary"."Eop Book Bal" else "Account Summary"."Avg Book Bal" end,0)/1000000, ifnull(case when '@{LBal}{Ending}'='Ending' then "Account Summary"."Eop Book Bal" else "Account Summary"."Avg Book Bal" end,0)/1000000, "Currency"."Currency Cd"

then "Account Summary"."Eop Book Bal" else "Account Summary"."Avg Book Bal" end,0)) when "Product"."Account Type"=300 then (ifnull(case when '@{LBal}{Ending}'='Ending' then "Account Summary"."Eop Book Bal" else "Account Summary"."Avg Book Bal" end,0)-ifnull(case when '@{LBal}{Ending}'='Ending' then FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) else FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) end,0)) end)/ifnull(case when '@{LBal}{Ending}'='Ending' then FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) else FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) end.0))*100.0),ifnull(case when '@{LBal}{Ending}'='Ending' then FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 100)) else FILTER("Ledget Stat"."Value" USING ("Ledget Stat"."Financial Elem Id" = 140)) end,0),ifnull(case when '@{LBal}{Ending}'='Ending' then "Account Summary"."Eop Book Bal" else "Account Summary"."Avg Book Bal" end,0),"Currency"."Currency Cd"

Conditions	"Product"."Account Type" IN (100, 300)
Compound Layout	Title Pivot Table

8.8.100 Result Master to Instrument Reconciliation in Base Currency

8.8.101 Result Master to Instrument Reconciliation in Consolidated Currency

Report Name	Result Master to Instrument Reconciliation Base Report Result Master to Instrument Reconciliation Cons Report
Description	This report displays Result master and instrument data.
Dashboards Prompts	Prompt - AsofDate • As of Date Prompt GL Recon • Process • Scenario Prompt - Result Master to Instrument Balance • Balance Prompt - Currency • Currency
Report Criteria	"Product"."Product Name Level20","Product"."Account Type","Product"."Product Leaf Name",(ifnull(case when '@{IRBal}{Par}'='Par' then "Master Results"."Cur Par Bal" else "Master Results"."Cur Defer Bal C" end,0)) - (ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0)),(((ifnull(case when '@{IRBal}{Par}'='Par' then "Master Results"."Cur Par Bal" else "Master Results"."Cur Defer Bal C" end,0)) - (ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Master Results"."Cur Defer Bal C" end,0)) - (ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0)))*100)/ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Master Results"."Cur Par Bal" else "Master Results"."Cur Defer Bal C" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Master Results"."Cur Defer Bal C" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0),ifnull(case when '@{IRBal}{Par}'='Par' then "Account Summary"."Eop Bal" else "Account Summary"."Deferrecur Bal" end,0),"Currency"."Base Currency","Currency"."Currency"."Eop

Conditions	"Product"."Account Type" IN (100, 300)
Compound Layout	Title Pivot Table

8.8.102 Detail Stepped Rate

Report Name	Stepped Interest Rate (Account level)
Description	This report displays results from the detail rate tier cash flow - audit table.
Dashboards Prompts	Prompt - Process (Rate Tier Cash Flow)
	Process
	• Scenario
	Prompt - Rate Tier Cash Flow 2
	As of Date
	Prompt - Rate Tier Cash Flow 1
	Account Number
Report Criteria	"Account"."Account Number"
	"Rate Tiers Cashflow"."Tier Name"
	"Rate Tiers Cashflow"."Rank"
	ifnull("Rate Tiers Cashflow"."Beginning Balance",0.00)
	ifnull("Rate Tiers Cashflow"."Interest Cash Flow",0.00)
	ifnull("Rate Tiers Cashflow"."Before Repricing Net Rate",0.00)
	ifnull("Rate Tiers Cashflow"."After Repricing Net Rate",0.00)
	ifnull("Rate Tiers Cashflow"."Discount Rate",0.00)
	ifnull("Rate Tiers Cashflow"."Duration",0.00)
	ifnull("Rate Tiers Cashflow"."Dv01 Fe 725",0.00)
	ifnull("Rate Tiers Cashflow"."End of Period Balance",0.00)
	ifnull("Rate Tiers Cashflow"."End Net Rate",0.00)
	ifnull("Rate Tiers Cashflow"."Market Value",0.00)
	ifnull("Rate Tiers Cashflow"."Modified Duration",0.00)
	ifnull("Rate Tiers Cashflow"."Repricing Balance",0.00)
	ifnull("Rate Tiers Cashflow"."Total Runoff Positive",0.00)
	"Calendar - Fact Data"."Calendar Date"
Conditions	
Compound Layout	Title
-	Table

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8.8.103 IRRBB Table B

Report Name	IRRBB Table B Template - Standardized Approach, IRRBB Table B Template - Enhanced Approach Tier1 Capital Report
Description	A resident template to capture and report the required quantitative measures for the Basel Committee Standards on IRRBB Table B.
Dashboards Prompts	Prompt -Process • Process Prompt - Shock Type • Shock Type Prompt - As of Date • As of Date 1 • As of Date 2
Report Criteria	FILTER(case when (case when "Process Scenario"."IRRBB Scenario Code" in (1) then 'Parallel Up' else case when "Process Scenario"."IRRBB Scenario Code" in (2) then 'Parallel Down' else case when "Process Scenario"."IRRBB Scenario Code" in (3) then 'Short Rate Up' else case when "Process Scenario"."IRRBB Scenario Code" in (4) then 'Short Rate Down' else case when "Process Scenario"."IRRBB Scenario Code" in (5) then 'Flattener' else case when "Process Scenario"."IRRBB Scenario Code" in (6) then 'Steepener' else " end end end end end end) in ('Parallel Up','Parallel Down') then "Standard Cash Flow Results"."Net Interest Income (Delta To Bench)" else NULL end USING((((date '@{Asofdate1})'<="Time Buckets"."End Date" and "Time Buckets"."End Date"<=TIMESTAMPADD(SQL_TSI_MONTH,12,(date '@{Asofdate1}))) and "Calendar - ALM Results"."As-of-Date" in (date '@{Asofdate1}))) or (((date '@{Asofdate2}')<="Time Buckets"."End Date" and "Time Buckets"."End Date"<=(date '@{Asofdate1}))) and "Calendar - ALM Results"."As of Date 2" in (date '@{Asofdate2})))) MAX(ABS(FILTER(case when (case when "Process Scenario"."IRRBB Scenario Code" in (1) then 'Parallel Up' else case when "Process Scenario"."IRRBB Scenario Code" in (2) then 'Parallel Down' else case when "Process Scenario"."IRRBB Scenario Code" in (3) then 'Short Rate Up' else case when "Process Scenario"."IRRBB Scenario Code" in (4) then 'Short Rate Down' else case when "Process Scenario"."IRRBB Scenario Code" in (5) then 'Flattener' else case when "Process

	Scenario"."IRRBB Scenario Code" in (6) then 'Steepener' else " end end end end end end) in ('Parallel Up', 'Parallel Down') then "Standard Cash Flow Results"."Net Interest Income (Delta To Bench)" else NULL end USING(((date '@{Asofdate1})<="Time Buckets"."End Date" and "Time Buckets"."End Date"<=TIMESTAMPADD(SQL_TSL_MONTH,12,(date '@{Asofdate1}))) and "Calendar - ALM Results"."As-of-Date" in (date '@{Asofdate1})) or (((date '@{Asofdate2})<="Time Buckets"."End Date" and "Time Buckets"."End Date"<=(date '@{Asofdate1})) and "Calendar - ALM Results"."As of Date 2" in (date '@{Asofdate2}))) by case when "Calendar - ALM Results"."As-of-Date"= @{Asofdate1}{ (date '2016-10-30')} then @{Asofdate1}{ (date '2016-10-30')} when "Calendar - ALM Results"."As of Date 2"=@{Asofdate2}{ (date '2016-10-24')} then @{Asofdate2}{ (date '2016-10-30')} then @{Asofdate1}{ (date '2016-10-30')} then @{Asofdate1}{ (date '2016-10-30')} when "Calendar - ALM Results"."As-of-Date"= @{Asofdate2}{ (date '2016-10-24')} then @{Asofdate2}{ (date '2016-10-30')} then @{Asofdate2}{ (date '2016-10-30')} when "Calendar - ALM Results"."As of Date 2"=@{Asofdate2}{ (date '2016-10-24')} then @{Asofdate2}{ (date '2016-10-24'}} end) Reg LE Capital Summary Fact."Amount Post Reg Adjustment" case when "Calendar - ALM Results"."As of Date 2"=@{Asofdate2}{ (date '2016-10-30')} then @{Asofdate1}{ (date '2016-10-30')} when "Calendar - ALM Results"."As of Date 2"=@{Asofdate2}{ (date '2016-10-30')} then @{Asofdate2}{ (date '2015-10-30')} end For Tier 1 Capital report, below is criteria: "Reg LE Capital Summary Fact"."Amount Post Reg Adjustment" case when "Calendar - ALM Results"."As-of-Date"= @{Asofdate1}{ (date '2016-10-30')} then @{Asofdate1}{ (date '2016-10-30')} when "Calendar - ALM Results"."As of Date 2"=@{Asofdate2}{ (date '2016-10-30')} then @{Asofdate2}{ (date '2015-10-30')} then @{Asofdate1}{ (date '2016-10-30')} when "Calendar - ALM Results"."As of Date 2"=@{Asofdate2}{ (date '2016-10-30')} then @{Asofdate2}{ (date '2015-10-30')} when "Calendar - ALM Result
Conditions	Rep Line."Rep Line Cd" = 8110000637 UPPER("Capital Comp Group"."Cap Comp Group Code") = 'OTH' UPPER("Scenario (IRRBB)"."Scenario Desc") = 'BASELINE' "Process Scenario"."IRRBB Scenario Code" IN (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12) For Tier 1 Capital report, below are conditions: Rep Line."Rep Line Cd" = 8110000637 UPPER("Capital Comp Group"."Cap Comp Group Code") = 'OTH' UPPER("Scenario (IRRBB)"."Scenario Desc") = 'BASELINE'
Compound Layout	Title, Pivot Table

Report Name	Material Currency Report
Description	Report displaying data on material currency for each legal entity and as of date.
	As per standardized approach of Interest Rate Risk in Banking Book (IRRBB) prescribed by Basel Committee (bcbs d368) loss in economic value of equity is calculated for each currency with material exposures. Material exposure is defined as "those accounting for more than 5% of either banking book assets or liabilities".
Dashboards Prompts	Prompt
	As of Date
	Prompt
	Legal Entity
	Prompt
	Material Currency Flag
Report Criteria	"ALM Significant Currency"."Currency Code"
	ALM Significant Currency."Asset Balance Currency Wise"
	ALM Significant Currency."Liability Balance Currency Wise"
	CASE WHEN "ALM Significant Currency"."Significant Currency Flag"='Y' then 'Yes' else 'No' end
	ALM Significant Currency."Customer Total Asset Balance"
	ALM Significant Currency."Reporting Currency Code"
	ALM Significant Currency."Customer Total Liability Balance"
Compound Layout	Title
	Table
	Table(2)
	Graph
	Graph(2)
	Narrative(2)

8.8.104 Material Currency

8.9 Change Database Connection

8.9.1 Dynamic Infodom Selection

1. Infodom Selection: This page allows users to select infodom or database of their choice.

2. Clear Cache: This page allows user to clear cache after selecting infodom or database

8.10 Funds Transfer Pricing Reports

8.10.1 Fund Transfer Pricing - Assumptions Reports

- 1. Transfer Pricing Process Assumption Map
- 2. Adjustments
- 3. Transfer Pricing

8.10.2 Fund Transfer Pricing Reports

- 1. Transfer Pricing Margin Super Report
- 2. Funding Center Time
- 3. Funding Center Original Vs. Remaining
- 4. Transfer Pricing Account Summary Report
- 5. Transfer Pricing NIM Quality Report
- 6. Transfer Pricing Stratification Report
- 7. Zero Transfer Pricing Rate Report
- 8. Transfer Pricing Process Errors
- 9. Historical Rates Report
- **10.** Rate Lock Option Cost Summary
- **11.** Breakage Charge Summary
- 12. Transfer Price Audit Trail Report

8.10.2.1 Transfer Pricing Process Assumption Map

Report Name	Transfer Pricing - Process Assumption Map
Description	This report allows users to see the assumption sets and calculations requests for TP Processes.
Dashboards Prompts	Prompt Folder Name • Folder Name Prompt - MLS Code • MLS - Code
Report Criteria	Fact TP Process Rule.Process Id Dim Object Definition.Process Name Fact TP Process Rule.Data Filter

	Fact TP Process Rule.Data Filter
	Fact TP Process Rule. Transfer Pricing Rule
	Fact TP Process Rule.Prepayment Rule
	Fact TP Process Rule.Adjustment Rule
	Fact TP Process Rule. Alternate Rate Output Mapping
	Dim Calc Mode.Calculation Mode
	Fact TP Process Rule.Transfer Rate
	Fact TP Process Rule.Forward FTP
	Fact TP Process Rule.TP Skip Non Zero
	Fact TP Process Rule.TP Charge Credit
	Fact TP Process Rule.Adjustment Rate
	Fact TP Process Rule.Adjustment Skip Non Zero
	Fact TP Process Rule.Adjustment Charge Credit
	Fact TP Process Rule.Rate Lock Option Cost
	Fact TP Process Rule.Option Cost
	Fact TP Process Rule.Option Cost Skip Non Zero
	Fact TP Process Rule."Adjustment Charge Credit" ' - ' "Fact TP
	Process Rule"."Option Cost"
Conditions	< None >
Compound Layout	Title
	Table

8.10.2.2 Adjustments

Report Name	Adjustments Rule
Description	This report allows users to see the details of their FTP Adjustment Rules.
Dashboards Prompts	 Prompt Folder Name FolderName Prompt - Adjustment Rule Adjustment Rule Prompt - Product Hierarchy Name (Adjustment Rule) Product Hierarchy Name Prompt - Product (Adjustment Rule) Product Name Prompt - Currency (Adjustment Rule) Currency

	Prompt - MLS Code • MLS - Code
Report Criteria	Fact Adjustment Rule.Product Id Dim Product.Product Name Product < formula > case when ("Dim Product"."Product Id" = "Fact Adjustment Rule"."Product Id") then 'YES' else 'NO' end Dim Currency.Currency Cd Dim - Adjustment Type.Adjustment Type Dim - Adjustment Method.Adjustment Method Dim Reference Term.ReferenceTerm Dim - Assignment Date.Assignment Date Dim IRCS.Interest Rate Name Product < formula > case when cast("Fact Adjustment Rule"."Cond Sys Id" as char) = '-1' then 'NO' else 'YES' end
Conditions	< None >
Compound Layout	Title Table

8.10.2.3 Transfer Pricing

Report Name	Transfer Pricing Rule
Description	This Report allows users to view details of their Transfer Pricing Rules.
Dashboards Prompts	 Prompt - Folder Name Folder Name Prompt - Transfer Pricing Rule Transfer Pricing Rule Prompt - Product Hierarchy Name (Transfer price Rule) Product Hierarchy Name Prompt - Product (TP Rule) Currency Prompt - Currency (TP Rule) Currency Prompt - MLS Code MLS - Code

Report Criteria	"Fact Transfer Price Rule"."Product Id", "Dim Products (Assumptions)"."Product Name", "Dim Products (Assumptions)"."Is Leaf", "Dim Products (Assumptions)"."Display Order Name", "Dim - Data Source"."Data Source", "Fact Transfer Price Rule"."Ccy Cd", "Dim - TP Method"."Tp Calc Method", "Dim IRCS"."Interest Rate Name", case when cast("Fact Transfer Price Rule"."Cond Sys Id" as char) = '-1' then 'NO' else 'YES' end, "Fact Transfer Price Rule"."Transfer Price Sys Id", "Fact Transfer Price Rule"."Cond Sequence", "Dim Object Definition"."Short Desc"
Conditions	< None >
Compound Layout	Title Table

8.10.2.4 Transfer Pricing Rule - Detail

Report Name	Assumptions - Transfer Pricing Rule - Detail	
Description	This report displays the Transfer Pricing Rule details.	
Dashboards Prompts	Prompt - Folder Name	
	Folder Name	
	Prompt -Transfer Pricing Rule	
	Transfer Pricing Rule	
	Prompt -Product Hierarchy Name (Transfer price Rule)	
	Product Hierarchy Name	
	Prompt - Product (TP Rule)	
	Product Name	
	Prompt - Currency (TP Rule)	
	Currency	
	Prompt - Condtion Sys Id	
	Conditional Sys Id	
	Prompt - MLS Code	
	MLS - Code	
Report Criteria	"Dim Products (Assumptions)"."Product Name", "Dim Products (Assumptions)"."Display Order Name", "Dim Products (Assumptions)"."Is Leaf", "Dim Currency"."Currency Cd", case when cast("Fact Transfer Price Rule"."Cond Sys Id" as char) = '-1' then 'NO' else 'YES' end, "Dim - TP Method"."Tp Calc Method", "Fact Transfer Price Rule"."Interest Rate Code", "Dim - Data Source"."Data Source", "Fact Transfer Price Rule"."Holiday Calculation Option", "Fact Transfer Price Rule"."Holiday Calendar", "Fact Transfer Price Rule"."Holiday Rolling Convention", case when "Fact Transfer Price Rule"."Mid Period Reprice	

Flg"=0 then 'No' when "Fact Transfer Price Rule"."Mid Period Reprice Flg"=1 then 'Yes' else null end, case when "Fact Transfer Price Rule"."Output Audit Flag"=0 then 'No' when "Fact Transfer Price Rule"."Output Audit Flag"=1 then 'Yes' else null end, case when "Fact Transfer Price Rule"."Across Org Unit Flg"=0 then 'No' when "Fact Transfer Price Rule"."Across Org Unit Flg"=1 then 'Yes' else null end, "Dim - Assignment Date". "Assignment Date", "Fact Transfer Price Rule"."Cashflow Discount Method", "Fact Transfer Price Rule"."Cash Flow Type", "Fact Transfer Price Rule"."Caterpillar Method", "Fact Transfer Price Rule"."Constant Rate", "Fact Transfer Price Rule"."Economic Value Cash Flow Interest Type", case when "Fact Transfer Price Rule"."Economic Value Exclude Accrued Interest Flag"=0 then 'No' when "Fact Transfer Price Rule"."Economic Value Exclude Accrued Interest Flag"=1 then 'Yes' else null end, case when "Fact Transfer Price Rule"."Economic Value Interest Only Flag"=0 then 'No' when "Fact Transfer Price Rule"."Economic Value Interest Only Flag"=1 then 'Yes' else null end, "Dim IRCS"."Interest Rate Name", case when "Fact Transfer Price Rule"."Economic Value TP Rate Calculation Flag"=0 then 'No' when "Fact Transfer Price Rule"."Economic Value TP Rate Calculation Flag"=1 then 'Yes' else null end, case when "Fact Transfer Price Rule"."Gross Rate Flg"=0 then 'No' when "Fact Transfer Price Rule"."Gross Rate Flg"=1 then 'Yes' else NULL end, "Fact Transfer Price Rule"."Historical Term", "Fact Transfer Price Rule"."Historical Mult", "Fact Transfer Price Rule"."Lag Term", case when "Fact Transfer Price Rule"."Option Cost Method Cd"=0 then 'No' when "Fact Transfer Price Rule"."Option Cost Method Cd"=1 then 'Yes' else NULL end, case when "Fact Transfer Price Rule"."Output Avg Life To Inst Flg"=0 then 'No' when "Fact Transfer Price Rule"."Output Avg Life To Inst Flg"=1 then 'Yes' else NULL end, case when "Fact Transfer Price Rule"."Output Dur To Inst Flg"=0 then 'No' when "Fact Transfer Price Rule"."Output Dur To Inst Flg"=1 then 'Yes' else NULL end, "Fact Transfer Price Rule"."Behavior Pattern", "Fact Transfer Price Rule"."Rate Spread", "Fact Transfer Price Rule"."Single Rate Discount", "Fact Transfer Price Rule". "Target Balance". "Fact Transfer Price Rule". "Transfer Price Rate Term". "Fact Transfer Price Rule"."Transfer Price Term Adjustment Amount", "Fact Transfer Price Rule". "Transfer Price Term Operator", "Fact Transfer Price Rule"."Weighted Term Cash Flow Code", "Fact Transfer Price Rule"."Yield Curve Term", "Fact Transfer Price Rule"."Yield Curve Mult", "Fact Transfer Price Rule"."Transfer Price Sys Id", "Dim Object Definition"."Short Desc"

8.10.2.5 Transfer Pricing Margin Super Report

Report Name	TP Margin Super Report
Description	The TP Margin Super Report provides users access to all relevant FTP dimensions and measures. This report displays results aggregated by the selected dimension and also provides drill to detail capability.
Dashboards Prompts	Prompt -As of Date • As of Date Prompt -Product • Product Name

Prompt - Org Unit
Org Unit
Prompt -Entity
Legal Entity
-Prompt -TP Rate Type
Rate or Charge Credit Amount
Prompt -Currency
Currency Name
Prompt - Product Type
Product Type
Prompt - MLS Code
MLS - Code

Report Criteria	"Dim Product"."Product Name Level19",
	"Dim Product"."Product Name",
	"Dim Product"."Account Type",
	"Fact Account Summary"."Average Book Balance",
	"Fact Account Summary"."EOP Balance",
	"Fact Account Summary"."Weighted Average Current Rate",
	case when '@{TPRateType}'='Rate' then "Fact Account Summary"."Weighted Average TP Rate" else "Fact Account Summary"."Charge Credit Rate" end,
	case when '@{TPRateType}'='Rate' then "Fact Account Summary"."Weighted Average Liquidity Premium Rate" else "Fact Account Summary"."Liquidity Premium Chg" end,
	"case when '@{TPRateType}'='Rate' then ""Fact Account Summary"".""Weighted Average Basis Risk Rate"" else ""Fact Account Summary"".""Basis Risk Chg"" end",
	case when '@{TPRateType}'='Rate' then "Fact Account Summary"."Weighted Average Pricing Incentive Rate" else "Fact Account Summary"."Pricing Incentive Amount Chg" end,
	case when '@{TPRateType}'='Rate' then "Fact Account Summary"."Weighted Average Other Adjustments Rate" else "Fact Account Summary"."Other Adj Chg" end,
	"Fact Account Summary"."Weighted Average Charge Credit Rate",
	CASE WHEN "Dim Product"."Account Type" in (100,200) Then ("Fact Account Summary"."Weighted Average Current Rate"- "Fact Account Summary"."Weighted Average All In TP Rate") else Case when "Dim Product"."Account Type" in (300,400) then ("Fact Account Summary"."Weighted Average All In TP Rate"-"Fact Account Summary"."Weighted Average Current Rate") end end,
	case when '@{TPRateType}'='Rate' then "Fact Account Summary"."Weighted Average All In TP Rate" else "Fact Account Summary"."Other Adj Chg" + "Fact Account Summary"."Basis Risk Chg" + "Fact Account Summary"."Pricing Incentive Amount Chg" + "Fact Account Summary"."Liquidity Premium Chg" + "Fact Account Summary"."Charge Credit Rate" end
Conditions	"Dim Product"."Account Type" IN (100, 200, 300, 400)
Compound Layout	Title
	Table

8.10.2.6 Funding Center Time

Report Name	Funding Center Time
Description	This report allows users to see Funding Center income, Weighted Average Transfer Rates or Average Balances over time.
Dashboards Prompts	 Prompt - Date Range Calendar From Date Calendar To Date Prompt - OrgUnit (Funding Centre) - 1 Org Unit Prompt - TP Rate Type Rate/Charge Credit Amount
Report Criteria	 "Dim Product"."Product Name Level19", "Dim Product"."Product Name", "Dim Calendar"."Year", "Dim Calendar"."Month", FILTER("Fact Ledger Stat"."Value" USING ("Financial Elements"."Financial Element Identifier" = 140)), case when '@{TPRateType}'='Rate' then (FILTER("Fact Ledger Stat"."Value" USING ("Financial Element Identifier" = 170))) else (FILTER("Fact Ledger Stat"."Value" USING ("Financial Elements"."Financial Elements"."Financial Elements"."Financial Element Identifier" = 450))) end
Conditions	"Dim Product"."Account Type" IN (100, 200, 300, 400)
Compound Layout	Title Pivot Table (4)

8.10.2.7 Funding Center Original Vs. Remaining

Report Name	TP Funding Center Org Vs Rem
Description	This report allows users to compare Remaining Term and Original Term transfer pricing results.
Dashboards Prompts	Prompt - AsOfDate (FundingCenter) • As of Date Prompt - Product (Funding Center)

	 Product Name Prompt - OrgUnit (Funding Center) Org Unit Name Prompt - Product Type Product Type
Report Criteria	 "Dim Product"."Product Name Level19" Dim Product.Product Name Product < formula > sum(CASE WHEN "Fact Ledger Stat"."Financial Element Identifier" = 140 THEN "Fact Ledger Stat"."Value" END) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(case when "Fact Ledger Stat"."Value" end) Product < formula > sum(IFNULL((case when "Fact Ledger Stat"."Value" end) Product < formula > sum(IFNULL((case when "Fact Ledger Stat"."Value" end), 0) - IFNULL((case when "Fact Ledger Stat"."Financial Element Identifier" = 172 then "Fact Ledger Stat"."Value" end), 0)) Product < formula > sum(IFNULL((case when "Fact Ledger Stat"."Value" end), 0)) Product < formula > sum(IFNULL((case when "Fact Ledger Stat"."Value" end), 0)) Product < formula > sum(IFNULL((case when "Fact Ledger Stat"."Value" end), 0)) Product < formula > sum(IFNULL((case when "Fact Ledger Stat"."Value" end), 0) - IFNULL((case when "Fact Ledger Stat"."Value" end), 0) - IFNULL((case when "Fact Ledger Stat"."Financial Element Identifier" = 450 then "Fact Ledger Stat"."Financial Element Identifier" = 450 then "Fact Ledger Stat"."Value" end), 0) - IFNULL((case when "Fact Ledger Stat"."Financial Element Identifier" = 450 then "Fact Ledger Stat"."Value" end), 0) - IFNULL((case when "Fact Ledger Stat"."Value" end), 0) - IFNULL((case when "Fact Ledger Stat"."Value" end), 0))
Conditions	Fact Ledger Stat."Financial Element Identifier" IN (140, 170, 450, 172, 452),"Dim Product"."Account Type" IN (100, 200, 300, 400)
Compound Layout	Title Table (2)
Report Name(s)	TP Funding Center Org Vs Rem

8.10.2.8 I ransfer Pricing Account Summary Report	8.10.2.8	Transfer Pricing Account Summary Report
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	1
Report Name	TP Account Summary Report
Description	This report allows users to see an overview of the account level TP information. A variant of the TP Margin Super report allowing further drill down to Account Detail Report.
Dashboards Prompts	Prompt – AsOfDate (TP Account Summary)
	As of Date
	Prompt - Product (TP Account Summary)
	Product Name
	Prompt - Customer (TP Account Summary)
	Customer Name
	Prompt - Account Number (TP Account Summary)
	Account Number
	Prompt - Account Officer (TP Account Summary)
	Account Officer
	Prompt - OrgUnit (TP Account Summary)
	• Org Unit
	Prompt - Entity (TP Account Summary)
	Legal Entity Prompt Currency (TD Account Summary)
	Prompt - Currency (TP Account Summary)Currency
	Prompt - Product Type (TP Account Summary)
	Product Type Product Type
	Prompt - Idnumber
	Identity Number
Report Criteria	"Dim Account"."Account Number",
	"Fact Account Summary"."Weighted Average Basis Risk Rate",
	"Fact Account Summary"."Weighted Average Liquidity Premium Rate",
	"Fact Account Summary"."Weighted Average Other Adjustments Rate",
	"Fact Account Summary"."Weighted Average Pricing Incentive Rate",
	"Fact Account Summary"."Weighted Average Current Rate",
	"Fact Account Summary"."Weighted Average TP Rate",
	"Fact Account Summary"."Average Book Balance",
	"Fact Account Summary"."EOP Balance",
	"Fact Account Summary"."Weighted Average All In TP Rate",
	CASE WHEN "Dim Product"."Account Type" in (100,200) Then ("Fact Account Summary"."Weighted Average Current Rate"- "Fact Account Summary"."Weighted Average All In TP Rate")

	else Case when "Dim Product"."Account Type" in (300,400) then ("Fact Account Summary"."Weighted Average All In TP Rate"-"Fact Account Summary"."Weighted Average Current Rate") end end, "Dim Product"."Product Name", "Dim Product"."Product Name Level19", "Dim Product"."Account Type"
Conditions	"Dim Product"."Account Type" IN (100, 200, 300, 400)
Compound Layout	Title Pivot Table

8.10.2.9 Transfer Pricing NIM Quality Report

Report Name	TP NIM Quality Report
Description	This report allows users to view standard deviations of transfer pricing results of the primary transfer pricing value (TRANSFER-RATE).
Dashboards Prompts	Prompt - AsOfDate As of Date
	Prompt - Product
	Product Name
	Prompt - OrgUnit
	Org Unit
	Prompt - Entity
	Legal Entity
	Prompt - Rate Type
	Rate Type
	Prompt - Currency
	Currency Name
	Prompt - Product Type
	Product Type

Report Criteria	"Dim Product"."Product Name",
	"Dim Product"."Account Type",
	"Dim Product"."Product Name Level19",
	sum("Fact Account Summary"."Record Count"),
	"Fact Account Summary"."Average Book Balance",
	case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Weighted Average TP Rate" else "Fact Account Summary"."Weighted Average All In TP Rate" end,
	"Fact Account Summary"."Weighted Average Current Rate",
	case when ASCII('@{RateType}{Base}') =ASCII('Base') then (case when "Dim Product"."Account Type" in (300,400) then "Fact Account Summary"."Weighted Average TP Rate" - "Fact Account Summary"."Weighted Average Current Rate" when "Dim Product"."Account Type" in (100,200) then "Fact Account Summary"."Weighted Average Current Rate" - "Fact Account Summary"."Weighted Average TP Rate" end) else (case when "Dim Product"."Account Type" in (300,400) then "Fact Account Summary"."Weighted Average All In TP Rate" - "Fact Account Summary"."Weighted Average Current Rate" - "Fact Account
	when "Dim Product"."Account Type" in (100,200) then "Fact Account Summary"."Weighted Average Current Rate" - "Fact Account Summary"."Weighted Average All In TP Rate" end) end,case when ASCII('@{RateType}{Base}') =ASCII('Base') then STDDEV(case when "Dim Product"."Account Type" in (300,400) then "Fact Account Summary"."Weighted Average TP Rate" - "Fact Account Summary"."Weighted Average Current Rate" when "Dim Product"."Account Type" in (100,200) then "Fact Account Summary"."Weighted Average Current Rate" - "Fact Account Summary"."Weighted Average TP Rate" - "Fact Account Summary"."Weighted Average Current Rate" - "Fact Account Summary"."Weighted Average TP Rate" end) else STDDEV(case when "Dim Product"."Account Type" in (300,400) then "Fact Account Summary"."Weighted Average All In TP Rate" - "Fact Account Summary"."Weighted Average Current Rate" when "Dim Product"."Account Type" in (100,200) then "Fact Account Summary"."Weighted Average Current Rate" when "Dim Product"."Account Type" in (100,200) then "Fact Account Summary"."Weighted Average Current Rate" when "Dim Product"."Account Type" in (100,200) then "Fact Account Summary"."Weighted Average Current Rate" when "Dim Product"."Account Type" in (100,200) then "Fact Account Summary"."Weighted Average Current Rate" - "Fact Account Summary"."Weighted Average All In TP Rate" end) end
Conditions	"Dim Product"."Account Type" IN (100, 200, 300, 400)
Compound Layout	Title Table

8.10.2.10 Transfer Pricing Stratification Report

Report Name	TP Stratification Report TP Stratification Report Graph - Modified
Description	This report allows users to view a stratification of transfer pricing results (TP results are accumulated into tranches).
Dashboards Prompts	Prompt - AsOfDate • As of Date Prompt - Product • Product Name Prompt - OrgUnit • Org Unit Prompt - Entity • Legal Entity Prompt - Currency • Currency Name Prompt - Product Type • Product Type

Doport Critoria	"Dim Dradust" "Dradust Name Laug10"
Report Criteria	"Dim Product"."Product Name Level19",
	"Dim Product"."Product Name",
	("Fact Account Summary"."Record Count"),
	"Fact Account Summary"."Average Book Balance",
	"Fact Account Summary"."Average Book Balance value",
	"Fact Account Summary"."Weighted Average All In TP Rate",
	"Fact Account Summary"."Weighted Average Basis Risk Rate",
	"Fact Account Summary"."Weighted Average Current Rate",
	"Fact Account Summary"."Weighted Average Liquidity Premium Rate",
	"Fact Account Summary"."Weighted Average Other Adjustments Rate",
	"Fact Account Summary"."Weighted Average Pricing Incentive Rate",
	"Fact Account Summary"."Weighted Average TP Rate"
	CASE WHEN cast((CASE WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 1.0
	AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 2.0 AND 3.0 THEN 2.0
	WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 4.0 AND 5.0 THEN 4.0
	WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 6.0 AND 7.0 THEN 6.0
	WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."All In TP Rate" END) as char) = '0' THEN '>0
	and <=1' WHEN cast((CASE WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."All In TP Rate"
	BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."All In TP Rate"
	BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."All In TP Rate"
	BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."All In TP Rate"
	BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."All In TP Rate" END) as char) = '1' THEN '>1 and <=2'
	WHEN cast((CASE WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."All In TP Rate"
	BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."All In TP Rate"

Rate'	VEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."All In TP ' END) as char) = '2' THEN '>2 and <=3' WHEN cast((CASE WHEN "Fact unt Summary"."All In TP Rate"
Rate'	VEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."All Rate"
Rate'	VEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."All Rate"
Rate'	VEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."All Rate"
Rate'	VEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."All In ate" END) as char) = '3'
In TP	N '>3 and <=4' WHEN cast((CASE WHEN "Fact Account Summary"."All Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account mary"."All In TP Rate" BETWEEN 1.0
BETV Rate' In TP	2.0 THEN 1.0 WHEN "Fact Account Summary"."All In TP Rate" VEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."All Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account mary"."All In TP Rate" BETWEEN 5.0 AND 6.0 THEN 5.0
THE	N "Fact Account Summary"."All In TP Rate" BETWEEN 6.0 AND 7.0 N 6.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 7.0 8.0 THEN 7.0 ELSE "Fact Account Summary"."All In TP Rate" END) as = '4'
In TP	N '>4 and <=5' WHEN cast((CASE WHEN "Fact Account Summary"."All Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account mary"."All In TP Rate"
BETV Rate'	VEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."All Rate"
Rate'	VEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."All Rate"
Rate'	VEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."All In TP ' BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."All ' Rate"
	VEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."All In TP ' END) as char) = '5' THEN '>5 and <=6'
	N cast((CASE WHEN "Fact Account Summary"."All In TP Rate" VEEN 0.0 AND 1.0 THEN 0.0
WHE THEN	N "Fact Account Summary"."All In TP Rate" BETWEEN 1.0 AND 2.0 N 1.0
WHE THEN	N "Fact Account Summary"."All In TP Rate" BETWEEN 2.0 AND 3.0 \ 2.0
	N "Fact Account Summary"."All In TP Rate" BETWEEN 3.0 AND 4.0 \ 3.0

WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 4.0 AND 5.0
THEN 4.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 6.0 AND 7.0 THEN 6.0
WHEN "Fact Account Summary"."All In TP Rate" BETWEEN 7.0 AND 8.0 THEN 7.0
ELSE "Fact Account Summary"."All In TP Rate" END) as char) = '6' THEN '>6 and <=7' ELSE 'All Other Rates' END
Add CASE WHEN cast((CASE WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Basis Risk Rate"
BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Basis Risk Rate" END) as char) = '0' THEN '>0 and <=1' WHEN cast((CASE WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Basis Risk Rate" END) as char) = '1'
THEN '>1 and <=2' WHEN cast((CASE WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Basis Risk Rate" END) as char) = '2' THEN '>2 and <=3' WHEN cast((CASE WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Basis Risk Rate"
BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 7.0

AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Basis Risk Rate" END) as char) = '3' THEN '>3 and <=4' WHEN cast((CASE WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 3.0 AND 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Basis Risk Rate" END) as char) = '4' THEN '>4 and <=5' WHEN cast((CASE
WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary". "Basis Risk Rate" END) as char) = '5' THEN '>5 and <=6' WHEN cast((CASE WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary". "Basis Risk Rate" BETWEEN 1.0 AND 3.0 THEN 2.0
WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Basis Risk Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Basis Risk Rate" END) as char) = '6' THEN '>6 and <=7' ELSE 'All Other Rates' END
CASE WHEN cast((CASE WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate"
BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Current Net Rate" END) as char) = '0' THEN '>0 and <=1' WHEN cast((CASE WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0

AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Current Net Rate" END) as char) = '1' THEN '>1 and <=2' WHEN cast((CASE WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 0.0 AND 1.0 THEN
0.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Current Net Rate" END) as char) = '2' THEN '>2 and <=3' WHEN cast((CASE WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 2.0 AND 3.0 THEN 7.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate"
5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Current Net Rate" END) as char) = '3' THEN '>3 and <=4' WHEN cast((CASE WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary". "Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 6.0 WHEN "Fact Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 6.0 AND 7.0 THEN 6.0
WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Current Net Rate" END) as char) = '4' THEN '>4 and <=5' WHEN cast((CASE WHEN "Fact Account Summary"."Current Net Rate" "Current Net Rate" BETWEEN
1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary".BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate" END) as char) = '5' THEN '>5 and <=6' WHEN cast((CASE WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 3.0 THEN 2.0 WHEN "Fact Account Summary"."Current Net Rate" SETWEEN 3.0

AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Current Net Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Current Net Rate" END) as char) = '6' THEN '>6 and <=7' ELSE 'All Other Rates' END Add CASE WHEN cast((CASE WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" END) as char) = '0' THEN '>0 and <=1' WHEN cast((CASE WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 4.0 AND 5.0 THEN 4.0
 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" END) as char) = '1' THEN '>1 and <=2' WHEN cast((CASE WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0
WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Liquidity Premium

Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" END) as char) = '3' THEN '>3 and <=4' WHEN cast((CASE WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN
5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" END) as char) = '4' THEN '>4 and <=5' WHEN cast((CASE WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" END) as char) = '5' THEN '>5 and <=6' WHEN cast((CASE WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 0.0 AND 1.0 THEN 0.0
WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 4.0 AND 5.0 THEN 4.0
WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Liquidity Premium Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Liquidity Premium Rate" END) as char) = '6' THEN '>6 and <=7' ELSE 'All Other Rates' END CASE WHEN cast((CASE WHEN "Fact Account Summary"."Other
Adjustments rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 3.0 AND 4.0 THEN 3.0

	WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 5.0 AND 6.0 THEN 5.0
	WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 7.0 AND 8.0 THEN 7.0
	ELSE "Fact Account Summary"."Other Adjustments rate" END) as char) = '0' THEN '>0 and <=1' WHEN cast((CASE WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Other Adjustments rate" END) as char) = '1'
	THEN '>1 and <=2' WHEN cast((CASE WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 1.0
	AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 3.0 AND 4.0 THEN 3.0
	WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 5.0 AND 6.0 THEN 5.0
	WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 7.0 AND 8.0 THEN 7.0
	ELSE "Fact Account Summary"."Other Adjustments rate" END) as char) = '2' THEN '>2 and <=3' WHEN cast((CASE WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Other Adjustments rate"
	BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Other Adjustments rate" END) as char) = '3'
l	

THEN '>3 and <=4' WHEN cast((CASE WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 1.0
AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 3.0 AND 4.0 THEN 3.0
Add WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 5.0 AND 6.0 THEN 5.0
WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 7.0 AND 8.0 THEN 7.0
ELSE "Fact Account Summary"."Other Adjustments rate" END) as char) = '4' THEN '>4 and <=5' WHEN cast((CASE WHEN "Fact Account Summary"."Other Adjustments rate"
BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Other Adjustments rate"
BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Other Adjustments rate"
BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Other Adjustments rate"
BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Other Adjustments rate" END) as char) = '5'
THEN '>5 and <=6' WHEN cast((CASE WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 1.0
AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 3.0 AND 4.0 THEN 3.0
WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 5.0 AND 6.0 THEN 5.0
WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Other Adjustments rate" BETWEEN 7.0 AND 8.0 THEN 7.0
ELSE "Fact Account Summary"."Other Adjustments rate" END) as char) = '6'
THEN '>6 and <=7' ELSE 'All Other Rates' END,
CASE WHEN cast(CASE WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 1.0 AND 2.0
THEN 1.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 3.0 AND 4.0 THEN 3.0

WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 5.0 AND 6.0 THEN 5.0
WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 7.0 AND 8.0 THEN 7.0
ELSE "Fact Account Summary"."Pricing Incentive Rate" END) as char) = '0' THEN '>0 and <=1' WHEN cast((CASE WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Pricing Incentive Rate" END) as char) = '1'
THEN '>1 and <=2' WHEN cast((CASE WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 1.0
AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 3.0 AND 4.0 THEN 3.0
WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 5.0 AND 6.0 THEN 5.0
WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 7.0 AND 8.0 THEN 7.0
ELSE "Fact Account Summary"."Pricing Incentive Rate" END) as char) = '2' THEN '>2 and <=3' WHEN cast((CASE WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Pricing Incentive Rate" END) as char) = '3'

THEN '>3 and <=4' WHEN cast((CASE WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 1.0
AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 3.0 AND 4.0 THEN 3.0
WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 5.0 AND 6.0 THEN 5.0
WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 7.0 AND 8.0 THEN 7.0
ELSE "Fact Account Summary"."Pricing Incentive Rate" END) as char) = '4' THEN '>4 and <=5' WHEN cast((CASE WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Pricing Incentive Rate"
BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Pricing Incentive Rate" END) as char) = '5'
THEN '>5 and <=6' WHEN cast((CASE WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 1.0
AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 3.0 AND 4.0 THEN 3.0
WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 5.0 AND 6.0 THEN 5.0
WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Pricing Incentive Rate" BETWEEN 7.0 AND 8.0 THEN 7.0
ELSE "Fact Account Summary"."Pricing Incentive Rate" END) as char) = '6'
THEN '>6 and <=7' ELSE 'All Other Rates' END
CASE WHEN cast((CASE WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Transfer Rate"
BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact

BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Transfer Rate" END) as char) = '0' THEN '>0 and <=1' WHEN cast((CASE WHEN "Fact Account
Summary"."Transfer Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Transfer Rate"
BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 5.0
AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Transfer Rate" END) as char) = '1' THEN '>1 and <=2' WHEN cast((CASE WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 2.0 AND 3.0
THEN 2.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Transfer Rate"
BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Transfer Rate" END) as char) = '2' THEN '>2 and <=3' WHEN cast((CASE WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 0.0 AND 1.0 THEN 0.0
WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 4.0
AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Transfer Rate" END) as char) = '3'
THEN '>3 and <=4' WHEN cast((CASE WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 1.0 AND 2.0
THEN 1.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Transfer Rate"
BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN

	AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Transfer Rate" END) as char) = '4' THEN '>4 and <=5' WHEN cast((CASE WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 5.0 AND 6.0 THEN 5.0 WHEN
	6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Transfer Rate" END) as char) =
	'5' THEN '>5 and <=6' WHEN cast((CASE WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 0.0 AND 1.0 THEN 0.0 WHEN "Fact Account Summary"."Transfer Rate"
	BETWEEN 1.0 AND 2.0 THEN 1.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 2.0 AND 3.0 THEN 2.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 3.0 AND 4.0 THEN 3.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 4.0 AND 5.0 THEN 4.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 5.0 AND 6.0 THEN 5.0
	WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 6.0 AND 7.0 THEN 6.0 WHEN "Fact Account Summary"."Transfer Rate" BETWEEN 7.0 AND 8.0 THEN 7.0 ELSE "Fact Account Summary"."Transfer Rate" END) as char) = '6'
	THEN '>6 and <=7' ELSE 'All Other Rates' END
	"Dim Product"."Account Type" IN (100, 200, 300, 400)
Compound Layout	Title Pivot Table
	View Selector
	Pivot Table (2)
	Pivot Table (3)
	Pivot Table (4)
	Pivot Table (5)
	Pivot Table (6)
	Pivot Table (7)
	1

8.10.2.11 Zero Transfer Pricing Rate Report

Report Name	Zero TP Rate Report
Description	This report allows users to see records with zero or missing transfer rates by product. Hyperlinks on Product lead to instrument level detail reports.
Dashboards Prompts	Prompt - AsOfDate

	 As of Date Prompt - Product Product Name Prompt - OrgUnit Org Unit Prompt - Entity Legal Entity Prompt - Rate Type Rate Type Prompt - Currency Currency Name Prompt - Product Type
Conditions	< None >
Compound Layout	Title Table

Report Criteria	"Dim Product"."Product Name""Dim Product"."Product Name",sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."Record Count" end by "Dim Product"."Product Name"),sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."Average Book Balance" end by "Dim Product"."Product Name"),sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" end) = 0 then "Fact Account Summary"."Record Count" end by "Dim Product"."Product Name"),sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" end) = 0 then "Fact Account Summary"."Record Count" end by "Dim Product"."Product Name"),sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" end) = 0 then "Fact Account Summary"."All In Transfer Rate" end) = 0 then "Fact Account Summary"."All In Transfer Rate" end) = 0 then "Fact Account Summary"."All In Transfer Rate" end) = 0 then "Fact Account Summary"."Average Book Balance" end by "Dim Product"."Product Name")
	,sum("Fact Account Summary"."Record Count" by "Dim Product"."Product Name"),sum("Fact Account Summary"."Average Book Balance" by "Dim Product"."Product Name"),(sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In TP Rate" end) = 0 then "Fact Account Summary"."Record Count" end by "Dim Product"."Product Name")/sum("Fact Account Summary"."Record Count" by "Dim Product"."Product Name"))*100,(sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In TP Rate" end) = 0 then "Fact Account Summary"."Average Book Balance" end by "Dim Product"."Product Name")/sum("Fact Account Summary"."All In TP Rate" end) = 0 then "Fact Account Summary"."Average Book Balance" end by "Dim Product"."Product Name")/sum("Fact Account Summary"."Average Book Balance" by "Dim Product"."Product Name"))*100,sum(case when (case when ASCII('@{RateType}{Base}') =ASCII('Base') then "Fact Account Summary"."Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" else "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."All In Transfer Rate" end) is null then "Fact Account Summary"."Average Book Balance" end by "Dim Product"."Product Name") * 100/sum("Fact Account Summary"."Average Book Balance" by "Dim Product"."Product Name")
Conditions	< None >
Compound Layout	Title Table

8.10.2.12 Transfer Pricing Process Errors

Report Name	FTP Process Error
Description	This report allows users to see the process errors with their impact.
Dashboards Prompts	Prompt - Process Errors
	Process Name
	Identification Number
Report Criteria	Fact Process Errors.Short Desc
	Fact Process Errors.Process Sys Id
	Fact Process Errors.Error Description
	Fact Process Errors.Error Code
	Fact Process Errors.Severity
	Dim Product (Process Errors).Product Leaf Name
	Fact Process Errors.Table Name
	Fact Process Errors.ld Number
	Fact Process Errors.Field name
	Fact Process Errors.Field Value
	Fact Process Errors.Corrected Value
Conditions	
Compound Layout	Title
	Pivot Table
Report Criteria	Fact Process Errors.Short Desc
	Fact Process Errors.Process Sys Id
	Fact Process Errors.Error Description
	Fact Process Errors.Error Code
	Fact Process Errors.Severity
	Dim Product (Process Errors).Product Leaf Name
	Fact Process Errors.Table Name
	Fact Process Errors.ld Number
	Fact Process Errors.Field name
	Fact Process Errors.Field Value
	Fact Process Errors.Corrected Value

8.10.2.13 Historical Rates Report

Report Name	FTP - IRC Report
	FTP - IRC Report - Rate by Term
	FTP - IRC Report - Rate by Date
Description	This report allows users to query historical interest rates used by Transfer Pricing processes.
Dashboards Prompts	Prompt - IRC Code
	Interest Rate Code
	IRC Description
	Interest Rate Term
	Prompt - Effective Date
	Effective Date
Report Criteria	Fact IRC Rate."Effective Date"
	Fact IRC Rate."Interest Rate"
	Dim IRCS"."Interest Rate Code" Dim IRCS"."Irc Description"
	Dim IRCS". "Currency"
	Fact IRC Rate"."Interest Rate Term(D)"
Conditions	
Compound Layout	Title
	Pivot Table (2)
	Pivot
	Pivot (3)
	· · · · · · · · · · · · · · · · · · ·

8.10.2.14 Rate Lock Option Cost Summary

Report Name	Rate Lock Option Cost Summary
Dashboards Prompts	Prompt - AsOfDate • As Of Date Prompt - OrgUnit • Org Unit Prompt - Currency • Currency
Report Criteria	Product.Product Name Fact Loan Commitments Account Summary.Commitment Term

	Fact Loan Commitments Account Summary.Curr Book Balance Fact Loan Commitments Account Summary.Weighted Average Curr Net Rate Fact Loan Commitments Account Summary.Weighted Average Transfer Rate Fact Loan Commitments Account Summary.Weighted Average Commit Option Cost Pct Fact Loan Commitments Account Summary.Commit Option Cost Fact Loan Commitments Account Summary.Commit fee to Cust Dim Product.Product Name Level19 cast("Fact Loan Commitments Account Summary"."Org Term" as char) "Fact Loan Commitments Account Summary"."Org Term"
Conditions	Product.Account Type in (100.200.300.400)
Compound Layout	Title Pivot Table

8.10.2.15 Breakage Charge Summary

Report Name	Breakage Charge Summary
Description	This report is a view of Current Book Balance, Breakage Amount, Weighted Average Current Net Rate, Weighted Average Transfer Rate, Weighted Average Break Funding Rate, Break Funding Market Value, Break Funding Amount, Break Funding Amount Change.
Dashboards Prompts	Prompt - AsOfDate • As Of Date Prompt - OrgUnit • Org Unit Prompt - Currency • Currency Prompt - Breakage Type • Breakage Type Prompt - Product Type • Product Type
Report Criteria	Product.Product Name Breakage Type MLS.Breakage Type Description

	Fact Account Summary.Weighted Average Current Rate Fact Account Summary.Weighted Average TP Rate Fact Account Summary.Weighted Average Break Funding Rate Fact Account Summary.Curr Net Book Bal Fact Account Summary.Break Funding Amount Fact Account Summary.Breakage Amount Fact Account Summary.Break Funding MV Fact Account Summary.Break Funding Amount Change Dim Product.Product Name Level19
Conditions	Product.Account Type in (100.200.300.400)
Compound Layout	Title Pivot Table

8.10.2.16 Transfer Price Audit Trail Report

Report Name	Transfer Price Audit Trail Report
Description	This report shows the audit details of the Transfer Price process.
Dashboards Prompts	Prompt - Process ld • Process ld Prompt - Process Name • Process Name
Report Criteria	"Fact FTP Audit Trail"."Instrument Type Code", "Fact FTP Audit Trail"."ID Number", "Fact FTP Audit Trail"."Identity Code", "Fact FTP Audit Trail"."As Of Date/MIS Date", "Fact FTP Audit Trail"."Transfer Price Sys Id", "Fact FTP Audit Trail"."Tp Method", "Fact FTP Audit Trail"."TP IRC", "Fact FTP Audit Trail"."TP Accrual Frequency Code", "Fact FTP Audit Trail"."Accrual Basis Code", "Fact FTP Audit Trail"."All in TP Rate Formula", "Fact FTP Audit Trail"."Adjustment Sys ID","Fact FTP Audit Trail"."Liquidity Adjustment Method Code", "Fact FTP Audit Trail"."Liquidity Adjustment IRC", "Fact FTP Audit Trail"."Basis Adjustment Method Code", "Fact FTP Audit Trail"."Basis Adjustment IRC", "Fact FTP Audit Trail"."Other Adjustment Method Code", "Fact FTP Audit Trail"."Other Adjustment IRC", "Fact FTP Audit Trail"."Pricing Adjustment IRC", "Fact FTP Audit Trail"."Breakage Adjustment Method Code", "Fact FTP Audit Trail"."Breakage Adjustment IRC", "Fact FTP Audit Trail"."Rate Lock - Discount Curve Code", "Fact FTP Audit Trail"."Rate Lock - Volatility Curve

	Code", "Fact FTP Audit Trail"."Economic Value - Cash Flow Interest Type", "Fact FTP Audit Trail"."Economic Value - IRC", "Fact FTP Audit Trail"."Stochastic Rate Index Sys ID", "Fact FTP Audit Trail"."Term Structure Model Code", "Fact FTP Audit Trail"."Option Cost - Accrual Frequency Code", REPLACE("Fact FTP Audit Trail"."Propagation Type 1", '_', ' '), REPLACE("Fact FTP Audit Trail"."Propagation Type 2",'_',' '), REPLACE("Fact FTP Audit Trail"."Propagation Type 3",'_',' '), REPLACE("Fact FTP Audit Trail"."Propagation Type 3",'_',' '), REPLACE("Fact FTP Audit Trail"."Propagation Type 4",'_',' '), "Fact FTP Audit Trail"."Batch Id"
Conditions	
Compound Layout	Title
	Table
	Title 2

NOTE The FTP Dashboards contain a prompt for Legal Entity. This prompt refers to Legal Entity data loaded directly from the Staging Area to the Reporting Data Model. If Legal Entity is not required, you can ignore this step and either delete the Legal Entity prompt or ignore it on the relevant FTP dashboards.

9 Creating a Custom Report

This section details how to create a custom report using OBIEE and ALM BI.

Topics:

• <u>Steps for Creating a Custom Report</u>

9.1 Steps for Creating a Custom Report

To create a custom report and add it to an existing Dashboard page, perform the following steps:

- 1. Log in to the ALMBI application and click the **New** link available at the top right corner.
- 2. Select Analysis.
- 3. Click ALM BI from Select Subject Area to see all the metadata objects available to build the report.
- 4. Once you select the ALM BI, you can see all the presentation items available on the LHS.
- 5. Select the required columns one after the other from the LHS as shown in the following Figure.
- **6.** You can put filters to restrict the data. To apply filers, **Ctrl+Click** the respective dimension columns and then provide the filter values as shown.
- **7.** Repeat the earlier step # 5 to add all the relevant filters to the earlier report and upon adding all the filters, as shown.
- **8.** Click the **Results** tab on the top and delete the **Table view** available in the **Compound Layout** by clicking the **Delete** button.
- **9.** After deletion of the **Table view**, add one **Pivot view** to the **Compound Layout** by selecting it from the list.
- **10.** After adding the **Pivot View**, change the format of the Pivot.
- **11.** Select the **Chart Pivoted Results** and make the changes to the pivot view to get the final Chart view, and then click Ok.
- 12. Click Save or Save As on the right-hand top corner.
- **13.** Add the newly created report to the **Catalog** page.

10 How to Change the Product Dimension in ALM BI

This section describes how to change the Product dimension. The seeded product dimension is PRODUCT. You can change any product dimensions other than the seeded dimension, as follows:

Topics:

- <u>Changing the Product Dimension Overview</u>
- <u>Steps to Point to a Different Product Dimension in ALMBI</u>

10.1 Changing the Product Dimension - Overview

ALM Product is a logical idea in the Presentation or Logical layer. In the physical layer, it can hold any one of the product dimension members that are available in ALM.

(This can be DIM_COMMON_COA, DIM_PRODUCT, DIM_GL_ACCOUNT, or any other user-defined Product dimensions).

As part of the released RPD (ALMBI 8.1.2.0.0 version), the ALM Product container was mapped to the DIM_PRODUCT table in the physical layer (containing PRODUCT_ID). In an implementation, however, users can point to any other product dimension table.

The section <u>Steps to Point to a Different Product Dimension in ALMBI</u> describes the steps to change the Product Dimension in the following three cases:

- Case 1: Changing the Product Dimension from DIM_PRODUCT to DIM_COMMON_COA.
- Case 2: Changing the Product Dimension from DIM COMMON COA to DIM GL ACCOUNT.
- Case 3: Changing the Product Dimension from DIM_PRODUCT to the user-defined dimension. For example, DIM TM COA ID.

10.2 Steps to Point to a Different Product Dimension in ALMBI

ALM Product is a logical idea in the Presentation or Logical layer and in the physical layer, it can hold any one of the product dimension members that are available in ALM. It can be from DIM_COMMON_COA, DIM_PRODUCT, DIM_GL_ACCOUNT, or any other user-defined dimension.

This section details the steps that must be performed to enable these Changes in the following places:

- RPD layer: change the references in the physical layer.
- Database layer: change data in the FSI_BI_SETUP_TABLE.

Changes in RPD layer: Stop the BI Server and open the RPD file in offline mode. Expand the ALMBI folder in the physical layer of the repository.

Take a backup of ALMBI RPD before doing any changes.

10.2.1 Case 1

When the product dimension needs to be changed from DIM_PRODUCT to DIM_COMMON_COA, the following changes are required in the OBIEE Repository:

- 1. Repository physical layer will have DIM_PRODUCT.
- 2. Rename the table name from DIM_PRODUCT to DIM_COMMON_COA.
- **3.** Rename every column name of the DIM_PRODUCT with PRODUCT to COMMON_COA.
- 4. Rename every column name of the DIM_PRODUCT with PRODUCT to COMMON_COA.
- 5. Double click Dim Product Assumptions (View).
- 6. Go to General tab. Replace below query:

```
Select
a.parent_id,a.child_id,a.child_depth_num,a.parent_depth_num,b.leaf_only
_flag,c.product_name,a.hierarchy_id,a.display_order_num,c.language from
dim_products_hier a
```

left outer join dim_products_b b on

a.child_id=b.product_id left outer join

dim_products_tl c

on b.product_id=c.product_id

```
and c.language='US'
```

with

```
select
a.parent_id,a.child_id,a.child_depth_num,a.parent_depth_num,b.leaf_only
_flag,c.common_coa_name,a.hierarchy_id,a.display_order_num,c.language
from dim common coa hier a
```

```
left outer join dim common coa b b on
```

```
a.child_id=b.common_coa_id left outer join
```

```
dim_common_coa_tl c
```

on b.common_coa_id=c.common_coa_id

and c.language='US'

- 7. Click OK
- 8. Save the Repository file.
- 9. Start the BI Server.

10.2.1.1 Database Layer Changes

The following changes are required in the Database layer. These can be applied in these two ways:

- Batch Execution
- Manual SQL Execution

10.2.1.1.1 Change of Product Dimension through Batch Execution

The database component used to change the product dimension or any other user-defined product dimension is <code>FN_ALM_BI_SET_USER_DEF_DIM</code> - Oracle database function.

Table used by the Change of Product Dimension Process is FSI_BI_SETUP_TABLE. This table stores the source Dimension table name, source Column name, member column name, and Surrogate Key

Column Name with the Join required flag. The flag JOIN_REQUIRED = 'Y' represents the active dimension to be considered for ALMBI Transformation.

Users must create a Batch Process for changing the product dimension. This process is explained in Executing the Change of Product Dimension.

The procedure takes Source Dimension Table Name, Source Column Name, Member Column Name, and Skey Column Name as additional parameters. Source Dimension Table Name is mandatory whereas Source Column Name, Member Column Name, and Skey Column Name are optional if a record with Source Dimension table Name already exists in FSI_BI_SETUP_TABLE. This process can also be run using the Simplified Batch window.

10.2.1.1.2 Executing the Change of Product Dimension

You can execute the function from the Operations framework module of OFSAAI.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition:

- 1. Select the check box adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) button from the Task Details grid. The Task Definition window is displayed.
- 3. Enter the Task ID and Description.
- 4. Select the Transform Data component from the **Transform Data** drop-down list.
- 5. Select the following from the Dynamic Parameters list:
 - Datastore Type: Select the appropriate datastore type from the list.
 - Datastore Name: Select the appropriate datastore name from the list.
 - IP address: Select the IP address from the list.
 - Rule Name: Select FN ALM BI SET USER DEF DIM from the drop-down list.

(This is a seeded Data Transformation procedure installed as part of the ALMBI application. If you don't see this procedure in the list, contact Oracle support).

• Parameter List: These are comma-separated values of Source Dimension Table Name, Source Column Name, Member Column Name, and Skey Column Name.

```
For example: 'DIM_COMMON_COA', 'N_COMMON_COA_ID', 'COMMON_COA_ID', and 'N_COMMON_COA_SKEY'.
```

- 6. Click **Save**. The Task definition is saved for the selected Batch.
- **7.** Execute the Batch. You can execute a Batch definition from the **Batch Execution** window of the OFSAAI Operations module.

NOTE

This process can also be run using the Simplified Batch user interface. In the optional parameters field within the Simplified Batch window, specify the parameters mentioned above. For more details, see the <u>Simplified Batch Execution window</u>.

10.2.1.1.3 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor window of the OFSAAI Operations module.

The status messages in Batch Monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The Event Log window in Batch Monitor provides logs for execution with the top row being the most recent. If there is any error during execution, it will get listed here. Even if you see Successful as the status in Batch Monitor it is advisable to go through the Event Log and re-check if there are any errors.

Alternatively, the execution log can be accessed on the application server in the following directory <code>\$FIC DB HOME/log/date</code>. The file name will have the Batch Execution ID.

The database-level operations log can be accessed by querying the <code>FSI_MESSAGE_LOG</code> table. The Batch Run ID column can be filtered for identifying the relevant log. (This is the same log you see in the Event Log window.)

Check the .profile file in the installation home if you are unable to navigate to the abovementioned locations.

10.2.1.1.4 Change of Product Dimension through Batch SQLPLUS

The details are as follows:

- Function Name: Fn_ALM_BI_SET_USER_DEF_DIM
- **Parameters:** BATCH_RUN_ID, MIS_DATE, DIMTABLENAME, SOURCECOLNAME, and MEMBERCOLNAME
- Sample Parameter Values: 'Batch1', '20130310', 'DIM_COMMON_COA', 'N COMMON COA ID', 'COMMON COA ID', and 'N COMMON COA SKEY'
- Manual Change of Product Dimension
 - **a.** Execute the following query and it will return three rows as seen in the following screen shot.

```
update fsi_bi_setup_table set JOIN_REQUIRED='Y' where
```

target_table_name='FCT_TABLE' and SOURCE_DIM_TABLE_NAME='DIM_COMMON_COA'; update fsi_bi_setup_table set JOIN_REQUIRED='N' where target_table_name='FCT_TABLE' and SOURCE_DIM_TABLE_NAME='DIM_PRODUCT';

By default, the JOIN_REQUIRED column will have 'Y' for the row where SOURCE_DIM_TABLE_NAME='DIM_PRODUCT'.

- **b.** Execute the following statements to change the value of the JOIN_REQUIRED column for DIM_COMMON_COA.
- **c.** Commit the transaction.

It appears as seen in the following figure.

10.2.2 ALMBI Transformation Package Update

The ALMBI Transformation package should also be updated in ALMBI for a user-defined product dimension.

Perform the following actions to update the ALMBI Transformation package (PKG ALM BI TRANSFORMATIONS) to handle a user-defined dimension.

NOTE The examples used here use the following: DIM_ALM_COA table with dimension member column as ALM_COA_ID You should substitute this with the correct user-defined dimension table and column name as required.

1. Inside the PKG Declaration section, include the new user-defined dimension reference. For example, existing variable declaration is:

```
'SELECT PROCESS_ID, PRODUCT,
CURRENCY, START_DATE_INDX, SCENARIO, RESULT_TYPE, ORG_UNIT, COMMON_COA, BUCKE
T
S, LEGT
YPE, ';
For a new user defined dimension reference ('ALM_COA_ID'), make the following
'SELECT PROCESS_ID, PRODUCT,
CURRENCY, START_DATE_INDX, SCENARIO, RESULT_TYPE, ORG_UNIT, COMMON_COA, BUCKE
T
```

```
S,LEGT
```

YPE, ALM_COA_ID,';

2. Inside the PKG Body section, extend the existing IF condition with a new ELSEIF.

ELSIF V_BI_SETUP_TABLE.MEMBER_COL_NAME = 'ALM_COA_ID' THEN
V_JOIN_CLAUSE := V_BISETUP_JOIN_COLUMN ||' = CONS_RES_DTL.ALM_COA_ID
AND ' ||
V_BI_SETUP_TABLE.DIM_TABLE_NAME ||'.F_LATEST_RECORD_INDICATOR = ''Y''
';

3. Once the above changes are complete, recompile, and execute the package.

10.2.3 Case 2

When the new product dimension is $DIM_GL_ACCOUNT$, the following changes are required in the OBIEE Repository:

- 1. Rename the existing DIM_GL_ACCOUNT table name to DIM_GL_ACCOUNT_OLD.
- 2. Rename the DIM_COMMON_COA to DIM_GL_ACCOUNT in the same way it has been stated above for DIM_PRODUCT.
- 3. Rename every column of DIM COMMON COA
- 4. Double click on the alias table **Dim General Ledger** in the physical layer.
- 5. Source Table is displayed as DIM GL ACCOUNT OLD.
- 6. Click Select next to the Source table name.
- 7. Select the physical table DIM GL ACCOUNT and click **OK**, and then click **OK** again.
- 8. Select Dim Product Assumptions (View) and double click.
- 9. Go to General tab. Replace below query:

```
select
a.parent_id,a.child_id,a.child_depth_num,a.parent_depth_num,b.leaf_only
_flag,c.common_coa_name,a.hierarchy_id,a.display_order_num,c.language
from dim_common_coa_hier a
left outer join dim_common_coa_b b on
a.child_id=b.common_coa_id left outer join
dim_common_coa_tl c
on b.common_coa_id=c.common_coa_id
and c.language='US'
with
```

```
select
a.parent_id,a.child_id,a.child_depth_num,a.parent_depth_num,b.leaf_only
_flag,c.gl_account_name,a.hierarchy_id,a.display_order_num,c.language
from dim_general_ledger_hier a
left outer join dim_general_ledger_b b on
a.child_id=b.gl_account_id left outer join
dim_general_ledger_tl c
on b.gl_account_id=c.gl_account_id
and c.language='US'
```

- 10. Click OK.
- **11.** Save the Repository file.
- 12. Start the BI Server.

10.2.3.1 Execution

Changes required in the Database layer:

Changes to the Database layer can be achieved in two ways:

Batch Execution

Follow the steps mentioned in section Case 1 of '<u>Change of Product Dimension through Batch</u> <u>Execution</u>'.

NOTE	The following parameter list needs to be provided when changing from DIM_COMMON_COA to DIM_GL_ACCOUNT:
	'DIM_GL_ACCOUNT','N_GL_ACCOUNT_ID', 'GL_ACCOUNT_ID', and 'N_GL_ACCOUNT_SKEY'.

- Manual Execution
 - a. Execute the following query and it will return three rows.

By default, the JOIN_REQUIRED column will have 'Y' for the row where SOURCE_DIM_TABLE_NAME='DIM_COMMON_COA'.

b. Execute the following statements to change the value of JOIN_REQUIRED column for **DIM_GL_ACCOUNT**.

```
update fsi_bi_setup_table set JOIN_REQUIRED='N' where
target_table_name='FCT_TABLE' and
SOURCE_DIM_TABLE_NAME='DIM_COMMON_COA';
update fsi_bi_setup_table set JOIN_REQUIRED='Y' where
target_table_name='FCT_TABLE' and
SOURCE_DIM_TABLE_NAME='DIM_GL_ACCOUNT';
```

c. Commit the transaction.

10.2.4 Case 3

When the product dimension needs to be changed from DIM_PRODUCT to User-defined dimension (for example, DIM_TM_COA_ID), the following changes are required in the OBIEE Repository:

1. Repository physical layer will have DIM_PRODUCT.

- 2. Rename the table name from DIM PRODUCT to DIM TM COA ID.
- 3. Rename every column name of the DIM_PRODUCT from 'PRODUCT' to 'TM_COA'.
- 4. Select Dim Product Assumptions (View) and double click.
- 5. Go to the **General** tab.
- **6.** Replace below query:

```
select
a.parent_id,a.child_id,a.child_depth_num,a.parent_depth_num,b.leaf_only
_flag,c.product_name,a.hierarchy_id,a.display_order_num,c.language from
dim_products_hier a
```

left outer join dim_products_b b on

a.child_id=b.product_id left outer join

```
dim_products_tl c
```

on b.product_id=c.product_id

and c.language='US'

with

```
select
a.parent_id,a.child_id,a.child_depth_num,a.parent_depth_num,b.leaf_only
_flag,c.tm_coa_name,a.hierarchy_id,a.display_order_num,c.language from
dim_tm_coa_hier a
```

left outer join dim_tm_coa_b b on

a.child id=b.tm coa id left outer join

```
dim_tm_coa_tl c
```

on b.tm_coa_id=c.tm_coa_id

and c.language='US'

- **7.** Click **OK**.
- 8. Select DIM_PRODUCTS_TL.
- 9. Rename the table DIM_PRODUCTS_TL to DIM_TM_COA_TL.
- **10.** Expand DIM_TM_COA_TL.
- 11. Rename column PRODUCT ID to TM COA ID.
- 12. Rename column product NAME to TM COA NAME.
- **13.** Save the Repository file.
- **14.** Start the BI Server.

10.2.4.1 Database Layer Changes

The following changes are required in the Database layer. These can be applied in following two ways:

- Batch Execution
- Manual SQL Execution

10.2.4.1.1 Change of Product Dimension through Batch Execution.

The database component used to change the product dimension or any other user-defined product dimension is <code>FN_ALM_BI_SET_USER_DEF_DIM</code> - Oracle database function.

Table used by the Change of Product Dimension Process is FSI_BI_SETUP_TABLE. This table stores the source Dimension table name, source Column name, member column name, and Surrogate Key Column Name with the Join required flag. The flag JOIN_REQUIRED = 'Y' represents the active dimension to be considered for ALMBI Transformation as shown below:

Users must create a Batch Process for changing the product dimension. This process is explained in section Executing the Change of Product Dimension. The procedure takes Source Dimension Table Name, Source Column Name, and Member Column Name as additional parameters. Source Dimension Table Name is mandatory whereas Source Column Name and Member Column Name are optional if a record with Source Dimension table Name already exists in FSI_BI_SETUP_TABLE. This process can also be run using the Simplified Batch window.

10.2.4.1.2 Executing the Change of Product Dimension

You can execute the function from the Operations framework module of OFSAAI. Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition:

- 1. Select the check box adjacent to the newly created Batch Name in the **Batch Maintenance** window.
- 2. Click Add (+) button from the Task Details grid. The Task Definition window is displayed.
- 3. Enter the Task ID and Description.
- 4. Select the Transform Data component from the Transform Data drop-down list.
- 5. Select the following from the **Dynamic Parameters** list:
 - Datastore Type: Select the appropriate datastore type from the list.
 - Datastore Name: Select the appropriate datastore name from the list.
 - IP address: Select the IP address from the list.
 - Rule Name: Select FN ALM BI SET USER DEF DIM from the drop-down list.

(This is a seeded Data Transformation procedure installed as part of the ALM BI application. If you don't see this procedure in the list, contact Oracle support).

Parameter List: These are comma-separated values of Source Dimension Table Name, Source Column Name, Member Column Name, and Skey Column Name.

For example: 'DIM TM COA ID', 'N TM COA ID', 'TM COA ID', 'N TM COA SKEY'.

6. Click Save.

The Task definition is saved for the selected Batch.

7. Execute the Batch.

You can execute a Batch definition from the Batch Execution window of the OFSAAI Operations module.

NOTE

This process can also be run using the Simplified Batch user interface. In the optional parameters field within the Simplified Batch window, specify the parameters mentioned above. For more details, see the <u>Simplified Batch Execution</u>

10.2.4.1.3 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor window of the OFSAAI Operations module.

The status messages in Batch Monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The Event Log window in Batch Monitor provides logs for execution with the top row being the most recent. If there is any error during execution, it will get listed here. Even if you see Successful as the status in Batch Monitor it is advisable to go through the Event Log and re-check if there are any errors.

Alternatively, the execution log can be accessed on the application server in the following directory <code>\$FIC DB HOME/log/date</code>. The file name will have the Batch Execution ID.

The database-level operations log can be accessed by querying the <code>FSI_MESSAGE_LOG</code> table. The Batch Run ID column can be filtered for identifying the relevant log. (This is the same log you see in the Event Log window.)

Check the .profile file in the installation home if you are unable to navigate to the abovementioned locations.

Change of Product Dimension can also be directly executed on the database through SQLPLUS.

Details are:

- Function Name: FN_ALM_BI_SET_USER_DEF_DIM
- Parameters: BATCH_RUN_ID, MIS_DATE, DIMTABLENAME,
- SOURCECOLNAME, MEMBERCOLNAME, and SKEYCOLNAME.

Sample Parameter Values: 'Batch1' , '20130310' , ' DIM_TM_COA_ID', 'N_TM_COA_ID', 'TM_COA_ID', and 'N_TM_COA_SKEY'

10.2.4.1.4 Manual Change of Product Dimension

Execute the following queries

```
update fsi_bi_setup_table set JOIN_REQUIRED='N' where target_table_name='FCT_TABLE' and SOURCE_DIM_TABLE_NAME='DIM_PRODUCT';
```

INSERT INTO FSI_BI_SETUP_TABLE
(target_table_name,target_col_name,member_col_name,source_dim_table_name
,source_column_name,skey_column_name,join_required) VALUES
('FCT_TABLE','N_PRODUCT_SKEY','TM_COA_ID','DIM_TM_COA_ID','N_TM_COA_ID',
'N_TM_COA_SKEY','Y');

11 Update Hierarchy System ID through Batch Execution

This chapter describes about the how to update the hierarchy system ID through the batch execution.

11.1 Overview

The database component is used to update the hierarchy System ID is FN ALMBI UPDATE FLAT HIER - Oracle database function.

The table used by the Update Hierarchy System ID is **SETUP_MASTER**.

Topics:

- Checking the Execution Status
- Executing the Update Hierarchy System ID

11.2 Checking the Execution Status

- Users must create a Batch Process to update the hierarchy System ID. This process is explained in section Executing the Update Hierarchy System ID section.
- The procedure takes Component Code and Component Value as parameters and updates the SETUP_MASTER table.
- This process can also be run using the Simplified Batch window.

11.2.1 Executing the Update Hierarchy System ID

You can execute the function from the Operations module of OFSAAI, as mentioned below.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition, follow these steps:

- 1. Select the check box adjacent to the newly created Batch Name in the Batch Maintenance window.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed.
- **3.** Enter the Task ID and Description.
- 4. Select Transform Data from the **Transform Data** drop-down list.
- 5. Select the following from the Dynamic Parameters drop-down list:
 - Datastore Type: Select the appropriate datastore type from the list.
 - Datastore Name: Select the appropriate datastore name from the list.
 - IP address: Select the IP address from the list.
 - Rule Name: Select FN_ALMBI_UPDATE_FLAT_HIER from the drop-down list. (This is a seeded Data Transformation procedure installed as part of the

- ALM BI application. If you don't see this procedure in the list, contact Oracle support).
- Parameter List: These are comma-separated values of component Code and component Value. For example: ('3',' 201739') (3 – COA, 201739 – hierarchy ID that needs to be transformed).
- 6. Click **Save**. The Task definition is saved for the selected Batch.
- **7.** Execute the Batch.

You can execute a Batch definition from the Batch Execution window of the OFSAAI Operations module.

NOTE This process can also be run using the Simplified Batch user interface. In the Optional Parameters field within the Simplified Batch window, specify the parameters mentioned above. For more details, see the <u>Simplified Batch Execution</u> section.

Update Hierarchy System ID can also be directly executed on the database through SQLPLUS.

Use the following details:

- Function Name: FN_ALMBI_UPDATE_FLAT_HIER
- Parameters: BATCH RUN ID, MIS DATE, COMPONENTCODE, and COMPONENTVALUE.

11.2.2 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor window of the OFSAAI Operations module.

The status messages in Batch Monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The Event Log window in the Batch Monitor provides logs for execution with the top row being the most recent. If there is any error during execution, it will get listed here. Even if you see Successful as the status in Batch Monitor, it is advisable to go through the Event Log and re-check if there are any errors.

Alternatively, the execution log can be accessed on the application server in the following directory \$FIC DB HOME/log/date. The file name will have the Batch Execution ID.

The database-level operations log can be accessed by querying the FSI_MESSAGE_LOG table. The Batch Run ID column can be filtered for identifying the relevant log. (This is the same log you see in the Event Log window.)

Check the .profile file in the installation home if you are unable to navigate to the abovementioned locations.

12 Simplified Batch Execution

This section describes how to set up and execute a simplified batch required for running ALM BI processes.

Topics:

• Steps for Simplified Batch Execution

12.1 Steps for Simplified Batch Execution

To execute a procedure through the Simplified Batch user interface, create a batch through the following steps:

- 1. From **OFSAAI Home**, navigate to **Financial Service Application**, select **Administration**, and then select **Simplified Batch**.
- 2. Click Add (+) to add a new Batch.
- 3. Enter the Name and Description of the Batch that you wish to add.
- 4. Select Folder Name and Access Type.
- 5. Select Batch Execution Type: Parallel or Sequential.
- **6.** Parallel Execution signifies the list of tasks to be executed in Parallel Sequential Execution signifies the list of tasks to be executed in sequential order.
- 7. Click Select Task in Task Details pane.
- **8.** Select Task Type and Source. (See Table the following mapping for more information.)

Sl. No.	Procedure	Task Type	Folder or Source	Task Selector or Rule Name
1	Hierarchy Flattening Process	Transform Data	Not Applicable	batch_hierTransformation
2	ALMBI Transformation	Transform Data	Not Applicable	ALM_BI_TRANSFORMATION
3	Time Dimension Population	Transform Data	Not Applicable	Dim_Dates_Population
4	DIM RUN Population	Transform Data	Not Applicable	Populate_Dim_Run_ALM
5	Account Summary Population	Load Data	<select the<br="">appropriate source></select>	<choose for="" instrument="" name="" process="" t2t="" the="" to="" want="" you=""></choose>

9. Click Search to view the list of Tasks based on Task Type.

10. In the **Task Selector** pane, select **Task**. Drag and drop into the right pane. (That is, Rule Name, which is a seeded Data Transformation procedure installed as part of the OFS ALM Analytics application installer. If you don't see this procedure in the list, contact Oracle support.)

NOTE You can deselect the task by dragging and dropping it into the left pane.

11. Click OK.

In the Task Details pane, select the Task by clicking on the checkbox and enter the optional parameters. Here the optional parameters would be the same parameter list as mentioned in the respective batch execution processes.

- 12. Click Save.
- **13.** Select the Batch you created by clicking on the checkbox in the **Simplified Batch Summary** window.
- **14.** Click **Run** to execute the Batch.

13 How to Define a Batch

To create or define a batch from the OFSAAI **Batch Maintenance** window, follow these steps:

- 1. From the OFSAAI Home menu, navigate to Operations and select **Batch Maintenance**.
- 2. In the **Batch Maintenance** window, select **Add (+)** from the Batch Name toolbar. The New Batch Definition window is displayed.
- 3. Enter the Batch details as tabulated.

Field	Description		
Batch Name	 The Batch Name is auto-generated by the system. You can edit to specify a Batch name based on the following conditions: The Batch Name should be unique across the Information Domain. The Batch Name must be alphanumeric and should not start with a number. The Batch Name should not exceed 41 characters in length. The Batch Name should not contain special characters "." and "-". 		
Batch Description	Enter a description for the Batch based on the Batch Name.		
Duplicate Batch	(Optional) Select the checkbox to create a new Batch by duplicating the existing Batch details. On selection, the Batch ID field is enabled.		
Batch ID (lf duplicate Batch is selected)	Select the required Batch ID from the list. It is mandatory to specify the Batch ID if the Duplicate Batch option is selected.		
Sequential Batch	Select the checkbox if the Batch has to be created sequentially based on the task specified. For example, if there are 3 tasks defined in a Batch, task 3 should have precedence as task 2, and task 2 should have precedence as task 1.		

4. Click **Save** to save the Batch definition details. The new Batch definition details are displayed in the **Batch Nam**e pane of the **Batch Maintenan**ce window with the specified Batch ID.

14 Dynamic Infodom Selection

This section details how to configure multiple Infodoms.

Topics:

- Introduction
- Switch Across Infodoms in ALMBI Reporting
- Adding a New Infodom to ALMBI Reporting

14.1 Introduction

You can view ALMBI reports from an Infodom by manually configuring the OBIEE connection pool pointing to a particular Infodom database. Dynamic Infodom Selection can switch multiple Infodoms.

14.2 Switch Across Infodoms in ALMBI Reporting

To switch from INFODOM1 to INFODOM2, follow these steps:

- 1. Go to Dashboards and select Dynamic Infodom Selection.
- 2. Select INFODOM2, and enter username and password. Click Apply.
- 3. Click 'Change Schema' and then click OK.
- 4. Click 'Issue SQL' then click the Back button as shown below.
- 5. To delete cache, clicking Manage Sessions, and close All Cursors.
- **6.** Refresh the dashboard pages. Now all dashboards will display data from the Infodom which you have selected above. The snapshot changed to INFODOM2 as shown below.

Similarly, an INFODOM can be switched to a different INFODOM.

14.3 Adding a New Infodom to ALMBI Reporting

- 1. Log in to ALM BI Application.
- 2. Navigate to **Dashboards** and select **Dynamic Infodom**.
- **3.** Click **Page Options** and click Edit **Dashboard** on the top right corner of the **Dashboard** as shown below.
- 4. Under **Section 1**, click **Edit** to edit the Prompt for Sources.
- 5. Click Edit on Prompt For Sources window.
- 6. Edit DATABASE prompt label as required and click **OK**.
- 7. Enter new infodom as **INFODOM3** by clicking + and **Ok** the prompt.
- **8.** Click from **Prompt For Sources** window.
- 9. Navigate to Shared Folders and select Change Database Connection.
- **10.** Select and **Edit** the **Prompt For Sources_TNS**.

- **11.** Select the **TNS** and Click **Edit**.
- **12.** Click on expand Options. Edit the SQL statement to include the new Infodom TNS Entry details as follows

Existing:

Select case when '@{DBNAME}' = 'INFODOM1' THEN '<TNS ENTRY1>' else case when '@{DBNAME}' ='INFODOM2' THEN

'<TNS ENTRY2>' end end from "ALM BI"

Modified:

Select case when '@{DBNAME}' = 'INFODOM1' THEN '<TNS ENTRY1>' else case when '@{DBNAME}' = 'INFODOM2' THEN

'<TNS ENTRY2>' else case when '@{DBNAME}' ='INFODOM3' THEN '<TNS ENTRY3>' end end from "ALM BI"

Edit Prompt						0 ×
Prompt for	Presentati	on Variable	•	TNS		
Label	TNS					
Description						
User Input	Text Field			•		
	ns					
General	More					
Variable D	ata Type	Default (Text)		•	
		Require	user i	nput		
		Auto Fill	● No ● Fin	one ist Available Val	ue	
Defaults	selection	SQL Results			•	
				ment to generate		f values.
		select case v THEN 'TNS I ='INFODOM: "ALM BI"	when "@ ENTRY 2" THEN	?{DBN AME}' = 'INF 1' else case when I 'TNS ENTRY2' e	FODOM 1' '@{DBN A end end fror	ME}' n
					ОК	Cancel

13. Click **OK** and save the prompt.

15 Update Breakage Charges through Batch Execution

This chapter describes about the how to update the Breakage Charges through Batch Execution.

Topics:

- Overview
- Executing the Update Breakage Charges
- <u>Checking the Execution Status</u>

15.1 Overview

The database component used to update Breakage charges is FN_FCT_FTP_ACC_SUMMARY_UPDATE - Oracle database function.

Topics:

- <u>Executing the Update Breakage Charges</u>
- Checking the Execution Status

Users must create a Batch Process to update Breakage Charges.

- The procedure takes Component Code and Component Value as parameters and updates the SETUP MASTER table.
- This process can also be run using the Simplified Batch window.

15.2 Executing the Update Breakage Charges

You can execute the function from the Operations module of OFSAAI, as mentioned below.

• Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI. For more information on defining a new Batch, see the <u>How to Define a Batch</u> section.

To define a new task for a Batch definition, follow these steps:

- 1. Select the check box adjacent to the newly created Batch Name in the Batch Maintenance window. For more information, see the <u>Checking the Execution Status</u> section.
- 2. Click Add (+) from the Task Details grid. The Task Definition window is displayed.
- 3. Enter the Task ID and Description.
- 4. Select Transform Data from the **Transform Data** drop-down list.
- 5. Select the following from the Dynamic Parameters drop-down list:
 - Datastore Type: Select the appropriate datastore type from the list.
 - Datastore Name: Select the appropriate datastore name from the list.
 - IP address: Select the IP address from the list.

- Rule Name: Select FN_FCT_FTP_ACC_SUMMARY_UPDATE from the drop-down list. (This is a seeded Data Transformation procedure installed as part of the ALM BI application. If you don't see this procedure in the list, contact Oracle support).
- Parameter List: NULL.
- 6. Click **Save**. The Task definition is saved for the selected Batch.
- **7.** Execute the Batch. You can execute a Batch definition from the **Batch Execution** window of the OFSAAI Operations module.

NOTE This process can also be run using the Simplified Batch user interface. In the Optional Parameters field within the Simplified Batch window, specify the parameters mentioned above. For more details, see the <u>Simplified Batch Execution</u> section.

15.3 Checking the Execution Status

The status of execution can be monitored using the **Batch Monitor** window of the OFSAAI Operations module.

The status messages in Batch Monitor are:

- N: Not Started
- 0: On Going
- F: Failure
- S: Success

The **Event Log** window in the Batch Monitor provides logs for execution with the top row being the most recent. If there is any error during execution, it will get listed here.

Even if you see Successful as the status in **Batch Monitor**, it is advisable to go through the Event Log and re-check if there are any errors.

Alternatively, the execution log can be accessed on the application server in the following directory <code>\$FIC DB HOME/log/date</code>. The file name will have the Batch Execution ID.

The database-level operations log can be accessed by querying the FSI_MESSAGE_LOG table. The Batch Run ID column can be filtered for identifying the relevant log. (This is the same log you see in the Event Log window.)

Check the .profile file in the installation home if you are unable to navigate to the above-mentioned locations.

16 How to Replace N_INT_ACCRD with N_INT_ACCRD_NET

This appendix describes the steps about how to replace N_INT_ACCRD with N_INT_ACCRD_NET.

Topics:

Overview

16.1 Overview

FE 440 is translated using the Exchange rate at Origination for following Financial Dashboard and select Report:

- Forecast Income and Balance Summary and select Forecast Income Statement in Consolidated Currency
- Forecast Income and Balance Detailand and select Income Statement Detail in Consolidated Currency
- Forecast Income Statement Detail Product and select Forecast Income Statement Detail Product-wise in Consolidated Currency
- Income and select Scenario Report, and then select Net Interest Income Across Scenarios in Consolidated Currency

If you want to use FE 441, translated using the Current Bucket Exchange rate instead of FE 440, then replace $N_{INT}ACCRD_{NET}$ (FE 441) in place of $N_{INT}ACCRD$ (FE 440) in ALM BI RPD layer.

To replace <code>N_INT_ACCRD with N_INT_ACCRD_NET</code>, follow below steps:

- **1.** Take back up of RPD.
- **2.** Open RPD in Online mode.
- 3. Go to the **BMM layer**.
- 4. In ALM BI, expand the Cash Flow Results report.
- 5. Double-click on Interest Income column.
- 6. Go to the **Column Source** tab.
- 7. Select CF Res Cons and click Edit.
- 8. Click Edit Expression.
- 9. Replace <code>n_int_accrd with n_int_accrd_net</code>.
- 10. Click OK to continue.
- 11. Repeat the steps 6 10 for below columns:
 - Interest Expense
 - Off B/S Income
 - Interest Accrued (440)#1
 - Interest Accrued (440)#2

- **12.** Check-in the changes and save the RPD.
- **13.** Remove the RPD and Presentation cache.
- **14.** Verify the reports.

17 How to Populate Data in FCT_REG_LE_CAPITAL_SUMMARY Table

This chapter describes about the how to populate the data in <code>FCT_REG_LE_CAPITAL_SUMMARY</code> table.

17.1 Overview

ΝΟΤΕ	The details about populating the tier 1 capital component from the Basel table are mentioned below. If you do not have the Basel license, then you can populate the table via script and have the value flow through to Table B.

Tier 1 Capital for reporting periods T and T-1 must be designated and reported. Currently, this value should be reported by the Basel capital application fact table:

FCT_REG_LE_CAPITAL_SUMMARY.N_AMOUNT_POST_REG_ADJUSTMENT

If the Basel capital fact table is not licensed, then the tier 1 capital value must be manually loaded into the reporting table via SQL command. The target table is <code>FCT_REG_LE_CAPITAL_SUMMARY</code> and its fields are as follows.

Column Name	Data Type	Nullable	РК	FK
N_ENTITY_SKEY	NUMBER(10)	No	Yes	No
N_REP_LINE_SKEY	NUMBER(10)	No	Yes	No
N_GAAP_SKEY	NUMBER(10)	No	Yes	No
N_LEV_RATIO_DED_GROUP_SKEY	NUMBER(5)	Yes	No	No
N_CAPITAL_COMP_GROUP_SKEY	NUMBER(10)	No	Yes	No
V_RCY_CODE	VARCHAR2(3)	Yes	No	No
N_COUNTRY_SKEY	NUMBER(10)	Yes	No	No
N_LOB_SKEY	NUMBER(10)	Yes	No	No
N_AMOUNT_PRE_REG_ADJUSTMENT	NUMBER(22,3)	Yes	No	No
N_AMOUNT_POST_REG_ADJUSTMENT	NUMBER(22,3)	Yes	No	No

F_NON_QUALIFIED_CAP_INSTR_FLAG	CHAR(1)	Yes	No	No
N_FORECAST_DATE_SKEY	NUMBER(10)	No	Yes	No
V_SCENARIO_CODE	VARCHAR2(20)	No	Yes	No
N_MIS_DATE_SKEY	NUMBER(10)	No	Yes	Yes
N_RUN_SKEY	NUMBER(10)	No	Yes	Yes
N_BRANCH_SKEY	NUMBER(10)	Yes	No	Yes

The T1 Capital amount should be entered into the field N_AMOUNT_POST_REG_ADJUSTMENT with the following constraints:

- N REP LINE SKEY = 8110000637
- V CAP COMP GROUP CODE = 'OTH'
- V_SCENARIO_CODE should be defaulted to the users' 'Baseline' forecast scenario ID
- N_FORECAST_DATE_SKEY should be defaulted to '999991231'

18 General Data Protection Regulation (GDPR) Configuration

This chapter describes about the GDPR configuration for ALMBI.

18.1 PII Dashboard

NOTE This is applicable from ALMBI v8.0.6.0.0 onwards.

To configure the GDPR in ALMBI, follow these steps:

- 1. Navigate to FTP Reporting, select Funds Transfer Pricing Reports, and then select Transfer Price Account Summary Report.
- 2. The PII Dashboard columns are as follows:
 - Customer Name (DIM_CUSTOMER_TL.CUSTOMER_NAME)
 - Account Number (DIM_ACCOUNT.V_ACCOUNT_NUMBER)

NOTE Added V_Original_ACCOUNT_NUMBER in the DIM_ACCOUNT table (Presentation layer of the RPD). If you want to view the original account number, then include it in the Transfer Pricing Account Summary report under <u>12 Fund Transfer Pricing - Assumptions</u>.

19 How to Populate Common Account Summary Data Directly from Instrument Table

This chapter describes about the how to populate the common account summary data directly from Instrument table.

19.1 Common Account Summary Data Population from Instrument Tables

In order to meet the requirements of specific customers where the FCT_COMMON_ACCOUNT_SUMMARY gets loaded directly through Instrument FSI_D_ tables, a single T2T definition as an example for Annuity table shall be provided, which moves data from FSI_D_ANNUITY_CONTRACTS table to FCT_COMMON_ACCOUNT_SUMMARY table.

Sl. No.	Definition Name	Source Table	Destination Table
1	T2T_FCT_COMMON_ACCOUNT_	FSI_D_ANNUITY_CONTRACT	FCT_COMMON_ACCOUNT_
	ANNUITY	S	SUMMARY

This T2T should be copied for all applicable instrument tables where data movement from Instrument Table to Common Account Summary is required.

20 Limit Management

This section covers the limit management details.

Topics:

- Overview
- Eunctional Flow
- Preparing and Uploading Limit Definitions

20.1 Overview

Limit functionality is useful if you want to compare the reprice gap measures calculated by the ALM application with a limit set as per the risk policy of the bank. This is done to assess the current level of risk and take corrective actions when required.

Using this, you can define the following:

- 1. Set and monitor net repricing gap limit
- 2. Set and monitor cumulative repricing gap limit

The limit can be defined in Amount or Percent terms and in base currency or in consolidated currency or both.

Limits are defined at granularity of the following dimensions:

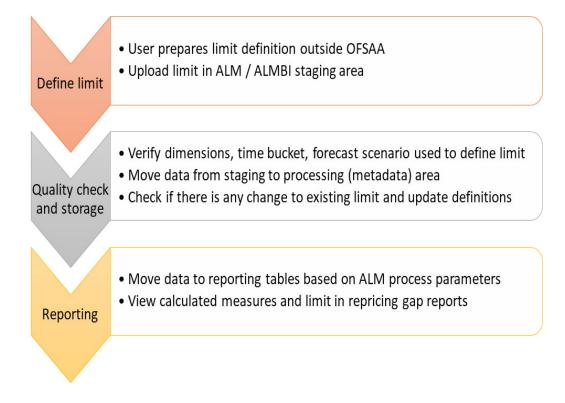
- Legal Entity
- Organization Unit
- Currency
- Time Bucket
- Rate Scenario

Following ALMBI reports are impacted:

- Repricing Gap Summary in Base Currency
- Repricing Gap Summary in Consolidated Currency
- Repricing Gap Across Dates in Base Currency
- Repricing Gap Across Dates in Consolidated Currency

20.2 Functional Flow

The following flow explains about how to define a limit, perform the quality check, and move the data for reporting purpose.



20.3 Preparing and Uploading Limit Definitions

1. Step 1: Create a limit definition with the following attributes and upload data to table STG_ALM_GAP_LIMIT_DTL:

Column Name	Name	Data Type	Nullable	Primary Key	Description
D_EFFECTIVE_EN D_DATE	Effective End Date	DATE	Yes	No	Date till which the limit definition is effective.
D_EFFECTIVE_ST ART_DATE	Effective Start Date	DATE	Yes	No	Date from which the limit definition is effective.
FIC_MIS_DATE	Extraction Date	DATE	No	Yes	Date till which the limit definition is effective.
N_BUCKET_NUMB ER	Bucket Number	NUMBER(5)	No	Yes	This is to identify a dynamic bucket number.
N_LWR_LIMIT_AM OUNT	Lower Limit Amount	NUMBER(22,3)	Yes	No	Normally the limit will be specified as a range. The lower value of the range must be given here.
N_START_DATE_I NDEX	Start Date Index	NUMBER(5)	No	Yes	This is to identify dynamic bucket start dates.
N_UPR_LIMIT_AM OUNT	Upper Limit Amount	NUMBER(22,3)	Yes	No	Normally the limit will be specified as a range. The upper value of the range must be given here.
V_ALM_GAP_MEA SURE	ALM Gap Measure Name	VARCHAR 2(100)	No	Yes	Name of the measure for which limit is specified. Indicative Values are 'Net Reprice Gap' and 'Cumulative Reprice Gap'.

V_CURRENCY_TY PE_CD	Currency Type Code	VARCHAR 2(40)	No	Yes	This column decides whether the given limits are for Base (Natural) currency or consolidated (Reporting) currency. Indicative Values are 'Entered' for base or natural currency and 'Functional' for consolidated or reporting currency.
V_FCAST_RULE_N AME	Forecast Rate Rule Name	VARCHAR 2(60)	No	Yes	Name of the forecast rate rule for which limit is specified.
V_ISO_CURRENCY _CD	ISO Currency Code	VARCHAR 2(3)	No	Yes	Code of the currency for which limit is specified. In case currency type is reporting then this column will store reporting currency code.
V_LIMIT_METHOD	Limit Method	VARCHAR 2(60)	Yes	No	The manner in which limit is specified. Indicative Values are 'Absolute' when the limit is defined as the amount or 'Relative' when limit is defined in terms percentage.
V_LV_CODE	Legal Entity Code	VARCHAR 2(20)	No	Yes	Stores the code for the legal entity to which the branch belongs.
V_ORG_UNIT_CO DE	Organization Unit Code	VARCHAR 2(40)	No	Yes	This column stores the cost center to which the account belongs to. Dim_Org_Unit is the equivalent dimension table for this column.
V_SCENARIO_NA ME	Scenario Name	VARCHAR 2(40)	No	Yes	Name of the forecast rate scenario for which limit is specified.

V_TIME_BUCKET_ Time Bucket Name NAME	VARCHAR 2(30)	No	Yes	Name of the time bucket which has been created from UI and for which limit is being specified.
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2. Step 2: Maintain limit in processing or metadata tables

To maintain the limit in processing or metadata table, you can execute the batch **INFODOM>_ALM_GAP_LIMIT_LOADER** (GAP Limits Loader) from the ICC Batch screen within OFSAAI framework. There is a seeded batch **INFODOM>_ALM_GAP_LIMIT_LOADER** with the following parameters for the task:

- Execution date: Date of batch execution
- Batch_run_id: ID of the batch

Here, no parameters are required from the user.

During this batch execution, data is uploaded and copied to the processing area where master definitions with changes over time will be maintained. Quality check and limit definition updating are also performed here.

Following quality checks will be performed here:

- **a.** Dimension data: All values like legal entity, currency, and so on. should be checked to confirm that they are present in respective dimension tables and are active. This includes the following:
 - i. Check if the legal entity code for a given record conforms to values in DIM_LEGAL_ENTITY_B; only those values which are 'leaf-only' and 'enabled' are considered.
 - **ii**. Check if the currency type code for a given record conforms to values in FSI_CURRENCY_TYPE_MLS.
- **iii**. Check if the currency code for a given record conforms to ISO codes in FSI_CURRENCIES.
- **b.** Metadata: Time bucket, start date index, forecast rule, the scenario should be checked with relevant metadata tables to confirm that there correct and active. This includes the following:
- i. Check if the bucket-name for a given record conforms to values in FSI_TIME_BUCKET_MASTER; follow this up and check if the bucket number for that particular record exists in DIM RESULT BUCKET.
 - **ii.** Check if the start-date index for a given record conforms to the bucket-name: startdate index mapping in FSI LR BUCKETS AUX and TIME BUCKET SYS ID.
 - iii. Check if the forecast-rule name for a given record conforms to values in FSI_M_OBJECT_DEFINITION_TL; follow it up and check if the scenario-name for that record conforms to forecast-rule name: scenario name mapping in FSI_FCAST_RATES_SCENARIOS.
- **c.** Values given for limit method and reprice measures must be from the prescribed list.

- **d.** Check if the repricing gap measure is one of 'NET REPRICE GAP' or 'CUMULATIVE REPRICE GAP'.
- e. Effective start date should be LESSER THAN effective end date. However, the date of execution (As of Date) can be LESS THAN, GREATER THAN AND EQUAL TO effective start date. The date of execution is allowed to be LESS THAN AND EQUAL TO effective end date but never greater than the effective end date.
- f. The limit type should be one of 'ABSOLUTE' or 'RELATIVE'.

Limit amount – lower value	Limit amount – upper value		
0	100		
110	200		

- **g.** Here, the lower value starts from 110 whereas the upper value of the previous band was 100. Thus, there is break, that is, 101-109 is lost.
- **h.** When the limit method is Absolute, then the upper value of limit should be greater than lower value and there should be no breakage of the gap between given ranges. For example: If the limit is defined in a way then there is a break.
- **i.** When the limit method is Relative, then the lower limit value should not be less than 0 and the upper value should not be more than 100.
- j. 'Valid till' date is in future (higher than as of date) and greater than 'valid from' date.
- **k.** Conditional upper and lower limits include the following: Succeeding lower limit should be continuous with previous upper limit whether the method is Absolute or Relative. (bucket continuity constraint)
- **I.** Limits should be non-negative irrespective of method or lower or upper. The upper limit should be greater than lower limit All buckets in a set (as differentiated by bucket name after filtering through other Primary Key columns) must follow the same limit method.
- **m.** For limit method RELATIVE, first lower limit must be 0 and last upper limit should be 100 to cover the entire percentage spectrum; of course, neither limit should cross 100 at any stage

If any record within a limit definition fails the quality test, the entire limit definition will be rejected, and a message will be logged in FSI_MESSAGE_LOG table.

3. Step3: Prepare limit definition for reports

In this step, limit definitions from the master will be prepared for use in BI by reports. You can execute this from the ICC Batch screen within the OFSAAI framework. A seeded batch INFODOMNAME_TRANSFORMALMRESULT is provided with the Task component as ALMBI TRANSFORMATION and following parameters for the task:

- Execution date: Date of batch execution.
- Batch_run_id: ID of the batch.
- Process ID (PID): The process for which the task is to be executed, either from UI or from the back-end.

- Limit flag(b_limit_flag): Possible values are 'Y' or 'N'; the limits should be prepared only if the flag is 'Y'.
- Rerun flag (p_re_run_flag): Possible values are 'Y' or 'N'; if flag is 'Y', previously present limit definitions will be removed.

Here, Process ID, Limit Flag, and Rerun parameters are required user input.

21 Troubleshooting

This section provides troubleshooting tips for problems that you may encounter while working in ALM BI.

Topics:

Overview

21.1 Troubleshooting the Problems

1. **Problem**: Batch Failed to Execute.

Solution: Before executing a batch, check if the following services are running on the application server (for more information on how to check if the services are up and on, and how to start the services if you find them not running, see the <u>Oracle Financial Services Analytical</u> <u>Applications Infrastructure User Guide</u>).

- Iccserver
- Router
- AM
- Messageserver
- 2. Problem: SCD is not processing a particular Hierarchy.

Solution: If SCD wants to process a DIM_PRODUCT hierarchy sys ID (say 1000018711), then the entry should be available in the table SETUP_MASTER as:

V_COMPONENT_CODE	V_COMPONENT_DESC	V_COMPONENT_VALUE
22	PRODUCT_HIER1	1000018711

For more information, see the <u>Tables used by the SCD component</u> section.

3. Problem: During the execution of the ALMBI Transformation, the program may not complete successfully.

Solution: Check for the existence of the <code>PROCESS_ID</code> and <code>LAST_RUN_AS_OF_DATE</code> combination in the <code>FSI_PROCESS_RUN_HISTORY</code> table.

The following SQL query can be executed to check the status:

"SELECT * FROM FSI_PROCESS_RUN_HISTORY"

4. **Problem**: Failed to execute ALMBI Transformation after the SCD process has run.

Solution: Execute DIM_RUN Population, as mentioned in the section before ALMBI Transformation.

The following SQL query can be executed to check the existence of the process in the DIM_RUN table:

SELECT * FROM DIM_RUN WHERE V_RUN_ID = '<PROCESS_ID>'.

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