Oracle Financial Services Market Risk Measurement and Management

Analytics User Guide

Release 8.0.6.0.0

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Oracle Financial Services Market Risk Measurement and Management Analytics User Guide, Release 8.0.6.0.0

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DOCUMENT CONTROL

Version Number	Revision Date	Changes Done
1.0	Created August 2018	Captured updates for 8.0.6.0.0 release

This document provides a comprehensive knowledge about the reports in Oracle Financial Services Market Risk Measurement and Management, Release 8.0.6.0.0. The latest copy of this guide can be accessed from OHC Documentation Library.

About the Guide

This section provides a brief description of the scope, the audience, the references, the organization of the user guide and conventions incorporated into the user guide. The topics in this section are organized as follows:

- Scope of the guide
- Intended Audience
- Documentation Accessibility
- Access to Oracle Support
- Related Information Sources

Scope of the Guide

The objective of this user guide is to provide a comprehensive knowledge about the reports available in Oracle Financial Services Market Risk Measurement and Management (MRMM), Release 8.0.6.0.0. This analytics user guide is intended to help you understand the reports which are part of MRMM and details the dashboard reports that are available to view and analyze results of various computations in the application. These reports and dashboards are expected to be starter kit which can be used to develop further reports based on individual requirements.

Intended Audience

This manual is intended for the following audience:

- Business User: This user reviews the functional requirements and information sources, like reports.
- Strategists: This user identifies strategies to manage risk in trading book of a bank.
- Data Analyst: This user would be involved with cleaning, validation, and importing of data into the OFSAA Download Specification Format.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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=trs if you are hearing impaired.

RELATED INFORMATION SOURCES

This section identifies additional documents related to OFS MRMM application. You can access Oracle documentation online from OHC Documentation Library.

- Oracle Financial Services Market Risk Measurement and Management Release Notes, Release 8.0.6
- Oracle Financial Services Market Risk Measurement and Management Installation Guide, Release 8.0.6
- Oracle Financial Services Market Risk Measurement and Management User Guide, Release 8.0.6

1 Market Risk Measurement and Management Reports

1.1 Overview

Market risk is the risk of losses in on and off-balance sheet positions arising from changes to factors such as interest rates, currency exchange rates, equity prices, inflation and so on. Financial institutes use a variety of tools and techniques to manage market risk. The need to manage it arises both from regulatory and non-regulatory perspectives. From a regulatory perspective, market risk stems from all the positions included in banks' trading book as well as from commodity and foreign exchange risk positions in the whole balance sheet.

OFS MRMM solution enables banks to accurately measure, evaluate, monitor and manage market risk and to proactively comply with regulatory requirements of capital calculation as per Internal Models Approach (IMA). This solution ensures that all critical elements of a market risk program from pricing, valuations, risk assessment, monitoring and management, stress testing to data governance, data storage and final regulatory submissions are fully addressed.

OFS MRMM application has pre-built dashboards and reports that give users visualization into processing results and input data. The reports which form part of the Market Risk Measurement and Management (MRMM) application dashboard are grouped into the following dashboards based on their functionality:

- MR Model Validation
- MR Historical Simulation
- MR Valuation Service
- MR Monte Carlo
- MR Market Data
- MR Assumptions

Oracle Business Intelligence (OBIEE) is the tool used to deliver the above. It is expected that pre-built dashboards, and reports may not be sufficient for every user, and hence the tool gives ability to modify standard reports and also create new as per individual requirements.

2 Process Flow

The picture below depicts high level process flow of MRMM Analytics.

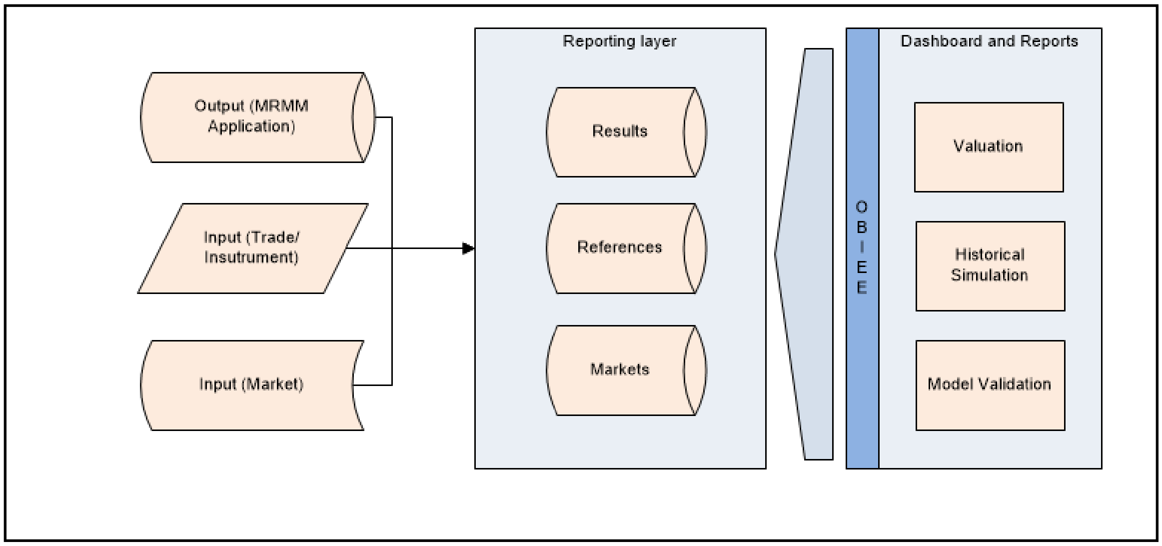

Figure 1 MRMM Process Flow

Output obtained from MRMM processing are obtained at various granularities – trade level and aggregated. The results are then transformed on the way to reporting layer of MRMM data model. Once the data is in reporting layer it is accessed by OBIEE to present dashboard and reports.

3 Data Flow

3.1 Dimension Population

In OFSAA, Hierarchies are defined and managed through the common infrastructure, Dimension Management User Interface. Prior to use in MRMMBI, the related parent/ 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.

The Dimension Population process has the following two components:

- Hierarchy Flattening
- Dimension Table Population

3.1.1 Hierarchy Flattening

The following topics are covered in this section:

- Overview of Hierarchy Flattening Process
- Prerequisites and Troubleshooting
- Tables Used by the Hierarchy Flattening Process
- Executing the Hierarchy Flattening Process
- Checking the Execution Status

3.1.1.1 Overview of Hierarchy Flattening Process

The Hierarchies are maintained in the Dimension Management component of OFSAA Infrastructure. (In the Financial Service Application menu, navigate to **Master Maintenance** > **Dimension Management** > **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 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 flattening is completed.

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:

- The user has 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.

3.1.1.2 Prerequisites and Troubleshooting

The following are the pre-requisites and troubleshooting steps:

1. All the post install steps mentioned in the Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) Installation and Configuration guide and the solution installation manuals of MRMM have to be completed successfully.

   The Hierarchies are maintained in the Dimension Management component of OFSAA Infrastructure. (In the Financial Service Application menu, navigate to Master Maintenance > Dimension Management > Hierarchies).

   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).

2. 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 MRMM Application seeds three user-profiles: MRMM Administrator, MRMM Analyst, and MRMM Approver. After installation of MRMM, the system administrator should additionally map the BATPRO function with the required MRMM roles.
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 how to start the services if you find them not running, refer to the Oracle Financial Services Analytical Applications Infrastructure User Guide on OHC Documentation Library.
4. Users must create Batch Processes for executing the 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 execution of stored procedures

3.1.1.3 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/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

3.1.1.4 Executing the Hierarchy Flattening Process

You can execute the function from the Operations (formerly Information Command Center (ICC) framework) module of OFSAAI, as mentioned below.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI.

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 drop-down list.
5. Select the following from the **Dynamic Parameters** drop-down list:
   - **Datastore Typ**e - 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 MRMMBI application. If you don't see this procedure in the list, contact Oracle support).
   - **Parameter List** - These are comma-separated values of Dimension ID and Hierarchy ID.

     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>'
     ```

     Replace the tag <DIMENSION NAME> in this query with the Dimension Name you find in the UI (Navigate to OFSAAI Home) **Financial Services Application** > **Master Maintenance** > **Dimension Management**). This is the Dimension on which the Hierarchy you want to flatten is configured. You must create separate Batches for each Dimension.
   - **Hierarchy ID Values**

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.

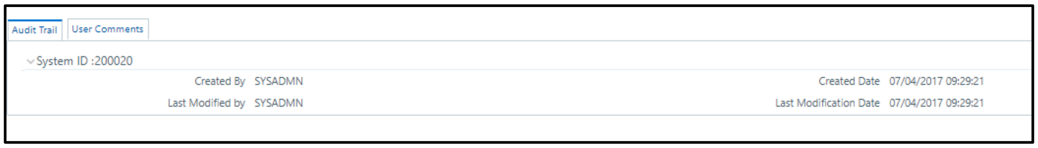

Figure 2 Hierarchy ID Values

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 need to 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'

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 section of 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.

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

Details are:

- **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.

3.1.1.5 Checking the Execution Status

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

The status messages in Batch Monitor are:

- N - Not Started
- O - 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 $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 these locations.

3.1.2 Dimension Table Population

The dimension table population process serves two purposes:

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

Dimension table population should be run after initial creation of a hierarchy and after any changes are made to a hierarchy

Dimensional data changes are handled in the MRMMBI solution using the SCD component.

The following topics are covered in this section:

- Overview of SCD Process
- Prerequisites
- Tables Used by the SCD Component
- Executing the SCD Component
- Checking the Execution Status

3.1.2.1 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 into MRMMBI. For example, if the Active Time Bucket Definition was changed for an MRMM 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, refer to:

- Oracle Data Integrator Best Practices for a Data Warehouse at

  http://www.oracle.com/technetwork/middleware/data-integrator/learnmore/odi-best-practice-data-warehouse-168255.pdf

- Oracle Warehouse Builder Data Modelling, 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 MRMMBI solution, the types of SCD supported are Type 1 and Type 2.

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_PRODUC T_NAME	D_START_DATE	D_END_DATE	F_LATEST_ RECORD_INDI CATOR
1	Personal Loan	5/31/2010	12/31/9999	Y

- 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_PRODUC T_NAME	D_START_ DATE	D_END_DATE	F_LATEST_RECORD_ INDI CATOR
1	Personal	6/30/2010	12/31/9999	Y

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 example below:

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'

3.1.2.2 Prerequisites

Following are the pre-requisites:

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 context of any hierarchy. If instead you wish to maintain the history of changes with respect to 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 the 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.

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

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

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 MRMMBI 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.

3.1.2.3 Tables Used by the SCD Component

These tables are described in the following sections:

- **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 MRMM BI 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 MRMMBI.

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.

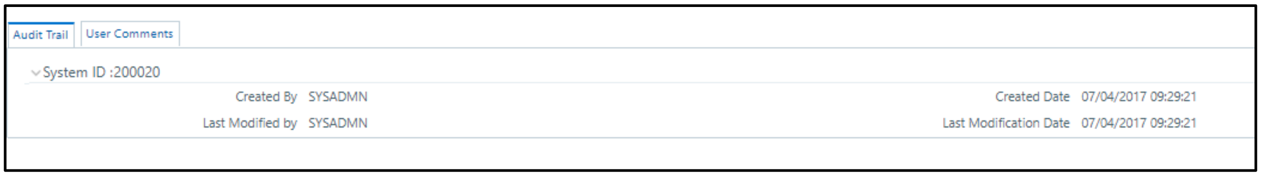

Figure 3 Hierarchy Management Page

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

- **SYS_TBL_MASTER**

  The MRMM BI 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	Priority of the Source when multiple sources are mapped to the same target.

Column Name	Data Type	Column Description
SRC_PROC_SEQ	NUMBER(2) NOT NULL	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 i.e.,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 MRMMBI. If any new dimensions have been added a row will have to be inserted to this table manually.

- **SYS_STG_JOIN_MASTER**

  The MRMM BI 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

Column Name	Data Type	Column Description
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
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 (may be multiple for a given "Mapping ReferenceNumber")
- SK - Surrogate Key
- DA - Dimensional Attribute (may be 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 / 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_ FLG	N

Column Name	Data Type
COL_DATATYPE	VARCHAR
COL_FORMAT	

No changes are required to this table if the standard dimensions are being used within MRMMBI. If any new dimensions have been added, 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:

```
create sequence SEQ_DIM_<DIM> minvalue 1 maxvalue 999999999999999999999999999 increment by 1
```

3.1.2.4 Executing the SCD Component

You can execute the function from the Operations (formerly Information Command

Center (ICC) framework) module of OFSAAI, as mentioned below.

Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI.

To define a new task for a Batch definition, follow the below 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 Run Executable from the drop-down list.
5. Select the following from the Dynamic Parameters drop-down list:
6. Executable - scd,<map_ref_num>

   For example, scd, 125.

   A third optional parameter (N/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'.

map_ref_num	Target Table that is Updated
scd,168	DIM_PARTY
scd-343	DIM_DATA_ORIGIN
scd,653	DIM_INSTRUMENT_CONTRACT
scd,666	DIM_BANDS
scd,679	DIM_BOND_TYPE
scd,270	DIM_ORG_STRUCTURE
scd,126	DIM_ORG_UNIT
scd,128	DIM_PRODUCT
scd,676	DIM_PARTY_TYPE
scd,678	DIM_INDUSTRY
scd,675	DIM_PARTY
scd,670	DIM_TRADING_DESK
scd,682	DIM_CREDIT_RATING
scd,674	DIM_MARKET_CENTRE
scd,677	DIM_INSTRUMENT_TYPE
scd,681	DIM_IRC
scd,669	DIM_BANDS
scd,680	DIM_BANDS
scd,671	Dim_Employee
scd,459	DIM_STOCK_TICKER
scd,667	DIM_BANDS
scd,254	dim_region
scd,673	DIM_INFL_INDEX
scd,456	DIM_UNDERLYING
scd,335	DIM_CUSTOMER
scd,69	DIM_MITIGANT
scd,187	DIM_NETTING_AGREEMENT

map_ref_num	Target Table that is Updated
scd,471	DIM_SUB_NETTING_AGREEMENT
scd,70	DIM_MITIGANT_TYPE

- Wait - When the file is being executed, you can either wait till 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).

7. Click **Save**.

The Task definition is saved for the selected Batch. Execute the Batch.

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

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

3.1.2.5 Checking the Execution Status

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

The status messages in batch monitor are:

- N - Not Started
- O - 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`

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

SCD Process Scenarios

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

3.2 MR Results Transformation

This section provides information on the data flows for the different modules in OFS MRMM.

3.2.1 Data Flows Market Risk Instrument Valuation

Below are the data flows for Instrument Valuation.

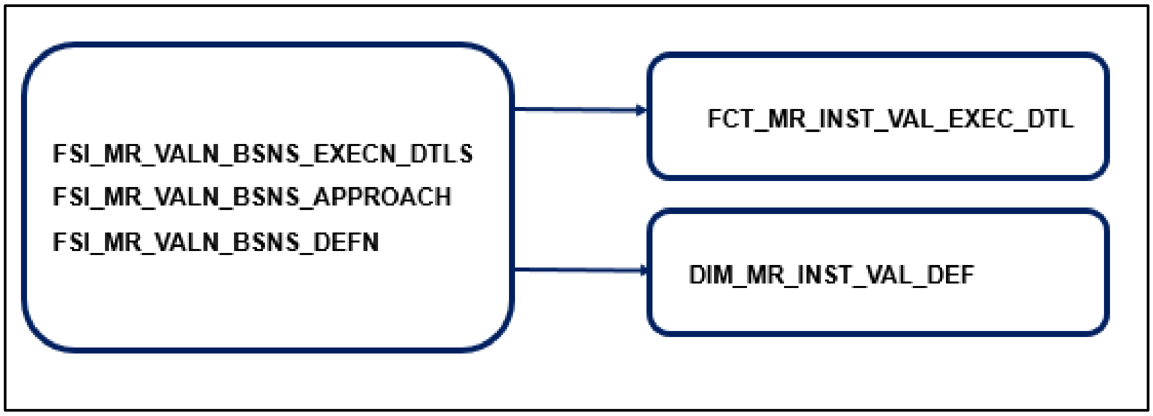

Figure 4 Data flow of business definition and execution detail

The FCT_MR_INST_VAL_EXEC_DTL table stores details of Fact Market Risk Instrument Valuation Execution.

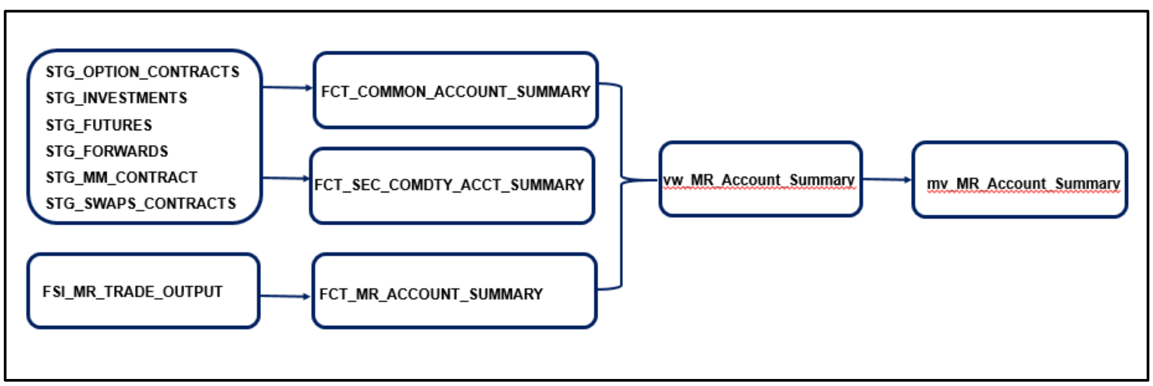

Figure 5 Data flow of input data and trade level results

The FCT_MR_ACCOUNT_SUMMARY table stores results of valuation process in market risk application of OFSAA. Output at account / contract / trade level like price, present value, delta, gamma and other results of pricing model are stored here. This entity is used together with Common Account Summary and Security Commodity Account Summary for reporting.

The FCT_COMMON_ACCOUNT_SUMMARY table stores common account level information that usually comes as an input through staging. 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.

The FCT_SEC_COMDTY_ACCOUNT_SUMMARY table stores input data related to financial instruments like bonds, commodity, forex etc. which are used in valuation and market risk analysis. These data are received directly from operational front office or trading systems of a bank. This entity is used together with Common Account Summary and MR Account Summary for reporting.

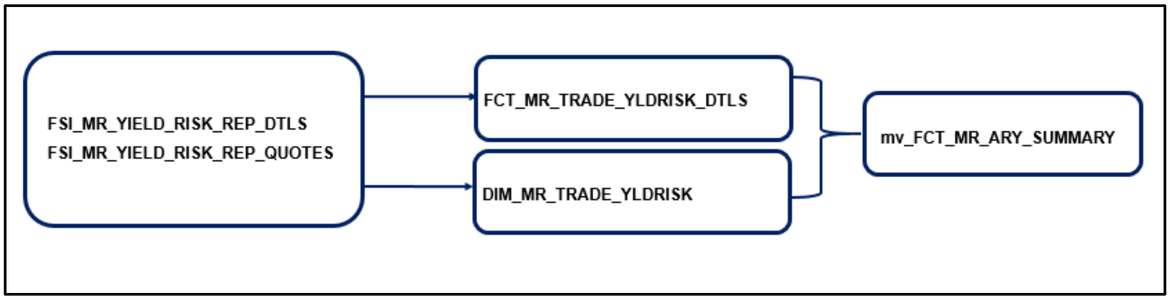

Figure 6 Data flow of Yield Risk Report

The FCT_MR_TRADE_YLDRISK_DTLS stores detail of risk factor level sensitivities and other measures generated during pricing / valuation of trade. These risk factors are in the form of yield curves and their term points which impact price. Each account / contract / trade will generally have multiple records in this table. Data here is read with those in Market Risk Yield Risk Report Quotes tables.

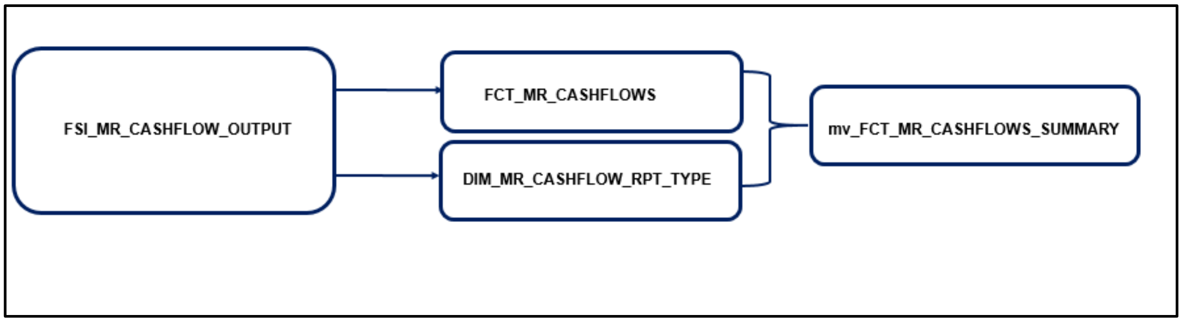

Figure 7 Data flow of trade level cash flows

The FCT_MR_CASHFLOWS table stores detail of cash flows generated during pricing / valuation of trade. Output at account / contract / trade level like cash flow date, accrual dates, interest and principal cash flows, discount rate, discounted cash flows and other results of pricing model are stored here. Each account / contract / trade will generally have multiple records in this table.

Sl. No	T2T	Source Table	Destination Table
1	T2T_MRMM_ACCOUNT_OUTPUT_FCT_POP	FSI_MR_TRADE_OUTPUT	FCT_MR_ACCOUNT_SUMMARY

2	T2T_MRMM_CASHFLOWS_FCT_POP	FSI_MR_CASHFLOW_OUTPUT	FCT_MR_TRADE_CASH_FLOWS
3	T2T_MRMM_TRADE_YIELD_RISK_POP	FSI_MR_YIELD_RISK_REP_DTLS	FCT_MR_TRSDE_YLDRISK_DTLS
4	T2T_MRMM_YIELD_RISK_DTLS_FCT_POP	FSI_MR_YIELD_RISK_REP_QUOTES	DIM_MR_TRSDE_YLDRISK
5	T2T_MRMM_INST_VAL_EXC_DTLS_POP	FSI_MR_VALN_BSNS_EXECN_DTLS	FCT_MR_INST_VAL_EXEC_DT

3.2.2 Data Flows Market Risk Historical Simulation

Below are the data flows for Market Risk- Historical Simulation.

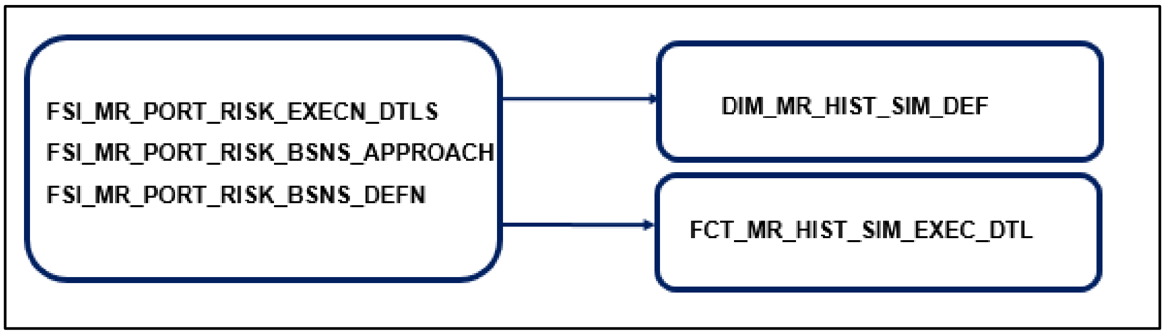

Figure 8 Data flow of business definition and execution detail

FCT_MR_HIST_SIM_EXEC_DTL stores mapping between the business definition and execution detail of each business definition which is executed in historical simulation service of Market Risk Application. This information is used to view reports in BI.

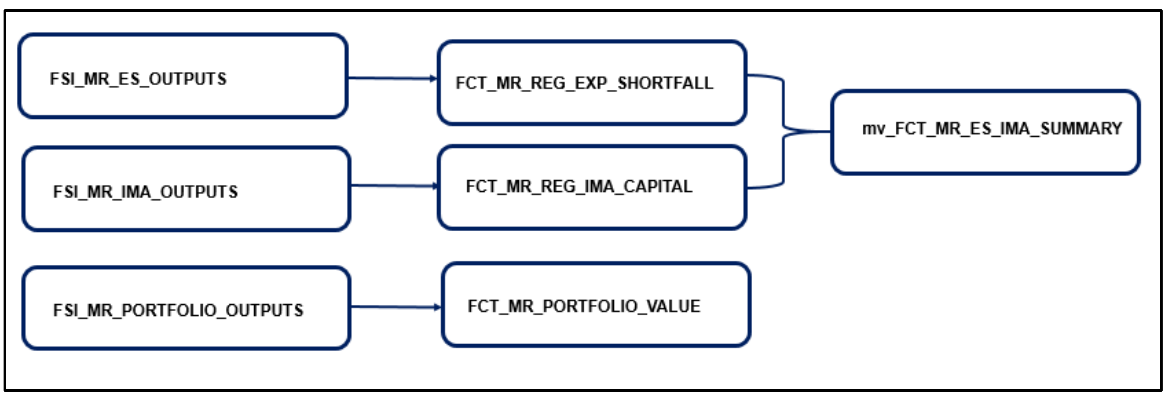

Figure 9 Data flow of regulatory results

The FCT_MR_PORTFOLIO_VALUE table stores the actual and hypothetical value of a portfolio or trading desk. These are output of market risk Portfolio validation process.

The FCT_MR_REG_EXP_SHORTFALL table stores regulatory Conditional Value-at-Risk related measures (Expected Shortfall for full set and reduced set of risk factors, Stress Calibrated Expected

Shortfall) which are output of market risk (FRTB) process. The data is available at aggregated level of portfolio and trading desk.

The FCT_MR_REG_IMA_CAPITAL table stores stores regulatory results (Internally modeled capital charge, stressed capital add-on, aggregated capital charge and default risk charge) of market risk (FRTB) process. The data is available at aggregated level of portfolio and trading desk.

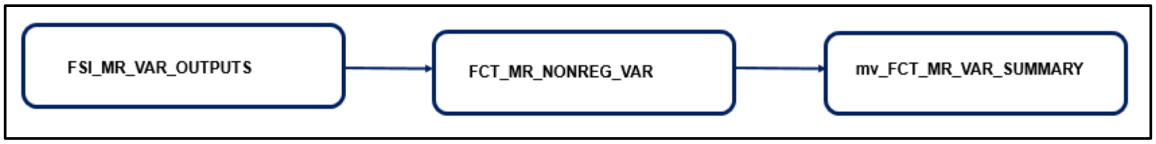

Figure 10 Data flow of non-regulatory results

The FCT_MR_NONREG_VAR table stores non-regulatory Value-at-Risk related measures (Expected tail gain, Expected tail loss, Value at Risk, Gain at Risk) which are output of market risk process. The data is available at aggregated level of portfolio and trading desk.

Sl.No.	T2T	Source Table	Destination Table
1	T2T_MRMM_NONREG_VAR_FCT_POP	FSI_MR_VAR_OUTPUT	FCT_MR_NONREG_VAR
2	T2T_MR_PORTFOLIO_VALUE_FCT_POP	FSI_MAR_PORTFOLIO_OUTPUT	FCT_MR_PORTFOLIO_VALUE
3	T2T_MRMM_EXP_SHORTFALL_FCT_POP	FSI_MR_ES_OUTPUT	FCT_MR_REG_EXP_SHORTFAL
4	T2T_MRMM_IMA_CAPITAL_FCT_POP	FSI_MR_IMA_OUTPUT	FCT_MR_REG_IMA_CAPITAL
5	T2T_MRMM_HIST_SIM_EXC_DTL_POP	FSI_MR_PORT_RISK_EXECN_DTLS	FCT_MR_HIST_SIM_EXEC_DTL

3.2.3 Data Flows Model Validation

Below are the data flows for Model validation.

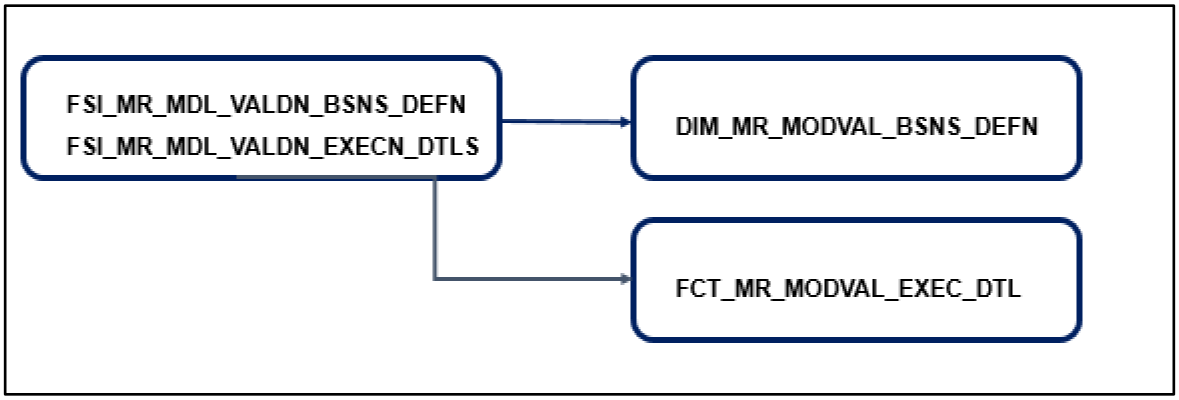

Figure 11 Data flow of business definition and execution detail

The FCT_MR_MODVAL_EXEC_DTL table stores metadata and execution detail of each business definition which is created in Model Validation service of Market Risk Application. This information is used to view reports in BI.

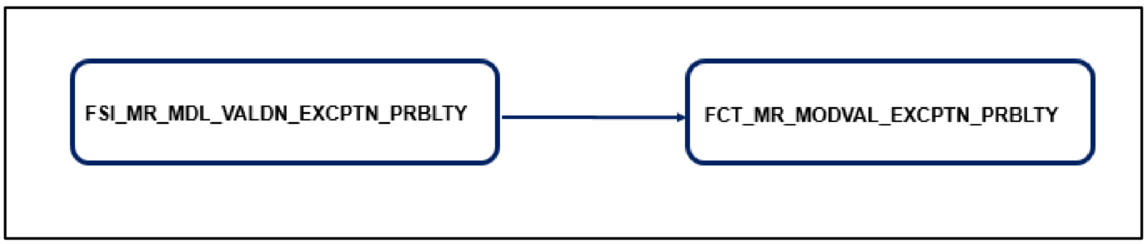

Figure 12 Data flow of FRTB IMA exception probability results

The FCT_MR_MODVAL_EXCPTN_PRBLTY table stores Risk Model Validation Exception Probability of each business definition which is created in Model Validation service of Market Risk Application. This information is used to view reports in BI.

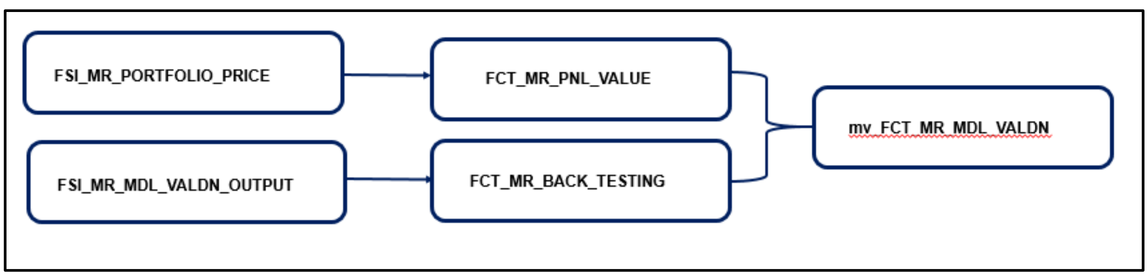

Figure 13 Data flow of profit and loss summary and back testing results

The FCT_MR_PNL_VALUE table stores the actual and hypothetical Profit and Loss value of a portfolio or trading desk. These are output of market risk Model validation process.

The FCT_MR_BACK_TESTING table stores the back testing and Profit-Loss attribution results of portfolio and trading desk. The data here is used to decide if a trading desk of bank is eligible to follow Internal Models Method for regulatory calculation or not. These are output of market risk model validation process.

Sl.No.	T2T	Source Table	Destination Table
1	T2T_MR_MDL_BACKTESTING_FCT_POP	FSI_MR_MDL_VALDN_OUTPUT	FCT_MR_BACK_TESTING
2	T2T_MRMM_PNL_VALUE_FCT_POP	FSI_MR_PORTFOLIO_PRICE	FCT_MR_PNL_VALUE
3	T2T_MRMM_MDLVAL_EXC_DTL_POP	FSI_MR_MDL_VALDN_EXECN_DTLS	FCT_MR_MODVAL_EXEC_DTLL

3.2.4 Data Flows Market Data

Below are the data flows for Market Data.

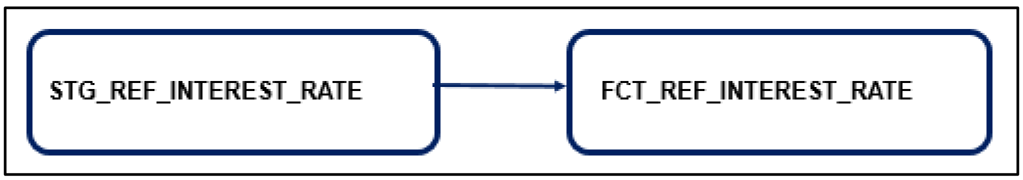

Figure 14 Data flow of fact reference interest rate

This FCT_REF_INTEREST_RATE table stores data of interest rate curves or yield curves such as libor, fedfunds and so on. for different currencies. It is used to decide interest/coupon rate for adjustable or floating rate instruments, discount rate and valuation of trading book instruments.

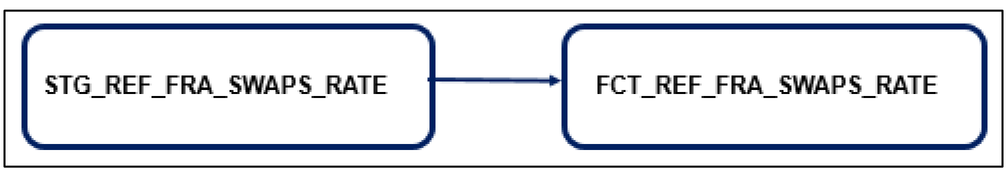

Figure 15 Data flow of forward rate agreements swap rate

The FCT_REF_FRA_SWAPS_RATE table stores market data related to Forward Rate Agreements and Swap Rate.

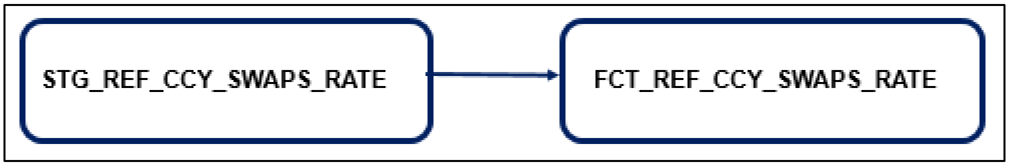

Figure 16 Data flow of swap rates

The FCT_REF_CCY_SWAPS_RATE table stores market data related to Basis Swap Rates, Cross-currency Basis Swaps & Cross-currency Fixed/Float Swaps rates.

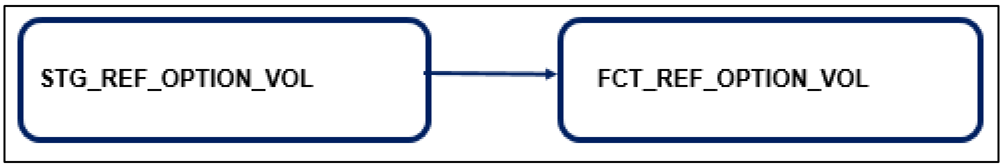

Figure 17 Data flow of stg_ref_option_vol

The FCT_REF_OPTION_VOL table stores market data related to volatility rates or curves for instruments such as swaptions, swaption cube and interest rate cap/floor.

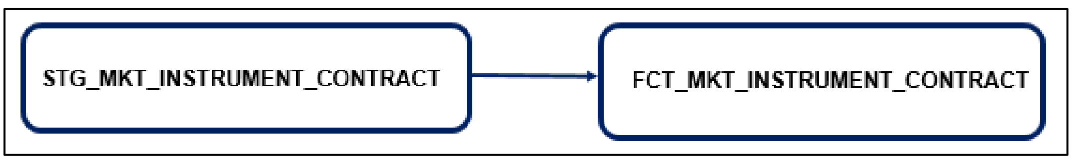

Figure 18 Data flow of stg_mkt_instrument_contracts

The FCT_MKT_INSTRUMENT_CONTRACT table stores prices of the traded instruments and contracts such as sovereign bond, corporate bond, treasury bills, equity, futures, options commodity and so on.

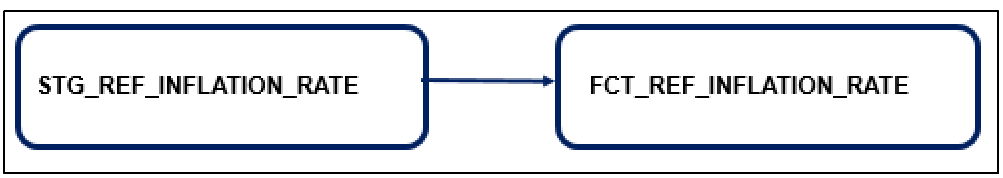

Figure 19 Data flow of stg_ref_inflation_rate

The FCT_REF_INFLATION_RATE table stores data of inflation index and associated seasonality for different currencies. It is used for calculation of cash flows and valuation of inflation linked instrument.

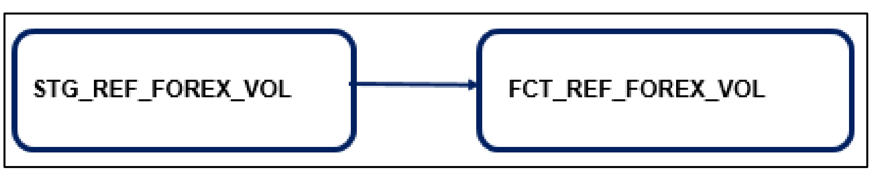

Figure 20 Data flow of stg_ref_forex_vol

The FCT_REF_FOREX_VOL table stores market data related to volatility rates for Foreign Exchange.

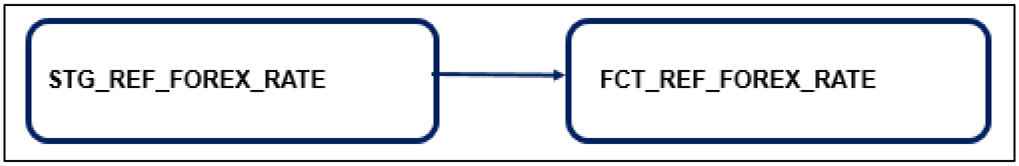

Figure 21 Data flow of stg_ref_forex_rate

The FCT_REF_FOREX_RATE table stores the spot and forward exchange rates between pair of currencies. This is used to do conversion of amounts and valuation of trading book instruments in FX asset class.

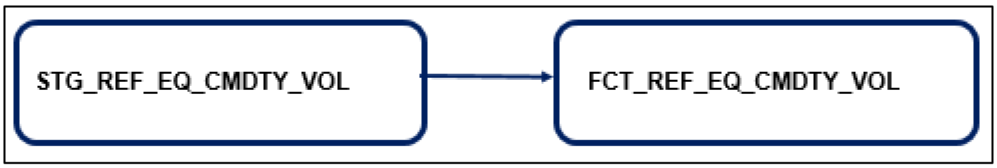

Figure 22 Data flow of stg_ref_eq_cmdty_vol

The FCT_REF_EQ_CMDTY_VOL table stores market data related to volatility rates for equity & commodity.

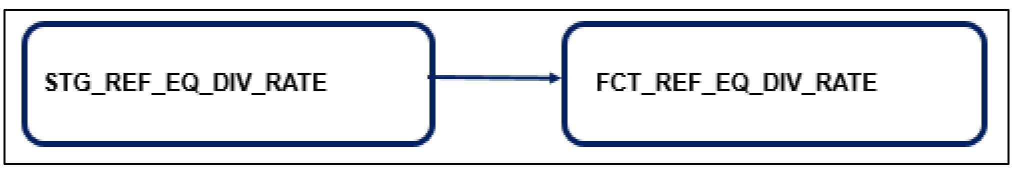

Figure 23 Data flow of stg_ref_eq_div_rate

The FCT_REF_EQ_DIV_RATE table stores market data related to Equity Dividend

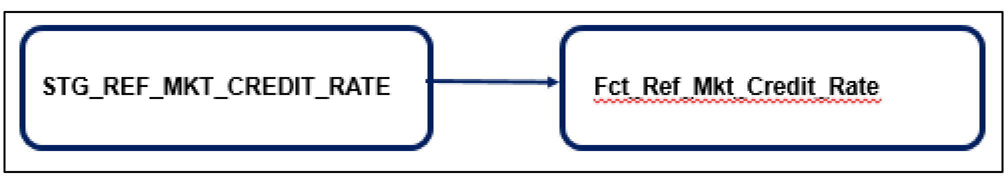

Figure 24 Data flow of stg_ref_mkt_credit_rate

The Fct_Ref_Mkt_Credit_Rate table stores market data related to Single-Name Credit Default Swaps, Credit Index Swaps and Survival Probabilities.

Sl. No.	T2T	Source Table	Destination Table
1	T2T_MR_FSI_INTEREST_RATE_POP	STG_REF_INTEREST_RATE	FCT_REF_INTEREST_RATE

2	T2T_MR_FSI_FRA_SWAP_RATE_POP	STG_REF_FRA_SWAPS_RATE	FCT_REF_FRA_SWAPS_RATE
3	T2T_MR_FSI_CCY_SWAP_RATE_POP	STG_REF_CCY_SWAPS_RATE	FCT_REF_CCY_SWAPS_RATE
4	T2T_MR_FSI_OPTION_VOLATILITY_POP	STG_REF_OPTION_VOL	FCT_REF_OPTION_VOL
5	T2T_MRMM_MKT_INSTR_CONTRACT_FCT_POP	STG_MKT_INSTRUMENT_CONTRACT	FCT_MKT_INSTRUMENT_CONTRACT
6	T2T_MR_FSI_INFLATION_RATE_POP	STG_REF_INFLATION_RATE	FCT_REF_INFLATION_RATE
7	T2T_MR_FSI_FOREX_VOL_POP	STG_REF_FOREX_VOL	FCT_REF_FOREX_VOL
8	T2T_MR_FSI_FOREX_RATE_POP	STG_REF_FOREX_RATE	FCT_REF_FOREX_RATE
9	T2T_MR_FSI_EQ_CMDTY_VOLATILITY_POP	STG_REF_EQ_CMDTY_VOL	FCT_REF_EQ_CMDTY_VOL
10	T2T_MR_FSI_EQ_DIVIDEND_RATE_POP	STG_REF_EQ_DIV_RATE	FCT_REF_EQ_DIV_RATE
11	T2T_MR_FSI_MARKET_CREDIT_RATE_POP	STG_REF_MKT_CREDIT_RATE	Fct_Ref_Mkt_Credit_Rate

3.2.5 Data Flows Monte Carlo

Below are the data flows for Market Data.

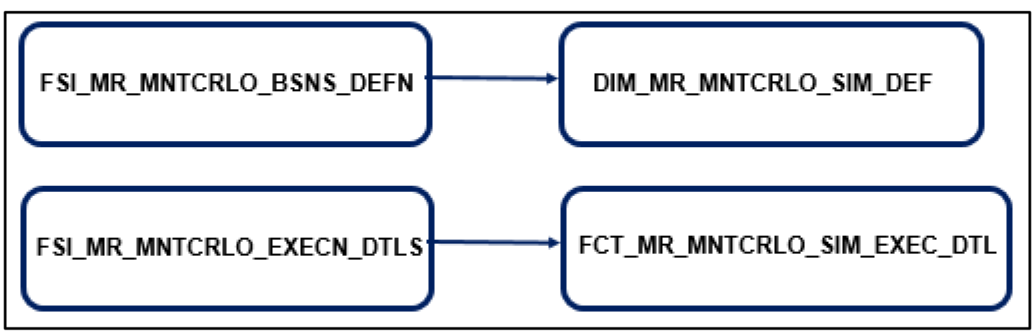

Figure 25 Data flow of Monte-Carlo business definition and execution

The FCT_MR_MNTCRLO_SIM_EXEC_DTL table stores mapping between the business definition and execution detail of each business definition which is executed in Monte-Carlo simulation service of Market Risk Application. This information is used to view reports in BI.

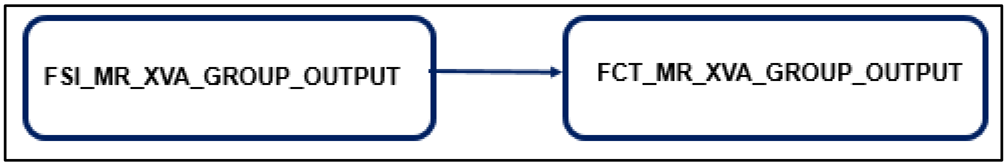

Figure 26 Data flow of fsi_mr_xva_group_output

The FCT_MR_XVA_GROUP_OUTPUT table stores all valuation adjustments also called as XVA (XVA refers to CVA-Credit Valuation Adjustment, DVA-Debt Valuation Adjustment, FVA- Funding Valuation Adjustment and KVA-Capital Valuation Adjustment) for the set of counterparties group wise.

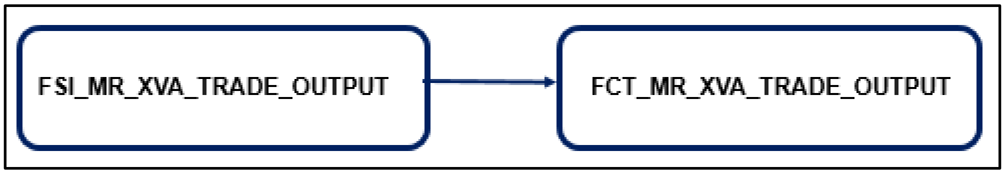

Figure 27 Data flow of fsi_mr_xva_trade_output

The FCT_MR_XVA_TRADE_OUTPUT table stores all valuation adjustments also called as XVA (XVA refers to CVA-Credit Valuation Adjustment, DVA-Debt Valuation Adjustment, FVA- Funding Valuation Adjustment and KVA-Capital Valuation Adjustment) for the set of counterparties individual trade wise

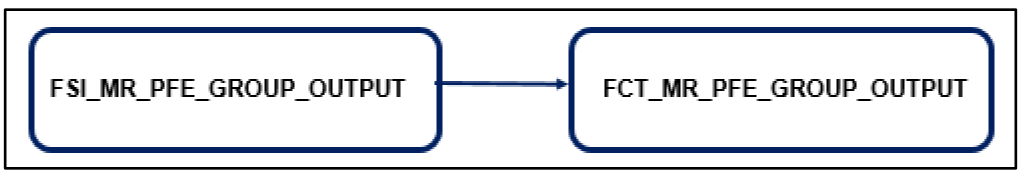

Figure 28 Data flow of fsi_mr_pfe_group_output

The FCT_MR_PFE_GROUP_OUTPUT table stores the Potential Future Exposure measures for the set of counterparties for the group wise

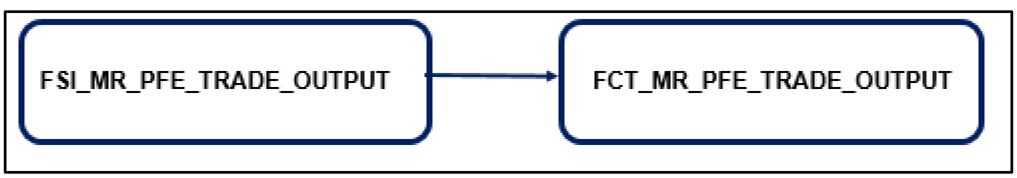

Figure 29 Data flow of fsi_mr_pfe_trade_output

The FCT_MR_PFE_TRADE_OUTPUT table stores the Potential Future Exposure measures for the set of counterparties for the individual trade wise

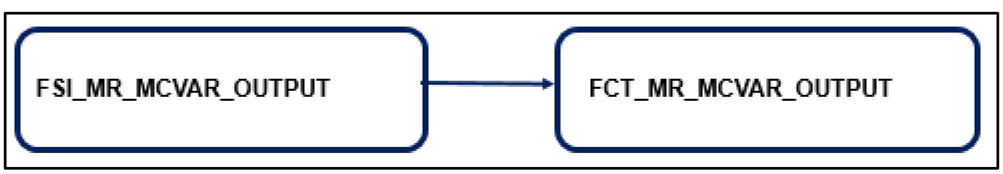

Figure 30 Data flow of fsi_mr_pfe_trade_output

The FCT_MR_MCVAR_OUTPUT table stores the Monte Carlo Value At Risk and Expected tail loss measures for the set of counterparties

Sl.No.	T2T	Source Table	Destination Table
2	T2T_MRMM_MNTCRLO_SIM_EXC_DTL_POP	FSI_MR_MNTCRLO_EXECN_DTLS	FCT_MR_MNTCRLO_SIM_EXEC_DTL
3	T2T_MR_XVA_GROUP_OUTPUT_FCT_POP	FSI_MR_XVA_GROUP_OUTPUT	FCT_MR_XVA_GROUP_OUTPUT
4	T2T_MR_XVA_TRADE_OUTPUT_FCT_POP	FSI_MR_XVA_TRADE_OUTPUT	FCT_MR_XVA_TRADE_OUTPUT
5	T2T_MR_PFE_GROUP_OUTPUT_FCT_POP	FSI_MR_PFE_GROUP_OUTPUT	FCT_MR_PFE_GROUP_OUTPUT
6	T2T_MR_PFE_TRADE_OUTPUT_FCT_POP	FSI_MR_PFE_TRADE_OUTPUT	FCT_MR_PFE_TRADE_OUTPUT
7	T2T_MR_MCVAR_OUTPUT_FCT_POP	FSI_MR_MCVAR_OUTPUT	FCT_MR_MCVAR_OUTPUT

3.2.6 Data Flows MR Assumptions

As part of Default Configurations reports, the below tables are populated via application user interface:

Sl.No.	Report	Table Name
1	Currency	FSI_MR_CURRENCY_SETUP
2	Currency Pair	FSI_MR_CURRENCY_PAIR_SETUP
3	Model and Method	FSI_MR_MODEL_METHOD_SETUP
4	Model Parameters	FSI_MR_MODEL_PARAM_SETUP
5	Instrument Type Classification	FSI_MR_INSTRUMENT_TYPE_SETUP
6	Liquidity Horizon	FSI_MR_LIQUIDITY_HORIZON

As part of Portfolio reports, the below tables are populated:

Sl.No.	Report	Table Name
1	Portfolio Definition by Hierarchy	fsi_mr_portfolio_hier_dtl
		fsi_m_object_definition_tl
		FSI_CURRENCY_MLS
2	Portfolio Definition by Instrument	FSI_MR_PORTFOLIO_INST_DTL
		fsi_m_object_definition_b
		fsi_mr_portfolio

4 Account Summary Population

This chapter provides information about Account Summary Population in the Oracle Financial Services Market Risk Measurement and Management application and step-by-step instructions to use this section. It 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 MRMM BI data model are loaded from both the Staging Area tables and operational Instrument Tables using the Table to Table (T2T) component of OFSAAI framework.

This chapter includes the following topics:

- Overview of Account Summary Tables
- Overview of Account Summary Population
- Executing the Account Summary Population T2T
- Checking the Execution Status
- Account Summary T2Ts

4.1 Overview of Account Summary Tables

Account Summary tables are loaded from the staging product processor tables using the Table to Table (T2T) component of Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) framework.

Customer account level data from the Oracle Financial Services Analytical Applications (OFSAA) staging product processor tables must be consolidated into a standardized relational Business Intelligence (BI) data model. This consolidation is done to have all the staging product processor table data in a single Fact table. The Account Summary table data can be used for building cubes which allow rollup of data for a dimension or a combination of dimensions. This relational BI model consists of multiple vertically partitioned Account Summary tables such as FCT_COMMON_ACCOUNT_SUMMARY, FCT_SEC_COMDTY_ACCT_SUMMARY and FCT_MR_ACCOUNT_SUMMARY that are organized by application subject area. FCT_COMMON_ACCOUNT_SUMMARY 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.

4.2 Overview of Account Summary Population

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

Data base 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.

In addition, a surrogate key is populated in Fact (BI) table dimension columns by doing SQL joins between the trade 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. In addition, the unique Account Number links the data flowing into Fact tables from both EPM instrument tables and ERM account level tables.

4.2.1 Prerequisites

Following are the pre-requisites for Account Summary population:

1. All the postinstall steps mentioned in the Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) Installation and Configuration Guide and the solution installation manuals of MRMM BI have to be completed successfully.
2. Application users must be mapped to a role which 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
4. 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, refer to the Oracle Financial Services Analytical Applications Infrastructure User Guide.
5. Batches must be created for executing the function. This is explained in section Executing the Account Summary Population T2T.
6. The Dimension Table Population step must be done before you execute the T2T batch. For more details, refer to section Dimension Population.

4.2.2 Tables Used by the Account Summary Population T2T Process

Table to Table seeded definitions are provided for loading data into Fact Common Account Summary and Fact securities & commodity account summary

Sl. No.	Source Table Name	Destination Table Name	T2T Definition Name
1	STG_FUTURES	FCT_SEC_COMDTY_ACCT_SUMMARY	T2T_FUTURES_SEC_CMTY_ACCT_FCT_POP
		FCT_COMMON_ACCOUNT_SUMMARY	T2T_STG_FUTURES_CAS
2	STG_FORWARDS	FCT_SEC_COMDTY_ACCT_SUMMARY	T2T_FORWARDS_SEC_CMDTY_FCT_POP
		FCT_COMMON_ACCOUNT_SUMMARY	T2T_STG_FORWARDS_CAS
3	STG_INVESTMENTS	FCT_SEC_COMDTY_ACCT_SUMMARY	T2T_INVESTMENTS_SEC_CMDTY_FCT_POP
		FCT_COMMON_ACCOUNT_SUMMARY	T2T_STG_INVESTMENTS_CAS
4	STG_MM_CONTRACTS	FCT_SEC_COMDTY_ACCT_SUMMARY	T2T_MM_CONTRACT_SEC_CMDTY_FCT_POP
		FCT_COMMON_ACCOUNT_SUMMARY	T2T_STG_MM_CAS
5	STG_SWAPS_CONTRACTS	FCT_SEC_COMDTY_ACCT_SUMMARY	T2T_SWAPS_CONTR_SEC_CMDTY_FCT_POP
		FCT_COMMON_ACCOUNT_SUMMARY	T2T_STG_SWAPS_CONTRACTS_CAS
6	STG_OPTION_CONTRACTS	FCT_SEC_COMDTY_ACCT_SUMMARY	T2T_OPTIONS_SEC_CMDTY_FCT_POP
		FCT_COMMON_ACCOUNT_SUMMARY	T2T_STG_OPTIONS_CAS

Table to Table Seeded Definitions

4.3 Executing the Account Summary Population T2T

4.3.1 Executing through Batch

Fact Common Account Summary table has to be loaded prior to loading any of the other Account Summary tables. You can execute the T2T component from OFSAA Infrastructure ICC framework (accessed through the application Batch Operations screen).

NOTE: Before executing Account Summary Population T2Ts, we need to manually configure the setup_master table with required GAAP code. For an account we can load only one GAAP_CODE to Fact Common Account Summary. By default, MRMM installer will seed the following entry into SETUP_MASTER.While executing through batch, the RUNSkey will be defaulted to -1.

V_COMPONENT_ CODE	V_COMPONENT_DESC	V_COMPONENT_VALUE
DEFAULT_GAAP	DEFAULT_GAAP	USGAAP

Configuration

For all other GAAP codes, we need to update SETUP_MASTER manually before running each Account Summary Population T2Ts.

4.3.2 Fact Common Account Summary - Batch Execution

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

You can execute the function from the Operations (formerly Information Command Center (ICC) framework) module of OFSAAI, as mentioned below. Define a new Batch and an underlying Task definition from the Batch Maintenance window of OFSAAI.

A seeded batch, <INFODOM>_MRMM_ACCT_SUMMARY_REP_POP has to be executed for the required MIS Date. Alternatively, following steps will help you define a new batch:

1. From the Home menu, click **Operations** and select **Batch Maintenance**.
2. Click **New Batch** ('+' symbol in Batch Name container). Enter the Batch Name and Description.
3. Click **Save**.
4. Click the check box in the Batch Name container to select the Batch, you created in the earlier step.
5. Enter the **Task ID** and **Description**.
6. Select **Load Data** from the Components list.
7. 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 <T2T Source Name> from the list.
   - **File Name** - Select the T2T name for the source stage channel table you want to process. Refer section Tables Used by the Account Summary Population T2T Process.
   - Data file name will be blank for any Table to Table Load mode.
   - Default value refers to currency calculation. If there is any need for currency conversion in T2T transactions, Default value has to be provided. For example, default value is [DRCY]='USD' Here 'USD' acts as reporting currency parameter to T2T.
8. Repeat steps 4 to 8 for adding the remaining T2Ts within the same batch definition.
9. Click **Save**. The Task definition is saved for the selected Batch.

10. Execute the batch created in the preceding steps.
11. You can execute a Batch definition from the Batch Execution section of the OFSAAI Operations module.

4.4 Checking the Execution Status

The status of execution can be monitored using the Batch Monitor screen.

NOTE: For a more comprehensive coverage of configuration and execution of a batch, refer to Oracle Financial Services Analytical Applications Infrastructure User Guide.

The status messages in Batch Monitor are:

- N - Not Started
- O - On Going
- F - Failure
- S – Success

The execution log can be accessed on the application server in the following directory $FIC_DB_HOME/log/t2t. The file name will have the batch execution id.

The error log table in atomic schema is: FCT_COMMON_ACCOUNT_SUMMARY$

4.5 Account Summary T2Ts

T2T definitions can be retrieved as an excel document for reference from the metadata browser of the Unified Metadata Manager (UMM) component of OFSAAI.

5 Overview of Dashboards and Reports

This chapter describes the seeded reports and dashboards. These reports integrates the results generated by the OFS MRMM application with Oracle Business Intelligence, giving users the ability to perform queries on 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 OFS MRMM. You can implement these reports as they are available, or modify them to the specifications of your users.

5.1 List of Dashboards and Reports

The following seeded dashboards and reports are available in MRMM.

Subject Area	Dashboard Name	Dashboard Page Name	Report Name
Valuation	1 Enterprise Performance	Portfolio Allocation	Portfolio Allocation
Valuation	1 Enterprise Performance	Portfolio Or Trading Desk - Top 10 Gainers And Losers	Portfolio Or Trading Desk - Top 10 Gainers
Valuation	1 Enterprise Performance	Portfolio Or Trading Desk - Top 10 Gainers And Losers	Portfolio Or Trading Desk - Top 10 Losers
Valuation	1 Enterprise Performance	Top 10 Portfolio Or Trading Desk	Top 10 Portfolio Or Trading Desk
Valuation	1 Enterprise Performance	Trading Desk - Variation From Last Business Day	Trading Desk - Variation From Last Business Day
Valuation	1 Enterprise Performance	Trading Desk Value	Trading Desk Value
Valuation	2 Trading Risk Metrics	Portfolio Or Trading Desk Value	Portfolio Value
Valuation	2 Trading Risk Metrics	Portfolio Or Trading Desk Value - Trend	Portfolio Value - Trend
Valuation	2 Trading Risk Metrics	Trade Level Metrics	Trade Level Metrics
Valuation	2 Trading Risk Metrics	Trading Desk Value: Trend	Trading Desk Value: Trend
Valuation	3 Trading Book: Analysis Of Portfolio Composition	Asset Allocation	Asset Allocation
Valuation	3 Trading Book: Analysis Of Portfolio Composition	Industry-Wise Holding	Industry-Wise Holding
Valuation	3 Trading Book: Analysis Of Portfolio Composition	Instrument Type Concentration By Trading Desk	Instrument Type Concentration By Trading Desk
Valuation	3 Trading Book: Analysis Of Portfolio Composition	Portfolio Breakdown By Instrument Type	Portfolio Breakdown By Instrument Type

Subject Area	Dashboard Name	Dashboard Page Name	Report Name
Valuation	4 Aging Analysis	Average Age On Book	Average Age On Book
Valuation	4 Aging Analysis	Average Age On Book By Instrument Type	Average Age On Book By Instrument Type
Valuation	4 Aging Analysis	Vintage Analysis By Trading Desk	Vintage Analysis By Trading Desk
Valuation	5 Market Data	Interest Rate Index	Interest Rate Index
Valuation	5 Market Data	Fra Rate	Fra Rate
Valuation	5 Market Data	Swap Rate	Swap Rate
Valuation	5 Market Data	Foreign Exchange Rate (Forward)	Foreign Exchange Rate (Forward)
Valuation	5 Market Data	Foreign Exchange Rate (Spot)	Foreign Exchange Rate (Spot)
Valuation	5 Market Data	Swaption Volatility	Swaption Volatility
Valuation	6 Audit	Cash Flow Report	Cash Flow Report
Valuation	6 Audit	Yield Risk Report	Yield Risk Report
Model Validation	1 Profit And Loss	Actual Profit And Loss	Actual Profit And Loss
Model Validation	1 Profit And Loss	Hypothetical Profit And Loss	Hypothetical Profit And Loss
Model Validation	1 Profit And Loss	Profit And Loss Summary	Profit And Loss Summary
Model Validation	1 Profit And Loss	Risk-Theoretical Profit And Loss	Risk Theoretical Profit And Loss
Model Validation	2 Back Testing	Back Testing Exception Details	Back Testing Exception Details
Model Validation	2 Back Testing	Back Testing Exception Summary	Back Testing Exception Summary
Model Validation	2 Back Testing	Exception Probability And Multiplier	Exception Probability And Multiplier
Model Validation	2 Back Testing	P&L Attribution Details	Backtesting Specifications
Model Validation	2 Back Testing	P&L Attribution Details	P&L Attribution Details
Model Validation	2 Back Testing	P&L Attribution Summary	P&L Attribution Summary
Model Validation	2 Back Testing	Zone Classification	Zone Classification
Model Validation	3 Audit	Audit Trial	Audit Trail

Subject Area	Dashboard Name	Dashboard Page Name	Report Name
Model Validation	3 Audit	Execution History	Execution History
Historical Simulation	1 Enterprise Risk	Development Of Value-At-Risk By Risk Factors During The Year	Development Of Value-At-Risk By Risk Factors During The Year Daily
Historical Simulation	1 Enterprise Risk	Development Of Value-At-Risk By Risk Factors During The Year	Development Of Value-At-Risk By Risk Factors During The Year Monthly
Historical Simulation	1 Enterprise Risk	Development Of Value-At-Risk By Risk Factors During The Year	Development Of Value-At-Risk By Risk Factors During The Year Weekly
Historical Simulation	1 Enterprise Risk	Value-At-Risk (Var) By Business Unit And Risk Factor Type	Value-At-Risk (Var) By Business Unit
Historical Simulation	1 Enterprise Risk	Value-At-Risk (Var) By Business Unit And Risk Factor Type	Value-At-Risk (Var) By Business Unit And Risk Factor Type
Historical Simulation	1 Enterprise Risk	Value-At-Risk (Var) By Business Unit And Risk Factor Type	Value-At-Risk (Var) By Risk Factor Type
Historical Simulation	1 Enterprise Risk	Value-At-Risk (Var) By Trading Desk	Value-At-Risk (Var) By Trading Desk
Historical Simulation	1 Enterprise Risk	Value-At-Risk By Risk Factor (Trend During Year)	Value-At-Risk By Risk Factor (Trend During Year)
Historical Simulation	1 Enterprise Risk	Value-At-Risk By Risk Factor Type (Year On Year)	Value-At-Risk By Risk Factor Type (Year On Year)
Historical Simulation	2 Fundamental Review Of Trading Book	LQ Adjusted Es By Risk Factor Type	LQ Adjusted Es By Risk Factor Type
Historical Simulation	2 Fundamental Review Of Trading Book	LQ Adjusted Es By Risk Factor Type And Lq Horizon	LQ Adjusted Es By Risk Factor Type And Lq Horizon
Historical Simulation	2 Fundamental Review Of Trading Book	Stress Calibrated Es By Risk Factor Type	Stress Calibrated Es By Risk Factor Type
Historical Simulation	3 Risk And Performance Summary	Risk By Region	Risk By Region
Historical Simulation	3 Risk And Performance Summary	Risk By Sector	Risk By Sector

Subject Area	Dashboard Name	Dashboard Page Name	Report Name
Historical Simulation	3 Risk And Performance Summary	Var And P&L	Var And P&L
Historical Simulation	3 Risk And Performance Summary	Portfolio Allocation	Portfolio Allocation
Historical Simulation	4 Aging Analysis	Average Age On Book	Average Age On Book
Historical Simulation	4 Aging Analysis	Average Age On Book By Instrument Type	Average Age On Book By Instrument Type
Historical Simulation	4 Aging Analysis	Vintage Analysis By Trading Desk	Vintage Analysis By Trading Desk
Historical Simulation	5 Market Data	Interest Rate Index	Interest Rate Index
Historical Simulation	5 Market Data	Fra Rate	Fra Rate
Historical Simulation	5 Market Data	Swap Rate	Swap Rate
Historical Simulation	5 Market Data	Foreign Exchange Rate (Forward)	Foreign Exchange Rate (Forward)
Historical Simulation	5 Market Data	Foreign Exchange Rate (Spot)	Foreign Exchange Rate (Spot)
Historical Simulation	5 Market Data	Swaption Volatility	Swaption Volatility
Historical Simulation	6 Audit	Audit Trail	Audit Trail
Historical Simulation	6 Audit	Execution History	Execution History
Market Data	1 Commodity Market Data	Commodity Spot Price	Commodity Spot Price
Market Data	1 Commodity Market Data	Commodity Forward Price	Commodity Forward Price
Market Data	1 Commodity Market Data	Commodity Volatility	Commodity Volatility
Market Data	2 Credit Rate Market Data	Single-Name Credit Default Swaps Spread	Single-Name Credit Default Swaps Spread
Market Data	2 Credit Rate Market Data	Single-Name Credit Default Swaps - Recovery Rate	Single-Name Credit Default Swaps - Recovery Rate

Subject Area	Dashboard Name	Dashboard Page Name	Report Name
Market Data	2 Credit Rate Market Data	Credit Index Swaps	Credit Index Swaps
Market Data	2 Credit Rate Market Data	Survival Probability	Survival Probability
Market Data	3 Equity Market Data	Equity Spot Price	Equity Spot Price
Market Data	3 Equity Market Data	Equity Futures Price	Equity Futures Price
Market Data	3 Equity Market Data	Equity Dividend	Equity Dividend
Market Data	3 Equity Market Data	Equity Dividends From Equity Dividend Futures	Equity Dividends From Equity Dividend Futures
Market Data	3 Equity Market Data	Equity Dividends From Equity Dividend Swaps	Equity Dividends From Equity Dividend Swaps
Market Data	3 Equity Market Data	Equity Volatility	Equity Volatility
Market Data	4 Foreign Exchange Market Data	Fx Spot Rates	Fx Spot Rates
Market Data	4 Foreign Exchange Market Data	Fx Forward Rates	Fx Forward Rates
Market Data	4 Foreign Exchange Market Data	Fx Volatility	Fx Volatility
Market Data	5 Inflation Market Data	Inflation-Linked Bonds	Inflation-Linked Bonds
Market Data	5 Inflation Market Data	Zero-Coupon Inflation-Indexed Swaps	Zero-Coupon Inflation-Indexed Swaps
Market Data	5 Inflation Market Data	Zero-Coupon Inflation-Indexed Options	Zero-Coupon Inflation-Indexed Options
Market Data	5 Inflation Market Data	Year-On-Year Options	Year-On-Year Options
Market Data	5 Inflation Market Data	Inflation Seasonality	Inflation Seasonality
Market Data	5 Inflation Market Data	Inflation Fixings	Inflation Fixings
Market Data	6 Interest Rate Market Data	Interest Rate Curve	Interest Rate Curve
Market Data	6 Interest Rate Market Data	Forward Rate Agreement	Forward Rate Agreement
Market Data	6 Interest Rate Market Data	Swap Rate	Swap Rate
Market Data	6 Interest Rate Market Data	Basis Swap Rate (Including Cross-Currency)	Basis Swap Rate (Including Cross-Currency)
Market Data	6 Interest Rate Market Data	Fixed Float Swap	Fixed Float Swap
Market Data	6 Interest Rate Market Data	Swaptions Volatility Surface	Swaptions Volatility Surface
Market Data	6 Interest Rate Market Data	Swaptions Volatility Cube	Swaptions Volatility Cube

Subject Area	**Dashboard Name**	**Dashboard Page Name**	**Report Name**
Market Data	6 Interest Rate Market Data	Swaptions Volatility Cube Shift	Swaptions Volatility Cube Shift
Market Data	6 Interest Rate Market Data	Cap Volatility Surface	Cap Volatility Surface
Market Data	6 Interest Rate Market Data	Bonds And Bills	Bonds And Bills
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty Info Summary	Counterparty Info Statistics Summary
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty Info Summary	Trend In CVA Summary
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty Info Summary	Range Of CVA Summary
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty Info Detail	Counterparty XVA - Info Statistics Detail
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty Info Detail	Trend In CVA Detail
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty Info Detail	Range Of CVA Detail
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty XVA	Counterparty XVA
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty XVA - Netting Set	Counterparty XVA- Netting Set
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty XVA - CSA	Counterparty XVA - CSA
Monte Carlo	1 Counterparty Risk (Xva)	Counterparty XVA – Trade	Counterparty XVA – Trade
Monte Carlo	2 Counterparty Risk (Xva) Increments	Counterparty XVA Increments	Counterparty XVA Increments Summary
Monte Carlo	2 Counterparty Risk (Xva) Increments	Counterparty XVA Increments – Netting Set	Counterparty XVA Increments – Netting Set
Monte Carlo	2 Counterparty Risk (XVA) Increments	Counterparty XVA Increments - CSA	Counterparty XVA Increments - CSA
Monte Carlo	2 Counterparty Risk (Xva) Increments	Counterparty XVA Increments - Trade	Counterparty XVA Increments - Trade
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Summary	Portfolio Or Trading Desk Exposure Summary
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Summary	Counterparty PFE – Info Statistics Summary
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Summary	Trend In PFE
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Summary	Range Of PFE

Subject Area	Dashboard Name	Dashboard Page Name	Report Name
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Detail	Portfolio Or Trading Desk Exposure Detail
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Detail	Counterparty PFE – Info Statistics Detail
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Detail	Trend In PFE
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Detail	Range Of PFE
Monte Carlo	3 Counterparty Exposure Summary	Regulatory Exposure	Regulatory Exposure
Monte Carlo	3 Counterparty Exposure Summary	Exposure by Observation Date	Exposure by Observation Date
Monte Carlo	3 Counterparty Exposure Summary	Counterparty Exposure Detailed - Trade	Counterparty Exposure Detailed - Trade
Monte Carlo	4 Monte Carlo Var	Portfolio Or Trading Desk Var	Monte-Carlo Var And Expected Shortfall
Monte Carlo	4 Monte Carlo Var	Portfolio Or Trading Desk Var	Monte-Carlo Var (Trend)
Monte Carlo	4 Monte Carlo Var	Portfolio Or Trading Desk Var	Monte-Carlo Var (Range)
Monte Carlo	4 Monte Carlo Var	Monte-Carlo Var Summary	Monte-Carlo Var Summary
Monte Carlo	4 Monte Carlo Var	Monte-Carlo Var Detailed	Monte-Carlo Var Detailed
Monte Carlo	4 Monte Carlo Var	Exposure Value -Trade	Exposure Value -Trade
Monte Carlo	5 Audit	Audit Trail	Audit Trail
Monte Carlo	5 Audit	Execution History	Execution History
Assumptions	1 Default Configurations	Currency	Currency
Assumptions	1 Default Configurations	Currency Pair	Currency Pair
Assumptions	1 Default Configurations	Models And Methods	Models And Methods
Assumptions	1 Default Configurations	Model Parameters	Model Parameters
Assumptions	1 Default Configurations	Instrument Type Classification	Instrument Type Classification
Assumptions	1 Default Configurations	Liquidity Horizon	Liquidity Horizon
Assumptions	2 Portfolio	Portfolio	Portfolioi

5.2 Report Description

See the below sections for details of the reports.

6 MR Model Validation

MR Model Validation consists of the following page level filters which are applicable to all the reports in this dashboard.

Dashboard Name	MR Model Validation
Subject Area	MR Model Validation
Page Level Filters	View Type, Execution Date, Analysis Name, Business Definition, EOD Execution, Execution Id **Note**: These are not applicable to Audit reports **Audit Dashboard Filters:** View type and Analysis Name
Page Level Display Parameters	Not applicable

The following dashboards are displayed as part of MR Model Validation:

- Profit and Loss
- Back Testing
- Audit

6.1 Profit and Loss

This dashboard displays desk-level and firm-wide level backtesting data. This data can be used to determine and monitor whether trading desks have permission to use internal models. For P&L figures, losses are reported as negative numbers, profits as positive.

The following reports are displayed as part of Profit and Loss:

- Profit and Loss Summary
- Actual Profit and Loss
- Hypothetical Profit and Loss
- Risk-Theoretical Profit and Loss

6.1.1 Profit and Loss Summary

Report Name	Profit and Loss Summary
Report Level Filters	Time interval: [Yearly, Monthly, Weekly, daily]
Report Description	This report is a summary view of actual, hypothetical and risk-theoretical P&L of trading desk or portfolio for selected time period. It is presented in both tabular and graphical form.

Report Type	**Graphical report:** Line graph presenting trend in P&L Time/dates are displayed on the x-axis. P&L amount are displayed on the y-axis. **Tabular Report:** The following are displayed as column items: • Trading Desk • Time Period – Daily, Weekly, Monthly, Yearly • Actual P&L • Hypothetical P&L • Risk-Theoretical P&L
Dimensions	• Dim Date • Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	• Actual P&L • Hypothetical P&L • Risk-Theoretical P&L

6.1.2 Actual Profit and Loss

Report Name	Actual Profit and Loss
Report Level Filters	Time interval: [Yearly, Monthly, Weekly, daily]
Report Description	This report is a view of actual P&L of trading desk or portfolio for selected time period. Comparison over multiple days can be done here.
Report Type	**Tabular Report** The following are displayed as column items: • Trading Desk • Time Period – Daily, Weekly, Monthly, Yearly • Actual P&L
Dimensions	• Dim Date • Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	Actual P&L

6.1.3 Hypothetical Profit and Loss

Report Name	Hypothetical Profit and Loss
Report Level Filters	Time interval: [Yearly, Monthly, Weekly, daily]
Report Description	This report is a view of hypothetical P&L of trading desk or portfolio for selected time period. Comparison over multiple days can be done here.
Report Type	**Tabular Report** The following are displayed as column items: • Trading Desk • Time Period – Daily, Weekly, Monthly, Yearly • Hypothetical P&L
Dimensions	• Dim Date • Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	• Hypothetical P&L

6.1.4 Risk Theoretical Profit and Loss

Report Name	Risk Theoretical Profit and Loss
Report Level Filters	Time interval: [Yearly, Monthly, Weekly, daily]
Report Description	This report is a view of risk-theoretical P&L of trading desk or portfolio for selected time period. Comparison over multiple days can be done here.
Report Type	**Tabular Report** The following are displayed as column items: • Trading Desk • Time Period – Daily, Weekly, Monthly, Yearly • Risk-Theoretical P&L
Dimensions	• Dim Date • Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	• Risk-Theoretical P&L

6.2 Back Testing

This dashboard shows desk-level and firm-wide level backtesting data. This data can be used to determine and monitor whether trading desks have permission to use internal models. For P&L figures, losses are reported as negative numbers, profits as positive.

The following reports are displayed as part of Back Testing:

- Back Testing Exceptions Summary
- Back Testing Exceptions Details
- P&L Attribution Summary
- P&L Attribution Details
- Exception Probability and Multiplier
- Zone Classification

6.2.1 Back Testing Exceptions Summary

Report Name	Back Testing Exceptions Summary
Report Level Filters	Not applicable
Report Description	This report is summary view on number of exceptions encountered during back-testing period and comparison with limit set by user or regulator.
Report Type	**Tabular Report** The following are displayed as column items: • Trading Desk • Back Testing Period • Number of Actual Exceptions • Number of Hypothetical Exceptions • Number of Risk Theoretical Exceptions • Exception Limit • Back Testing Status – Pass/Fail • Actual Portfolio Value in Reporting Currency
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	• No Of Actual Exceptions, • No Of Hypothetical Exceptions, • No Of Risk Theoretical Exceptions

	• Actual Portfolio Value in Reporting Currency

6.2.2 Back Testing Exceptions Details

Report Name	Back Testing Exceptions Details
Report Level Filters	• Exception Limit • Back Testing Period
Report Description	This report is daily view on exceptions encountered during back-testing period for a selected trading desk or portfolio.
Report Type	**Tabular Report** The following are displayed as column items: • Execution Date • Actual VaR • Actual P&L • Actual Exception • Hypothetical VaR • Hypothetical P&L • Hypothetical Exception • Risk Theoretical VaR • Risk Theoretical P&L • Risk Theoretical Exception • Back Testing Date
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	• Actual P&L • Hypothetical P&L • Risk Theoretical P&L

6.2.3 P&L Attribution Summary

Report Name	P&L Attribution Summary
Report Level Filters	Not applicable
Report Description	This report is summary view on the P&L attribution test performed during back-testing period for trading desk or portfolio. It also gives a view on first and second ratio computed as per FRTB IMA requirement.

Report Type	**Tabular Report** The following are displayed as column items: • Trading Desk / Portfolio • Mean Unexplained Daily P&L • Standard Deviation of Hypothetical P&L • First Ratio • Acceptable Range • Variances of Unexplained Daily P&L • Variances of Hypothetical Daily P&L • Second Ratio • Acceptable Range • Business Definition Execution Id
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	• Mean Unexplained Daily P&L • Standard deviation of hypothetical daily P&L • First Ratio • Variances of unexplained daily P&L • Variance of hypothetical daily P&L • Second Ratio

6.2.4 P&L Attribution Details

Report Name	P&L Attribution Details
Report Level Filters	Not applicable
Report Description	This report is daily view on the P&L attribution test (unexplained P&L) performed during back-testing period for trading desk or portfolio.
Report Type	**Tabular Report 1 - P&L Attribution Details** The following are displayed as column items: • As Of Date • Risk Theoretical P&L • Hypothetical P&L • Unexplained P&L **Tabular Report 2 – Back testing Specifications** The following are displayed as column items:

	• Mean Of Unexplained P&L • Standard Deviation Of Hypothetical P&L • Variances of Unexplained P&L • Variances of Hypothetical P&L
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	**Report 1** - • Risk Theoretical P&L • Hypothetical P&L • Unexplained P&L **Report 2** • Mean Of Unexplained P&L • Standard Deviation Of Hypothetical P&L • Variances of Unexplained P&L • Variances of Hypothetical P&L

6.2.5 Exception Probability and Multiplier

Report Name	Exception Probability and Multiplier
Report Level Filters	Not applicable
Report Description	This report is a detail view on Exception Probability and Multipliers used in P&L attribution test as per FRTB IMA guidelines.
Report Type	**Tabular Report** The following are displayed as column items: • Number of Exception • Probability of Occurrence (Exact) • Type 1 probability of Rejecting Model • Type 2 Probability of Rejecting Model • Multiplier
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	Not applicable
Computed Measures	Not applicable

6.2.6 Zone Classification

Report Name	Zone Classification
Report Level Filters	Not applicable
Report Description	This report is a summary view of probability and exception ranges used for R-A-G classification of trading desks during P&L attribution test as per FRTB IMA guidelines.
Report Type	**Tabular Report** The following are displayed as column items: • Zone • Probability Range (Lower) • Probability Range (Upper) • Exception Range (lower) • Exception Range (Upper)
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	Not applicable
Computed Measures	Not applicable

6.3 Audit

This dashboard shows reports which can used for verification purpose. These are not directly used for analysis but support them. The following reports are displayed as part of Audit:

- Execution History
- Audit Trail

6.3.1 Execution History

Report Name	Execution History
Report Level Filters	Not applicable
Report Description	This report is a summary view of process execution for each trading desk or portfolio and their status.
Report Type	**Tabular Report** The following are displayed as column items: • Execution Date • Is EOD Execution • Business definition

	• Execution Status • Business Execution ID
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	Not applicable
Computed Measures	Not applicable

6.3.2 Audit Trail

Report Name	Audit Trail
Report Level Filters	Not applicable
Report Description	This report is a summary view of number of records processed during each execution for each trading desk or portfolio.
Report Type	**Tabular Report** The following are displayed as column items: • Execution ID • Execution Date • Is EOD Execution • Number of Records Processed
Dimensions	• Dim MR Model Validation Business Execution
Base Measures	• Fact MR Model Validation
Computed Measures	• Number of Records Processed

7 Historical Simulation

MR Historical Simulation module consists of the following page level filters which are applicable to all the reports in this subject area.

Dashboard Name	MR Historical Simulation
Subject Area	MR Historical Simulation
Page Level Filters	View Type, Analysis Name, Business Definition, EOD Execution, Execution Id, Legal Entity **Note**: These are not applicable to Audit reports **Audit Dashboard Filters:** View type and Analysis Name
Page Level Display Parameters	Amount in (Thousands, Millions, Billions)

The following dashboards are displayed as part of MR Portfolio Service Risk:

- Enterprise Risk
- Fundamental review of Trading Book
- Risk And Performance Summary
- Aging Analysis
- Audit
- Market Data

7.1 Enterprise Risk

This dashboard shows Value-at-Risk and its analysis. The following reports are displayed as part of Enterprise Risk:

- Value-At-Risk By Risk Factor Type (Year On Year)
- Value-At-Risk By Risk Factor (Trend During Year)
- Development Of Value-At-Risk By Risk Factors During The Year
- Value-At-Risk (VaR) By Trading Desk
- Value-At-Risk (VaR) By Business Unit and Risk Factor Type

7.1.1 Value-At-Risk By Risk Factor Type (Year On Year)

Report Name	Value-At-Risk By Risk Factor Type (Year On Year)
Report Level Filters	• Date for Comparison
Report Description	This report is summary view of VaR and Expected Tail Loss by Risk Factor Type (IR, EQ etc.) and how it has changed year-on-year

Report Type	**Tabular Report** The following are displayed as column items: • Risk Factor • Date • VaR • ETL
Dimensions	• Dim Date • Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary
Computed Measures	• VaR • ETL

7.1.2 Value-At-Risk By Risk Factor (Trend During Year)

Report Name	Value-At-Risk By Risk Factor (Trend During Year)
Report Level Filters	Not applicable
Report Description	This report is summary view of VaR and Expected Tail Loss by Risk Factor Type (IR, EQ etc.) and its trend during the previous year
Report Type	**Graphical Report:** Bar Graph presenting contribution of risk factor types to the VaR and their trend over selected time period. Time/dates are displayed on the x-axis. VaR amount is displayed on the y-axis **Tabular Report:** The following are displayed as column items: • Risk Factor • Date • VaR
Dimensions	• Dim Date • Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary
Computed Measures	VaR

7.1.3 Development Of Value-At-Risk By Risk Factors During The Year

Report Name	Development Of Value-At-Risk By Risk Factors During The Year
Report Level Filters	• Time Period (Daily,Weekly,Monthly) (For 52 weeks back from selected date)
Report Description	This report is summary view of VaR by Risk Factor Type (IR, EQ etc.) and its daily, weekly and monthly trend during the previous year
Report Type	**Graphical Report:** Line graph showing changes to VaR over last 1 years and broken down by risk factor type. Time/dates are displayed on the x-axis. VaR amount is displayed on the y-axis **Tabular Report:** The following are displayed as column items: • Columns, • Risk Factor • VaR • date
Dimensions	• Dim Date • Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary
Computed Measures	VaR

7.1.4 Value-At-Risk (VaR) By Trading Desk

Report Name	Value-At-Risk (VaR) By Trading Desk
Report Level Filters	• Risk Factor • Execution Date
Report Description	This report is summary view of VaR by Trading Desk
Report Type	**Tabular Report:** The following are displayed as column items: • Trading Desk Name/Portfolio • Average VaR • Maximum VaR • Minimum VaR • Total VaR

Dimensions	• Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary
Computed Measures	• Average VaR • Maximum VaR • Minimum VaR • Total VaR

7.1.5 Value-At-Risk (VaR) By Business Unit and Risk Factor Type

The report is divided into three reports

- Value-At-Risk (VaR) By Risk Factor Type
- Value-At-Risk (VaR) By Business Unit
- Value-At-Risk (VaR) By Business Unit and Risk Factor Type

Report Name	Value-At-Risk (VaR) By Business Unit and Risk Factor Type
Report Level Filters	Not applicable
Report Description	This report is summary view of VaR by Business Unit and Risk Factor Type
Report Type	**Tabular Report:** The following are displayed as column items: **Report 1** • Risk Factor • Average VaR • Maximum VaR • Minimum VaR • Total VaR **Report 2** • Business unit • Average VaR • Maximum VaR • Minimum VaR • Total VaR **Report 3** • Risk Factor • Business unit

	• Average VaR • Maximum VaR • Minimum VaR • Total VaR
Dimensions	• Dim MR Port Risk Business Execution • Dim Org Structure • Dim Org Unit
Base Measures	• Fact MR VaR Summary
Computed Measures	• Average VaR • Maximum VaR • Minimum VaR • Total VaR

7.2 Fundamental review of Trading Book

The following reports are displayed as part of Enterprise Risk:

- Liquidity Adjusted Expected Shortfall By Risk Factor Type and Liquidity Horizon
- Liquidity Adjusted Expected Shortfall By Risk Factor Type
- Stress Calibrated Expected Shortfall By Risk Factor Type

7.2.1 Liquidity Adjusted Expected Shortfall By Risk Factor Type and Horizon

Report Name	Liquidity Adjusted Expected Shortfall By Risk Factor Type and Liquidity Horizon
Report Level Filters	• Risk Factor Type - All, IR, EQ, FX, CMDTY, CC, CR
Report Description	This report is a view of Liquidity adjusted Expected Shortfall by Risk Factor Type and Liquidity Horizon. The analysis is available for both reduced and full set of risk factors.
Report Type	**Tabular Report:** The following are displayed as column items: • ES Type (Column header is blank) • Liquidity Horizon (days) • Expected Shortfall
Dimensions	• Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary

Computed Measures	Expected Shortfall

7.2.2 Liquidity Adjusted Expected Shortfall By Risk Factor Type

Report Name	Liquidity Adjusted Expected Shortfall By Risk Factor Type
Report Level Filters	Not applicable
Report Description	This report is a view of Liquidity adjusted Expected Shortfall by Risk Factor Type. The analysis is available for both reduced and full set of risk factors for current and stress period.
Report Type	**Tabular Report:** The following are displayed as column items: • ES Type • Risk Factor Type • Expected Shortfall (Liquidity Adjusted)
Dimensions	• Dim MR Port Risk Business Execution
Base Measures	• Fact MR ES IMA Summary
Computed Measures	Expected Shortfall (Liquidity Adjusted)

7.2.3 Stress Calibrated Expected Shortfall By Risk Factor Type

Report Name	Stress Calibrated Expected Shortfall By Risk Factor Type
Report Level Filters	Not applicable
Report Description	This report is a view of Stress Calibrated Expected Shortfall by Risk Factor Type for a trading desk.
Report Type	**Tabular Report:** The following are displayed as column items: • Risk Factor Type • Expected Shortfall (Stress Calibrated)
Dimensions	• Dim MR Port Risk Business Execution
Base Measures	• Fact MR ES IMA Summary
Computed Measures	Expected Shortfall (Stress Calibrated)

7.3 Risk And Performance Summary

This dashboard presents summarized view of risk and performance metrics of portfolio. The following reports are displayed as part of Risk and Performance Summary:

- Risk By Region
- Risk By Sector
- VaR and P&L
- Portfolio Allocation

7.3.1 Risk By Region

Report Name	Risk By Region
Report Level Filters	Not applicable
Report Description	This report depicts contribution of various geographical regions to the total risk of a trading desk.
Report Type	**Graphical Report:** Pie chart showing share of each geographical region and country to total VaR of the entity. • Region • Country • % of Total VaR
Dimensions	• Dim Country • Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary
Computed Measures	% of Total VaR

7.3.2 Risk By Sector

Report Name	Risk By Sector
Report Level Filters	Not applicable
Report Description	This report depicts contribution of various industrial sectors to the total risk of a trading desk.
Report Type	**Graphical Report** Pie chart showing share of each industrial sector in total VaR of the entity • Industry Sector • % of Total VaR
Dimensions	• Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary

Computed Measures	% of Total VaR

7.3.3 VaR and P&L

Report Name	VaR and P&L
Report Level Filters	Not applicable
Report Description	This report is a detail view of daily VaR and unrealized gain/loss of a trading desk during selected time period
Report Type	**Graphical Report** Line graph presenting trend in VaR and unrealized gain/loss of a trading desk or portfolio **Tabular Report:** The following are displayed as column items: • Date • VaR
Dimensions	• Dim Date • Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact MR VaR Summary
Computed Measures	• VaR

7.3.4 Portfolio Allocation

Report Name	Portfolio Allocation
Report Level Filters	Not applicable
Report Description	This report provides a view into composition of portfolio by types of instruments, short and long position
Report Type	**Tabular Report:** The following are displayed as column items: • Instrument Type • Instrument • Number of Positions • % of Portfolio • Market Value • Long Market Value • Short Market Value
Dimensions	• Dim Date

	• Dim MR Port Risk Business Execution • Dim Org Structure
Base Measures	• Fact Trading Accounts
Computed Measures	• Number of Positions • % of Portfolio • Market Value • Long Market Value • Short Market Value

7.4 Aging Analysis

This dashboard shows age of investments and trades in trading book. The following reports are displayed as part of Aging Analysis:

- Average Age On Book
- Average Age On Book By Instrument type
- Vintage Analysis By Trading Desk

7.4.1 Average Age On Book

Report Name	Average Age On Book
Report Level Filters	Not applicable
Report Description	This reports is a summary view of average age on book of holdings by trading desk
Report Type	**Graphical report:** Histogram presenting the average age-on-book of instruments held by trading desks **Tabular Report:** The following are displayed as column items: • Trading desk/Portfolio • Average Age On Book (In days)
Dimensions	Dim Date (Effective Date and As of Date)
Base Measures	Fact Trading Accounts
Computed Measures	Average Age On Book

7.4.2 Average Age On Book By Instrument type

Report Name	Average Age On Book By Instrument type
Report Level Filters	Not applicable

Report Description	This reports is a summary view of average age on book by type of instrument within a trading desk
Report Type	**Graphical report:** Histogram presenting the average age-on-book of instruments held by trading desks broken by instrument type **Tabular Report:** The following are displayed as column items: • Instrument type • Average Age On Book (In days)
Dimensions	• Dim Instrument Contract • Dim Date (Effective Date and As of Date)
Base Measures	• Fact Trading Accounts
Computed Measures	Average Age On Book

7.4.3 Vintage Analysis By Trading Desk

Report Name	Vintage Analysis By Trading Desk
Report Level Filters	• Instrument type • Currency
Report Description	This reports is a summary view of average age on book by trading desk for a given type of instrument
Report Type	**Graphical report:** Line graph presenting average age of trades of trading desks grouped by their age bands **Tabular Report:** The following are displayed as column items: • Trading Desk/Portfolio • Average Age Composition • Time Period (Age week, Age Month,Age Year)
Dimensions	• Dim Account • Dim Date (Effective Date and As of Date)
Base Measures	Not Applicable
Computed Measures	#Accounts

7.5 Audit

This dashboard shows reports which can used for verification purpose. These are not directly used for analysis but support them. The following reports are displayed as part of Audit:

- Execution History

- Audit Trail

7.5.1 Execution History

Report Name	Execution History
Report Level Filters	Not Applicable
Report Description	This report is a summary view of number of records processed during each execution for each trading desk or portfolio.
Report Type	**Tabular Report:** The following are displayed as column items: • Execution Date • Execution ID • Is EOD Execution • Business Definition • Scenario • Stress Period • Status
Dimensions	• Dim MR Port Risk Business Execution
Base Measures	• Not applicable
Computed Measures	Not applicable

7.5.2 Audit Trail

Report Name	Audit Trail
Report Level Filters	Not Applicable
Report Description	This report is a summary view of process execution for each trading desk or portfolio and their status.
Report Type	**Tabular Report:** The following are displayed as column items: • Execution ID • Is EOD Execution • Number of Records Processed
Dimensions	• Dim MR Port Risk Business Execution
Base Measures	• Fact MR VaR Summary
Computed Measures	Number of Records Processed

8 MR Valuation Service

MR Valuation Service tab consists of the following page level filters which are applicable to all the reports in this module.

Dashboard Name	MR Valuation Service
Subject Area	MR Account MR Audit
Dashboard Level Filters	View Type, Date, Analysis Name, Business Definition, EOD Execution, Legal Entity, Instrument Type, Currency
Page Level Display Parameters	Amount in (Thousands, Millions, Billions)

The following dashboards are displayed as part of MR Valuation Service:

- Enterprise Performance
- Trading Risk Metrics
- Trading Book: Analysis of Portfolio composition
- Aging Analysis
- Audit

8.1 Enterprise Performance

This dashboard shows risk metrics for the firm. The following reports are displayed as part of Enterprise Performance:

- Trading Desk Value
- Trading Desk –Variation From Last Business Day
- Top 10 Portfolio or Trading Desk
- Portfolio or Trading Desk-Top 10 Gainers and Losers
- Portfolio Allocation

8.1.1 Trading Desk Value

Report Name	Trading Desk Value
Report Level Filters	Not Applicable
Report Description	This report is a view of valuation of a trading desk. It contains information on total present value, delta, gamma and other risk measures applicable to the desk.

Report Type	**Graphical report:** Bar graph showing total value of instruments held by trading desk. **Tabular Report:** The following are displayed as column items: • Portfolio/Trading Desk Name • Present Value • Delta • Gamma • Currency Code
Dimensions	• Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable
Computed Measures	• Present Value • Delta • Gamma
Drill-through On	Portfolio or Trading Desk
Drill-through's	Account ID and Instrument ID

8.1.2 Trading Desk –Variation From Last Business Day

Report Name	Trading Desk-Variation From Last Business Day
Report Level Filters	• Dates For Comparison
Report Description	This report depicts variation in the value of a trading desk over two days
Report Type	**Graphical report:** Bubble chart showing change in total value of instruments held by trading desk compared to last business day **Tabular Report:** The following are displayed as column items: • Portfolio/Trading Desk Name • Present Value (PV) (Current Date) • Present Value (Previous Date) • % Change
Dimensions	• Dim Date • Dim Instrument Contract

	• Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable
Computed Measures	• Present Value (PV) (Current Date) • Present Value (Previous Date) • % Change

8.1.3 Top 10 Portfolio or Trading Desk

Report Name	Top 10 Portfolio or Trading Desk
Report Level Filters	• Dates For Comparison
Report Description	This report is a view on the top 10 portfolio and trading desk by value and their rank on a given date
Report Type	**Graphical report:** Line graph showing rank of portfolio based on their total value. Comparison with prior business day is depicted. **Tabular Report:** The following are displayed as column items: • Portfolio/Trading Desk Name • Present Value • % of Total • Rank (Today) • Rank (Yesterday)
Dimensions	• Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable
Computed Measures	• Present Value • % of Total

8.1.4 Portfolio or Trading Desk-Top 10 Gainers and Losers

Report Name	Portfolio or Trading desk – Top 10 Gainers and Losers
Report Level Filters	Dates for Comparison
Report Description	This report is a view on the top 10 portfolio or trading desk which gained or lost in value compared to previous day

Report Type	**Tabular Report:** The following are displayed as column items for both gainers and losers: • Portfolio/Trading Desk Name • Present Value (Today) • Present Value (Yesterday) • % Change
Dimensions	• Dim Date • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable
Computed Measures	• Present Value (Today) • Present Value (Yesterday) • % Change

8.1.5 Portfolio Allocation

Report Name	Portfolio Allocation
Report Level Filters	Not Applicable
Report Description	This report provides a view into composition of portfolio by types of instruments, short and long position
Report Type	**Tabular Report:** The following are displayed as column items: • Instrument type • Instrument • Number of Positions • % of Portfolio • Market Value • Long Market Value • Short Market Value
Dimensions	• Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Fact Trading Accounts

Computed Measures	• Number of Positions • % of Portfolio • Market Value • Long Market Value • Short Market Value

8.2 Trading Risk Metrics

This dashboard shows trade level metrics like present value and sensitivities. The following reports are displayed as part of Trading Risk metrics:

- Portfolio or Trading Desk Value
- Portfolio or Trading Desk Value-Trend
- Trade Level Metrics

8.2.1 Portfolio or Trading Desk Value

Report Name	Portfolio or Trading Desk Value
Report Level Filters	Not Applicable
Report Description	This report is a view of valuation of a portfolio or trading desk. It contains information on total present value, delta, gamma and other risk measures applicable to the desk and portfolio.
Report Type	**Tabular Report:** The following are displayed as column items: • Portfolio/Trading Desk Name • Instrument Type • Currency • Present Value
Dimensions	• Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable
Computed Measures	Present Value

8.2.2 Portfolio or Trading Desk Value-Trend

Report Name	Portfolio or Trading Desk Value-Trend

Report Level Filters	Not Applicable
Report Description	This report is a view of historical trend in valuation of a portfolio or trading desk
Report Type	**Graphical report:** Line graph depicting trend in total value of portfolio or trading desk over selected time period **Tabular Report:** The following are displayed as column items: • Portfolio Name • Last five Execution Dates (T, T-1, T-2, T-3, T-4) • Present Value • Delta • Gamma • Clean price • Dirty price • Currency Code
Dimensions	• Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure • Dim Trading Desk
Base Measures	Not Applicable
Computed Measures	• Present Value • Delta • Gamma • Clean price • Dirty price

8.2.3 Trade Level Metrics

Report Name	Trade Level Metrics
Report Level Filters	Not Applicable
Report Description	This report gives details of each risk metrics like present value, delta, gamma etc. for each trade or contract in a portfolio or trading desk
Report Type	**Tabular Report:** The following are displayed as column items: • Trading Desk

	• Portfolio Name • Account Number • Instrument Description • Present Value • Clean Price 100 • Dirty Price 100 • Delta • Gamma • Currency Code
Dimensions	• Dim Account • Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure • Dim Trading Desk
Base Measures	Not Applicable
Computed Measures	• Present Value • Clean Price 100 • Dirty Price 100 • Delta • Gamma

8.3 Trading Book: Analysis of Portfolio Composition

This dashboard shows composition of portfolio. The following reports are displayed as part of Trading Book: Analysis of Portfolio Composition:

- Portfolio Breakdown By Instrument Type
- Instrument Type Concentration By Trading Desk
- Asset Allocation
- Industry-Wise Holding

8.3.1 Portfolio Breakdown By Instrument Type

Report Name	Portfolio Breakdown By Instrument Type
Report Level Filters	Not applicable
Report Description	This report presents a view on composition of a portfolio by type of instrument and currency

Report Type	**Graphical report:** Pie chart presenting composition of portfolio by instrument type **Tabular Report:** The following are displayed as column items: • Portfolio/Trading Desk Name • Instrument Type • Currency • Composition %
Dimensions	• Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure • Dim Trading Desk
Base Measures	Not Applicable
Computed Measures	Composition %

8.3.2 Instrument Type Concentration By Trading Desk

Report Name	Instrument Type Concentration By Trading Desk
Report Level Filters	Not Applicable
Report Description	This report presents a view on composition of a trading desk by type of instrument
Report Type	**Graphical report:** Pie chart presenting composition of portfolio by instrument type **Tabular Report:** The following are displayed as column items: • Portfolio/Trading Desk Name • Instrument Type • Composition %
Dimensions	• Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure • Dim Trading Desk
Base Measures	Not Applicable
Computed Measures	Composition %

8.3.3 Asset Allocation

Report Name	Asset Allocation
Report Level Filters	Not applicable
Report Description	This report presents a view on composition of a trading desk or portfolio by individual instruments
Report Type	**Graphical report:** Pie-chart presenting break down of a portfolio by instruments held **Tabular Report:** The following are displayed as column items: • Instrument Name • Market Value • % Composition • Currency code
Dimensions	• Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable
Computed Measures	• Market Value • % Composition

8.3.4 Industry –Wise Holding

Report Name	Industry –Wise Holding
Report Level Filters	Not Applicable
Report Description	This report presents a view on composition of a trading desk or portfolio by industry sector
Report Type	**Graphical report:** Pie-chart presenting break down of a trading desk holding by industry sector **Tabular Report:** The following are displayed as column items: • Industry Name • Market Value • % Composition • Currency Code

Dimensions	• Dim Date • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable
Computed Measures	• Market Value • % Composition

8.4 Aging Analysis

This dashboard shows age of investments and trades in trading book. The following reports are displayed as part of Aging Analysis:

- Average Age On Book
- Average Age On Book By Instrument Type
- Vintage Analysis By Trading Desk

8.4.1 Average Age On Book

Report Name	Average Age On Book
Report Level Filters	Not applicable
Report Description	This report is a summary view of average age on book of holdings by trading desk
Report Type	**Graphical report:** Histogram presenting the average age-on-book of instruments held by trading desks **Tabular Report:** The following are displayed as column items: • Trading desk/Portfolio • Average Age On Book (In days)
Dimensions	• Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Fact Trading Accounts
Computed Measures	Average Age On Book

8.4.2 Average Age On Book By Instrument Type

Report Name	Average Age On Book By Instrument Type

Report Level Filters	• Trading Desk • Currency
Report Description	This report is a summary view of average age on book by type of instrument within a trading desk
Report Type	**Graphical report:** Histogram presenting the average age-on-book of instruments held by trading desks broken by instrument type **Tabular Report:** The following are displayed as column items: • Instrument Type • Average Age On Book (In days)
Dimensions	• Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Fact Trading Accounts
Computed Measures	Average Age On Book

8.4.3 Vintage Analysis By Trading Desk

Report Name	Vintage Analysis By Trading Desk
Report Level Filters	Not Applicable
Report Description	This report is a summary view of average age on book by trading desk for a given type of instrument
Report Type	**Graphical report:** Line graph presenting average age of trades of trading desks grouped by their age bands **Tabular Report:** The following are displayed as column items: • Trading desk/Portfolio • Average Age Composition
Dimensions	• Dim Account • Dim Instrument Contract • Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Fact Trading Accounts
Computed Measures	#Accounts

8.5 Audit

This dashboard shows reports which can used for verification purpose. These are not directly used for analysis but support them. The following reports are displayed as part of Audit:

- Cash Flow Report
- Yield Risk Report

8.5.1 Cash Flow Report

Report Name	Cash flow Report
Report Level Filters	Not Applicable
Report Description	This report presents detail of each flow of a selected instrument along with its discounted value and other parameters
Report Type	**Tabular Report:** The following are displayed as column items: • Account Number • Payment Date • Accural Start Date • Accural End Date • Fixing Date • Principal Or Notional Payment • Caplet Price • Cash Flow Amount • Present Value Of Cash Flow • Present Value Of Cash Flow In Reporting Currency • Cash Flow Amount In Reporting Currency • Counterparty Surrogate Key • Coupon Rate • Day Count • Day Count Fraction (DCF) • Discount Factor • Fixed Leg Cashflow • Floating Leg Cashflow • Futures Price • Currency Conversion Rate • Principal Balance Or Notional Amount • Survival Probability • Unit Delta Of Option

	• Unit Gamma Of Option • Unit Price Of Option • Unit Vega Of Option • Currency Code • Nature Of Cash Flow • Business Approach Type • Analysis Name • Business Definition Name • Business Execution Date • Entity Name
Dimensions	• Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Fact MR Cash Flow Summary

8.5.2 Yield Risk Report

Report Name	Yield Risk Report
Report Level Filters	Not Applicable
Report Description	This report is a view on the risk parameters like sensitivities, of a selected instrument
Report Type	**Tabular Report:** The following are displayed as column items: • Account Number • Load Run ID • Instrument Name • Pricing Output Name • Quote ID • Initial Value • CCY Code • Yield Curve ID • Actual Value Of Price • Change in Price • Delta Of Price • Gamma Difference in Price • Hedge Price • Business Approach Type • Analysis Name

	• Business Definition Name • Business Execution Date • Entity Name
Dimensions	• Dim MR VALN Business Execution • Dim Org Structure
Base Measures	Not Applicable

9 MR Market Data

MR Market Data tab consists of the following page level filters which are applicable to all the reports in this module.

Dashboard Name	MR Market Data
Subject Area	MR Market Data
Dashboard Level Filters	No Dashboard Level Filters
Page Level Display Parameters	Not Applicable

The following dashboards are displayed as part of MR Market Data:

- Commodity Market Data
- Credit Rate Market Data
- Equity Market Data
- Foreign Exchange Market Data
- Inflation Market Data
- Interest Rate Market Data

9.1 Commodity Market Data

This dashboard presents the market data related to commodity like spot, forward and volatility. The following reports are displayed as part of Commodity Market Data:

- Commodity Spot Price
- Commodity Forward Price
- Commodity Volatility

9.1.1 Commodity Spot Price

Report Name	Commodity Spot Price
Report Level Filters	Currency, Exchange, Symbol, Quote Type
Report Description	This report presents spot prices of commodity. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** Line graph showing trend in spot prices of selected commodity over time. **Tabular Report:** The following are displayed as column items:

	• As of Date • Price
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Price
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.1.2 Commodity Forward Price

Report Name	Commodity Forward Price
Report Level Filters	Currency, Exchange, Symbol, Quote Type
Report Description	This report presents forward prices of commodity. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** Bar graph showing trend in forward prices of selected commodity over time. **Tabular Report:** The following are displayed as column items: • Price • Maturity (Forward tenor) • As of Date
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Price
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.1.3 Commodity Volatility

Report Name	Commodity Volatility
Report Level Filters	As of Date , Currency, Exchange, Symbol, Strike Type, Quote Type
Report Description	The report represents surface plot of commodity volatility.

Report Type	**Graphical report:** The surface chart presents volatility for given strike and forward tenor. **Tabular Report:** The following are displayed as column items: • Strike • Maturity (Forward Tenor) • Volatility
Dimensions	• Dimension Effective Date • Dimension Currency • Dimension Market Centre, • Dimension Stock Ticker • Dimension MR Strike Type • Dimension Financial Market Quote Type
Base Measures	Strike, Volatility
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through’s	Not applicable

9.2 Credit Rate Market Data

This dashboard presents the market data related to credit default swap, credit index swap and survival probabilities. The following reports are displayed as part of Trading Risk metrics:

- Single-Name Credit Default Swaps Spread
- Single-Name Credit Default Swaps - Recovery Rate
- Credit Index Swaps
- Survival Probability

9.2.1 Single-Name Credit Default Swaps Spread

Report Name	Single-Name Credit Default Swaps Spread
Report Level Filters	Market Date Type, Currency, Reference Entity, Debt Type, Restructuring Clause, Indicator, Quote Type
Report Description	This report presents credit default swap spread of named issuer. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical Report:** The bar chart presents trend of CDS spread of selected counterparty for different tenors.

	Tabular Report: The following are displayed as column items: • Spread • Tenor • As of Date
Dimensions	• Dimension MR Rate Type • Dimension Currency • Dimension MR Debt Seniority • Dimension MR Restructuring Clause • Dimension Spread or Recovery • Dimension Financial Market Quote Type • Dimension Effective Date • Dimension Party • Dimension MR Term Unit IRC
Base Measures	CDS spread
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.2.2 Single-Name Credit Default Swaps - Recovery Rate

Report Name	Single-Name Credit Default Swaps - Recovery Rate
Report Level Filters	Market Data Type, Currency, Reference Entity, Restructuring Clause, Indicator
Report Description	This report presents credit default swap recovery rate of named issuer. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The bar chart presents trend of CDS recovery of selected counterparty for different tenors and debt type. **Tabular Report:** The following are displayed as column items: • As of Date • Debt type • Recovery Rate
Dimensions	• Dimension MR Rate Type • Dimension Currency • Dimension MR Debt Seniority

	• Dimension MR Restructuring Clause • Dimension Spread or Recovery • Dimension Financial Market Quote Type • Dimension Effective Date • Dimension Party
Base Measures	Recovery Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.2.3 Credit Index Swaps

Report Name	Credit index Swaps
Report Level Filters	Market Data Type, Currency, Index, Series, Version, Indicator, Quote Type
Report Description	This report presents spread and recovery rates of credit index swaps. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The line graph presents trend in credit index swap spread or recovery rates for selected index and series. **Tabular Report:** The following are displayed as column items: • As of Date • Tenor • Spread or Recovery Rate
Dimensions	• Dimension MR Rate Type • Dimension Currency • Dimension Credit Derivative Index • Dimension Financial Market Quote Type • Dimension Effective Date • Dimension MR Term Unit IRC
Base Measures	Spread or Recovery Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.2.4 Survival Probability

Report Name	Survival Probability
Report Level Filters	Market Data Type, Currency, Reference Entity, Debt Type, Restructuring Clause, Quote Type
Report Description	This report presents survival probability of named issuers. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical repo**rt: The line graph presents trend in survival probabilities of selected counterparty for different tenors. **Tabular Report:** The following are displayed as column items: • Effective Date • Tenor (Maturity Date) • Survival probability
Dimensions	• Dimension MR Rate Type • Dimension Currency • Dimension Financial Market Quote Type • Dimension Effective Date • Dimension MR Debt Seniority • Dimension MR Restructuring Clause • Dimension Party
Base Measures	Survival Probability
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through’s	Not applicable

9.3 Equity Market Data

This dashboard presents the market data related to equity such as spot prices, futures price, dividends and so on. The following reports are displayed as part of Equity Market Data:

- Equity Spot price
- Equity Futures Price
- Equity Dividend
- Equity Dividends from Equity Dividend Futures
- Equity Dividends from Equity Dividend Swaps
- Equity Volatility

9.3.1 Equity Spot price

Report Name	Equity Spot Price
Report Level Filters	Currency, Exchange, Quote Type
Report Description	This report presents spot prices of equity instrument. Trend can be monitored by comparing rates over selected time period
Report Type	**Graphical report:** The bar graph presents trend and comparison of spot prices for selected equities. **Tabular Report:** The following are displayed as column items: • As of Date • Ticker • Price
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Spot Price
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.3.2 Equity Futures Price

Report Name	Equity Futures Price
Report Level Filters	Currency, Exchange, Quote Type, Maturity Code
Report Description	This report presents futures price of equity instrument. Trend can be monitored by comparing rates over selected time period
Report Type	**Graphical report:** The line graph presents trend and comparison of futures prices for selected equities contracts. **Tabular Report:** The following are displayed as column items: • As of Date • Contract Code • Price
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type

Base Measures	Futures Price
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.3.3 Equity Dividend

Report Name	Equity Dividend
Report Level Filters	As of Date, Currency, Exchange, Dividend Structure Type
Report Description	This report presents dividend rate of equity instrument for different types of dividend structure such as Absolute, Continuous Flat, Relative Discrete and Relative Continuous. Trend can be monitored by comparing rates over selected time period
Report Type	**Graphical report:** The line graph presents comparison and trend in dividend rates of given equity for selected dividend structure types. **Tabular Report:** The following are displayed as column items: • Ticker • Ex-Dividend Date • Dividend Pay Date • Dividend Rate
Dimensions	• Dimension Extraction Date • Dimension Currency • Dimension Market Centre • Dimension Stock Ticker • Dimension Ex Dividend Date • Dimension Dividend Pay Date
Base Measures	Dividend Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.3.4 Equity Dividends from Equity Dividend Futures

Report Name	Equity Dividends from Equity Dividend Futures
Report Level Filters	Currency, Exchange, Maturity Code, Quote Type
Report Description	This report presents dividend rate of equity instrument with dividend curve stripped from equity dividend futures. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The bar graph presents comparison and trend in dividend rate of equity instrument with dividend curve stripped from equity dividend futures. **Tabular Report:** The following are displayed as column items: • As of Date • Contract Code • Dividend Rate
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Dividend rate from Futures
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.3.5 Equity Dividends from Equity Dividend Swaps

Report Name	Equity Dividends from Equity Dividend Swaps
Report Level Filters	Currency, Exchange, Swap Tenor, Quote Type
Report Description	This report presents dividend rate of equity instrument with dividend curve stripped from equity dividend swaps. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The bar graph presents comparison and trend in dividend rate of equity instrument with dividend curve stripped from equity dividend swaps. **Tabular Report:** The following are displayed as column items: • As of Date • Ticker

	• Dividend Rate
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Dividend rate from Swaps
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.3.6 Equity Volatility

Report Name	Equity Volatility
Report Level Filters	As of Date, Market Data Type, Currency, Exchange, Strike Type, Quote Type, Ticker
Report Description	This report presents a point on an equity volatility surface. Trend can be monitored by comparing rates over selected time period
Report Type	**Graphical report:** The surface chart presents plot of volatility in prices of selected equity for given strike and option tenor. **Tabular Report:** The following are displayed as column items: • Tenor • Strike • Volatility
Dimensions	• Dimension Effective Date • Dimension MR Rate Type • Dimension Currency • Dimension Market Centre • Dimension MR Strike Type • Dimension Financial Market Quote Type • Dimension Stock Ticker
Base Measures	Volatility
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.4 Foreign Exchange Market Data

This dashboard presents the market data related to foreign exchange like spot and forward rates, volatility surface. The following reports are displayed as part of Foreign Exchange Market Data:

- FX Spot Rates
- FX Forward Rates
- FX Volatility

9.4.1 FX Spot Rates

Report Name	FX Spot Rates
Report Level Filters	Market Data Type, From (Base) Currency, To (Term) Currency, Quote Type
Report Description	This report presents spot exchange rate between a pair of currencies. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The line graph presents trend in exchange rate for selected currency pair for a time period. **Tabular Report:** The following are displayed as column items: • As of Date • Exchange Rate
Dimensions	• Dimension Effective Date • Dimension MR Rate Type • Dimension Financial Market Quote Type
Base Measures	Exchange Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.4.2 FX Forward Rates

Report Name	FX Forward Rates
Report Level Filters	As of Date, From (Base) Currency, To (Term) Currency, Quote Type
Report Description	This report presents forward exchange rate between a pair of currencies. Trend can be monitored by comparing rates over selected time period.

Report Type	**Graphical report:** The line graph presents trend in forward exchange rate for selected currency pair for a time period from onshore and offshore markets. Spread in forward rates between two markets can also be viewed here. **Tabular Report:** The following are displayed as column items: • Market Type • Exchange Rate • Tenor
Dimensions	• Dimension Effective Date • Dimension MR Rate Type • Dimension Financial Market Quote Type • Dimension MR Term Unit Foreign Exchange
Base Measures	Forward Exchange Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.4.3 FX Volatility

Report Name	FX Volatility
Report Level Filters	As of Date, Market Data Type, From (Base) Currency, To (Term) Currency, Quote Type
Report Description	This report presents a point on FX volatility surface. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The surface chart presents plot of volatility in exchange rate of selected currency pair for given strike and set of maturities. **Tabular Report:** The following are displayed as column items: • Strike • Tenor or Maturity
Dimensions	• Dimension Effective Date • Dimension MR Rate Type • Dimension MR Term Unit Foreign Exchange • Dimension Financial Market Quote Type

Base Measures	Volatility
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.5 Inflation Market Data

This dashboard presents the market data related to inflation linked instruments such as bonds, zero coupon swaps, zero coupon options, year on year options and seasonality. The following reports are displayed as part of Inflation Market Data:

- Inflation-Linked Bonds
- Zero-Coupon Inflation-Indexed Swaps
- Zero-Coupon Inflation-Indexed Options
- Year-on-Year Options
- Inflation Seasonality
- Inflation Fixings

9.5.1 Inflation-Linked Bonds

Report Name	Inflation-Linked Bonds
Report Level Filters	Price or Yield, Market Data Type, Currency, Bond Type, Inflation Index, Quote Type
Report Description	This report presents spot prices of inflation-linked bonds. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The bar graph presents trend in price or yield of inflation linked bonds plotted against their issue and maturity date for selected issuer. **Tabular Report:** The following are displayed as column items: • Issuer • Issue Date • Maturity Date • Coupon • Price or Yield Indicator • As of Date
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type

	• Dimension Date
Base Measures	Price, Yield
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.5.2 Zero-Coupon Inflation-Indexed Swaps

Report Name	Zero-Coupon Inflation-Indexed Swaps
Report Level Filters	Market Data Type, Currency, Inflation Index, Quote Type
Report Description	This report presents rates of Zero-Coupon Inflation-Indexed Swaps. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The bar graph presents trend in swap rates for different maturities. Tabular Report: The following are displayed as column items: • As of Date • Maturity Date
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Swap Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.5.3 Zero-Coupon Inflation-Indexed Options

Report Name	Zero-Coupon Inflation-Indexed Options
Report Level Filters	As of Date, Market data Type, Flavour, Quote Type
Report Description	This report presents price of Zero-Coupon Inflation-Indexed Options. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical rep**ort: The bar graph presents trend in price of Zero-Coupon Inflation-Indexed Options plotted against strike and maturity. **Tabular Report:** The following are displayed as column items:

	• Tenor or Maturity • Inflation Index • Currency • Strike
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Price
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through’s	Not applicable

9.5.4 Year-on-Year Options

Report Name	Year-on-Year Options
Report Level Filters	As of Date, Market Data Type, Flavor, Quote Type
Report Description	This report presents price of Year-on-Year Options. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The line graph presents trend in prices of Y-O-Y options for selected currency and inflation index plotted against strike and maturity. **Tabular Report:** The following are displayed as column items: • Inflation Index • Tenor • Currency • Strike
Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	Price
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through’s	Not applicable

9.5.5 Inflation Seasonality

Report Name	Inflation Seasonality
Report Level Filters	As of Date, Market Data Type,
Report Description	This report presents the seasonality factor for inflation indexes. Trend can be monitored by comparing rates over selected time period.
Report Type	**Tabular Report:** The following are displayed as column items: • Inflation Index • Currency • Month
Dimensions	• Dimension MR Rate Type • Dimension Currency • Dimension Inflation Index • Dimension Effective Date
Base Measures	Seasonal Factor
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.5.6 Inflation Fixings

Report Name	Inflation Fixings
Report Level Filters	Currency, Inflation Index
Report Description	This report presents the fixed values of inflation indexes over time. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The line graph presents trend in value of inflation index over time for selected currency. **Tabular Report:** The following are displayed as column items: • Index Value • As of Date
Dimensions	• Currency • Dimension Inflation Index

	• Dimension Effective Date
Base Measures	Index value
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6 Interest Rate Market Data

This dashboard presents the market data related to interest rate such as cash, forward rates, swap rates and so on. The following reports are displayed as part of Interest Rate Market Data:

- Interest Rate Curve
- Forward Rate Agreement
- Swap Rate
- Basis Swap Rate (including Cross-Currency)
- Fixed Float Swap
- Swaptions Volatility Surface
- Swaptions Volatility Cube
- Swaptions Volatility Cube Shift
- Cap Volatility Surface
- Bonds and Bills

9.6.1 Interest Rate Curve

Report Name	Interest Rate Curve
Report Level Filters	As of Date, Quote Type
Report Description	This report presents details of interest rate for selected currencies and index. Trend can be monitored by comparing rates over selected time period
Report Type	**Graphical report**: The line graph presents trend in interest rates of different maturities for selected currency and index. Difference in interest rate of same index across currencies can also be monitored. **Tabular Report:** The following are displayed as column items: • Interest Rate Index • Currency • Index Tenor

Dimensions	• Dimension IRC • Dimension Currency • Dimension MR Term Unit IRC • Dimension Effective Date • Dimension Financial Market Quote Type
Base Measures	Interest Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.2 Forward Rate Agreement

Report Name	Forward Rate Agreement
Report Level Filters	As of Date, IR Index Code, Quote Type
Report Description	This report presents details of forward rate agreements (FRA) rate for selected currencies and interest rate index. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The line graph presents trend in FRA rate over time and comparison of rate for the same interest rate index by different currencies. **Tabular Report:** The following are displayed as column items: • Currency • IR Index Tenor • FRA Tenor (This can be based on contract tenor like 3M/6M or actual fixing and maturity dates.
Dimensions	• Dimension IRC • Dimension MR Term Unit IRC Tenor • Dimension Currency • Dimension MR Term Unit IRC • Dimension MR Term Unit FRA Start Tenor • Dimension MR Term Unit FRA End Tenor • Dimension Extraction Date • Dimension Financial Market Quote Type
Base Measures	FRA Rate
Computed Measures	Not applicable

Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.3 Swap Rate

Report Name	Swap Rate
Report Level Filters	As of Date, IR Index, Quote Type, Market Data Type
Report Description	This report presents details of swap rate for selected currencies and index for various maturities. Trend can be monitored by comparing rates over selected time period
Report Type	**Graphical report:** The bar graph presents comparison of swap rate for an index by currency and trend over time. **Tabular Report:** The following are displayed as column items: • Currency • IR Index Tenor • Swap Tenor
Dimensions	• Dimension IRC • Dimension Currency • Dimension MR Term Unit Instr Tenor • Dimension MR Term Unit IRC • Dimension Extraction Date • Dimension MR Rate Type • Dimension Financial Market Quote Type
Base Measures	Swap Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.4 Basis Swap Rate (including Cross-Currency)

Report Name	Basis Swap Rate (including cross-currency)
Report Level Filters	As of Date, Market Data Type, Target Currency, Known Currency, Quote Type
Report Description	This report presents details of basis swap rate including cross currency basis swaps for selected currencies and index. Trend can be monitored by comparing rates over selected time period

Report Type	**Graphical Report**: The line graph presents comparison of swap rate for multiple currencies and indexes. **Tabular Report:** The following are displayed as column items: • Target IR Index • Target IR Index Tenor • Known IR Index • Known IR Index Tenor • Swap Tenor
Dimensions	• Dimension Extraction Date • Dimension MR Rate Type • Dimension Currency Target Currency • Dimension Currency Known Currency • Dimension Financial Market Quote Type • Dimension Target IRC • Dimension MR Term Unit Target Tenor • Dimension MR Term Unit Known Tenor • Dimension Known IRC • Dimension Currency • Dimension MR Term Unit Currency Swaps Instrument Term
Base Measures	Swap Rate
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.5 Fixed Float Swap

Report Name	Cross-Currency Fixed/Float Swaps
Report Level Filters	Quote Type
Report Description	This report presents details of cross-currency fixed/float swap rate including cross currency basis swaps for selected currencies and market (onshore, offshore, non-deliverable). Trend can be monitored by comparing rates over selected time period
Report Type	**Graphical report:** The bar graph presents comparison and trend of swap rate for multiple currencies and indexes. **Tabular Report:** The following are displayed as column items:

	• Interest Rate • Fixed Currency • Floating Currency • Floating IR Index • Floating IR Index Tenor • Market Date Type • As of Date • Swap Tenor
Dimensions	• Dimension Extraction Date • Dimension MR Rate Type • Dimension Currency Target Currency • Dimension Currency Known Currency • Dimension Financial Market Quote Type • Dimension MR Term Unit Currency Swaps Instrument Term • Dimension Known IRC • Dimension MR Term Unit Known Tenor • Dimension MR Term Unit Currency Swaps Instrument Term
Base Measures	Fact Currency Swaps Rate
Computed Measures	Interest Rate
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.6 Swaptions Volatility Surface

Report Name	Swaptions Volatility Surface
Report Level Filters	As of Date, Currency, Market Data Type, IR Index Code, IR Index Tenor, Swaption Strike, Quote Type
Report Description	This report presents data on swaption volatility surface. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The surface chart presents volatility of a swaptions for selected currency and interest rate index across option tenor and swap tenor at a given strike. **Tabular Report:** The following are displayed as column items: • Option Tenor • Swap Tenor
Dimensions	• Dimension IRC

	• Dimension MR Term Unit IRC • Dimension MR Term Unit Opt Cap Tenor • Dimension MR Term Unit Swaption Swap Tenor • Dimension Extraction Date • Dimension Currency • Dimension MR Term Unit IRC • Dimension Financial Market Quote Type • Dimension MR Rate Type
Base Measures	Swaptions Volatility
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.7 Swaptions Volatility Cube

Report Name	Swaptions Volatility Cube
Report Level Filters	As of Date, Currency, IR Index, Index Tenor, Strike Type, Swaption Strike, Swaption Option Tenor, Quote Type
Report Description	This report presents data on swaption volatility cube. Trend can be monitored by comparing rates over selected time period. Swaption cube is an object that shows how swaption prices vary along three dimension - maturities of the underlying swaps, expiries of the options and option strikes.
Report Type	**Graphical report:** The chart presents volatility in swaption prices for selected currency and interest rate index across option tenor and swap tenor at a given strike. **Tabular Report:** The following are displayed as column items: • Swap Tenor • Option Tenor • Volatility Data Type
Dimensions	• Dimension Extraction Date • Dimension Currency • Dimension MR Term Unit IRC • Dimension MR Term Unit Opt Cap Tenor • Dimension MR Term Unit Swaption Swap Tenor • Dimension IRC • Dimension MR Strike Type

	• Dimension MR Swaption Type • Dimension Financial Market Quote Type
Base Measures	Volatility Cube
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.8 Swaptions Volatility Cube Shift

Report Name	Swaptions Volatility Cube Shift
Report Level Filters	As of Date, Currency, IR Index, Index Tenor, Strike Type, Swaption Strike, Quote Type
Report Description	This report presents data on shift of the swaption volatility cube. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The chart presents volatility cube shift in swaption prices for selected currency and interest rate index across option tenor and swap tenor at a given strike. **Tabular Report:** The following are displayed as column items: • Option Tenor • Swap Tenor
Dimensions	• Dimension Extraction Date • Dimension Currency • Dimension MR Term Unit IRC • Dimension MR Term Unit Opt Cap Tenor • Dimension MR Term Unit Swaption Swap Tenor • Dimension IRC • Dimension MR Strike Type • Dimension Financial Market Quote Type
Base Measures	Volatility Cube Shift
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.9 Cap Volatility Surface

Report Name	Cap Volatility Surface
Report Level Filters	As of Date, Currency, IR Index, Index Tenor, Quote Type
Report Description	This report presents data on interest rate cap volatility surface. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The chart presents volatility in interest rate caps for selected currency and interest rate index across cap tenor and strike. **Tabular Report:** The following are displayed as column items: • Strike • Cap Tenor
Dimensions	• Dimension Extraction Date • Dimension Currency • Dimension MR Term Unit IRC • Dimension MR Term Unit Opt Cap Tenor • Dimension IRC • Dimension Financial Market Quote Type
Base Measures	Volatility
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

9.6.10 Bonds and Bills

Report Name	Bonds and Bills
Report Level Filters	As of Date, Market Date Type, Currency, Issuer Type, Issuer, Issue Date, Quote Type
Report Description	This report presents price and yield of bonds and bills. Trend can be monitored by comparing rates over selected time period.
Report Type	**Graphical report:** The line graph presents trend in price or yield of a bond or bill over time. **Tabular Report:** The following are displayed as column items: • Maturity Date • Price or Yield

Dimensions	• Dimension Instrument Contract • Dimension Financial Market Quote Type
Base Measures	• Price • Yield
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

10 MR Monte Carlo

MR Monte Carlo tab consists of the following page level filters which are applicable to all the reports in this module.

Dashboard Name	MR Monte Carlo
Subject Area	MR Monte Carlo
Dashboard Level Filters	View Type, Name, MIS Date, Definition, EOD Execution, Execution ID, Reporting Currency, Amount in
Page Level Display Parameters	Amount in (Thousands, Millions, Billions)

The following dashboards are displayed as part of MR Monte Carlo:

- Counterparty Risk (XVA)
- Counterparty Risk (XVA) Increments
- Counterparty Exposure Summary
- Monte-Carlo VaR
- Audit

10.1 Counterparty Risk (XVA)

This dashboard shows valuation adjustments done to counterparty risk measures like credit, debit, funding etc. Information is available for selected counterparty at summarized and detailed levels. The following reports are displayed as part of Counterparty Risk (XVA):

- Counterparty Info Summary
- Counterparty Info Detail
- Counterparty XVA - Netting Set
- Counterparty XVA - CSA
- Counterparty XVA - Trade

10.1.1 Counterparty Info Summary

This page includes three reports:

- Counterparty Info Statistics Summary
- Trend in CVA Summary
- Range of CVA Summary

10.1.1.1 Counterparty Info Statistics Summary

Report Name	Counterparty Info Statistics Summary
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents summarized credit risk related information about parent counterparty
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Industry • No of Child Counterparty • No of Account • No. of Netting Agreement • No. of Sub Netting Agreement • Probability of Default AIRB • Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dim Parent Counterparty, Dim Counterparty,
Base Measures	Fact MR XVA Group
Computed Measures	• No of Child Counterparty • No of Account • No. of Netting Agreement • No. of Sub Netting Agreement • Probability of Default AIRB

	• Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Counterparty Info Statistics Summary – on Parent counterparty ID
Drill-through's	Child Counterparty ID

10.1.1.2 Trend in CVA Summary

Report Name	Trend in CVA Summary
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type, Time Period
Report Description	This report presents CVA of selected counterparty and changes over time.
Report Type	**Graphical report:** The line graph presents trend in various CVA measures for a counterparty during selected date range. **Tabular Report:** The following measures are displayed as row items: • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment

	The following are displayed as column items: • MIS Date • Measure Value
Dimensions	• Dim Extraction Date
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment
Drill-through On	Not applicable
Drill-through's	Not applicable

10.1.1.3 Range of CVA Summary

Report Name	Range of CVA Summary
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type, Time Period
Report Description	This report is presents minimum and maximum CVA of selected counterparty during selected time period.
Report Type	**Graphical report:** The line graph presents minimum and maximum value of CVA measures of a counterparty during selected date range. **Tabular Report:** The following measures are displayed as row items: • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment

	• Funding Value Adjustment • Capital Valuation Adjustment The following are displayed as column items: • MIS Date • Measure minimum value • Measure maximum value
Dimensions	• Dim Extraction Date
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Not applicable
Drill-through's	Not applicable

10.1.2 Counterparty Info Detail

This page includes three reports:

- Counterparty XVA - Info Statistics Detail
- Trend in CVA Detail
- Range of CVA Detail

10.1.2.1 Counterparty XVA - Info Statistics Summary

Report Name	Counterparty Info Statistics Detail
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents summarized credit risk related information about child counterparties of a parent.
Report Type	**Tabular Report:**

	The following are displayed as column items: • Parent Counterparty ID • Industry • No of Account • No. of Netting Agreement • No. of Sub Netting Agreement • Probability of Default AIRB • Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dim Parent Counterparty, Dim Counterparty
Base Measures	Fact MR XVA Group
Computed Measures	• No of Account • No. of Netting Agreement • No. of Sub Netting Agreement • Probability of Default AIRB • Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral

	• Funding Cost Adjustment • Funding Value Adjustment Capital Valuation Adjustment
Drill-through On	Not applicable
Drill-through's	Not applicable

10.1.2.2 Trend in CVA Detail

Report Name	Trend in CVA Detail
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type, Time Period
Report Description	This report presents CVA of child counterparties of a parent and changes over time.
Report Type	**Graphical report:** The line graph presents trend in various CVA measures for a counterparty during selected date range. **Tabular Report:** The following are displayed as row items: • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment The following are displayed as column items: • MIS Date • Measure Value
Dimensions	• Dim Extraction Date
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral

	• DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Not applicable
Drill-through's	Not applicable

10.1.2.3 Range of CVA Detail

Report Name	Range of CVA Detail
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type, Time Period
Report Description	This report is presents minimum and maximum CVA of child counterparties of a parent during selected time period.
Report Type	**Graphical report:** The line graph presents minimum and maximum value of CVA measures of a counterparty during selected date range. **Tabular Report:** The following are displayed as row items: • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment The following are displayed as column items: • MIS Date • Measure minimum value Measure maximum value
Dimensions	• Dim Extraction Date
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral

	• Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Not applicable
Drill-through's	Not applicable

10.1.3 Counterparty XVA

Report Name	Counterparty XVA
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is presents CVA measures of parent counterparty on selected date.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dim Parent Counterparty
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA

	• CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment Capital Valuation Adjustment
Drill-through On	Counterparty XVA on Parent Counterparty ID
Drill-through's	Child Counterparty ID, Netting Agreement Name

10.1.4 Counterparty XVA - Netting Set

Report Name	Counterparty XVA- Netting Set
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is presents CVA measures of parent counterparty on selected date and at netting agreement level.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Industry • Netting Agreement Name • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dim Parent Counterparty, Dim Counterparty, Dim Netting Agreement
Base Measures	Fact MR XVA Group

Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Counterparty XVA– Netting Set on Netting Agreement Name
Drill-through's	CSA Agreement Name

10.1.5 Counterparty XVA – CSA

Report Name	Counterparty XVA – CSA
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is presents CVA measures of counterparty on selected date and at sub-netting agreement (credit support annex) level.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Netting Agreement Name • CSA Agreement Name • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment

Dimensions	Dim Parent Counterparty, Dim Counterparty, Dim Netting Agreement, Dim Sub Netting Agreement
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Counterparty XVA– CSA on CSA Agreement Name
Drill-through's	Account Number

10.1.6 Counterparty XVA - Trade

Report Name	Counterparty XVA – Trade
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is presents CVA measures of counterparty on selected date and at trade level.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Netting Agreement Name • CSA Agreement Name • Account Number • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral

	• DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dimension Parent Counterparty • Dimension Counterparty • Dimension Netting Agreement • Dimension Sub Netting Agreement • Dimension Account
Base Measures	Fact MR XVA Trade
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Not applicable
Drill-through's	Not applicable

10.2 Counterparty Risk (XVA) Increments

This dashboard presents a detailed view of counterparty valuation adjustment. Reports display increments of XVA scalar measures between successive observation dates. The following reports are displayed as part of Counterparty Risk (XVA) Increments:

- Counterparty XVA Increments
- Counterparty XVA Increments – Netting Set
- Counterparty XVA Increments - CSA
- Counterparty XVA Increments - Trade

10.2.1 Counterparty XVA Increments

Report Name	Counterparty XVA Increments Summary
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is present incremental CVA measures for a parent counterparty.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Observation Date • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dimension Parent Counterparty • Dimension Future Date
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Counterparty XVA on Parent Counterparty ID

Drill-through's	Child Counterparty ID, Netting Agreement Name

10.2.2 Counterparty XVA Increments – Netting Set

Report Name	Counterparty XVA Increments - Netting Set
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is present incremental CVA measures for a counterparty at netting agreement level.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Netting Agreement Name • Observation Date • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dimension Parent Counterparty • Dimension Counterparty • Dimension Netting Set • Dimension Future Date
Base Measures	Fact MR XVA Group
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral

	• DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Counterparty XVA Increments – Netting Set on Netting Agreement Name
Drill-through's	CSA Agreement Name

10.2.3 Counterparty XVA Increments – CSA

Report Name	Counterparty XVA Increments – CSA
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is present incremental CVA measures for a counterparty at sub-netting agreement (credit support annex) level.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Netting Agreement Name • CSA Agreement Name • Observation Date • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Dimensions	• Dimension Parent Counterparty • Dimension Netting Agreement • Dimension Sub Netting Agreement • Dimension Future Date
Base Measures	Fact MR XVA Group

Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Counterparty XVA Increments – CSA on CSA Agreement Name
Drill-through's	Account Number

10.2.4 Counterparty XVA Increments - Trade

Report Name	Counterparty XVA Increments – Trade
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report is present incremental CVA measures for a counterparty at trade level.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Netting Agreement Name • CSA Agreement Name • Account Number • Observation Date • BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment

	• Capital Valuation Adjustment
Dimensions	• Dimension Parent Counterparty • Dimension Netting Agreement • Dimension Sub Netting Agreement • Dimension Future Date • Dimension Account
Base Measures	Fact MR XVA Trade
Computed Measures	• BCVA Unilateral • BCVA Bilateral • Collateral VA • CVA Unilateral • CVA Bilateral • DVA Unilateral • DVA Bilateral • Funding Cost Adjustment • Funding Value Adjustment • Capital Valuation Adjustment
Drill-through On	Not applicable
Drill-through's	Not applicable

10.3 Counterparty Exposure Summary

This dashboard shows information on exposures that bank has to its counterparties. The following reports are displayed as part of Counterparty Exposure Summary:

- Counterparty Exposure Summary
- Counterparty Exposure Detail
- Counterparty Exposure
- Counterparty Exposure Detailed
- Counterparty Exposure Detailed - Trade

10.3.1 Counterparty Exposure Summary

This page includes four reports:

- Portfolio or Trading Desk Exposure Summary
- Counterparty PFE – Info Statistics Summary
- Trend in PFE

- Range of PFE

10.3.1.1 Portfolio or Trading Desk Exposure Summary

Report Name	Portfolio or Trading Desk Exposure Summary
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents summarized information of exposures in a portfolio or trading desk.
Report Type	**Tabular Report:** The following are displayed as column items: • Portfolio • Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure
Dimensions	• Dimension MR Monte Carlo Execution Details
Base Measures	Fact MR PFE Group
Computed Measures	• Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure
Drill-through On	Not applicable
Drill-through’s	Not applicable

10.3.1.2 Counterparty PFE – Info Statistics Summary

Report Name	Counterparty PFE – Info Statistics Summary
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents summarized credit and exposure information about a parent counterparty.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Industry

	• No of Child Counterparty • No of Account • No of Netting Agreement • No of Sub Netting Agreement • Expected Positive Exposure • Effective Expected Positive Exposure • Probability of Default AIRB • Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB
Dimensions	• Dimension Parent Counterparty • Dimension Counter Party
Base Measures	Fact MR PFE Group
Computed Measures	• No of Child Counterparty • No of Account • No of Netting Agreement • No of Sub Netting Agreement • Expected Positive Exposure • Effective Expected Positive Exposure • Probability of Default AIRB • Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB
Drill-through On	Portfolio or Trading Desk Exposure Summary – on Parent counterparty ID
Drill-through's	Not applicable

10.3.1.3 Trend in PFE

Report Name	Trend in PFE
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents changes in exposure amount for a counterparty over time.
Report Type	**Graphical report:** The line graph represents trend in exposure measures for a counterparty during selected time period. **Tabular Report:**

	The following measures are displayed as row items: • Expected Positive Exposure • effective Expected Positive Exposure The following are displayed as column items: • MIS Date • Measure Value
Dimensions	Dimension Extraction Date
Base Measures	Fact MR PFE Group
Computed Measures	• Expected Positive Exposure • Effective Expected Positive Exposure
Drill-through On	Not applicable
Drill-through's	Not applicable

10.3.1.4 Range of PFE

Report Name	Range of PFE
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report represents minimum and maximum exposure amount for a counterparty during selected time period
Report Type	**Graphical report:** The line graph represents minimum and maximum exposure amount for a counterparty during selected time period. **Tabular Report:** The following measures are displayed as row items: • Expected Positive Exposure • effective Expected Positive Exposure The following are displayed as column items: • MIS Date • Measure exposure amount • Measure exposure amount
Dimensions	Dimension Extraction Date
Base Measures	Fact MR PFE Group
Computed Measures	• Expected Positive Exposure • Effective Expected Positive Exposure

Drill-through On	Not applicable
Drill-through's	Not applicable

10.3.2 Counterparty Exposure Detail

This page includes four reports:

- Portfolio or Trading Desk Exposure Detail
- Counterparty PFE – Info Statistics Detail
- Trend in PFE
- Range of PFE

10.3.2.1 Portfolio or Trading Desk Exposure Detail

Report Name	Portfolio or Trading Desk Exposure Detail
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents summarized information of exposures in a portfolio or trading desk of a counterparty.
Report Type	**Tabular Report:** The following are displayed as column items: • Portfolio • Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure
Dimensions	Dimension MR Monte Carlo Execution Details,
Base Measures	Fact MR PFE Group
Computed Measures	• Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure
Drill-through On	Not applicable
Drill-through's	Not applicable

10.3.2.2 Counterparty PFE – Info Statistics Detail

Report Name	Counterparty PFE – Info Statistics Detail
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents summarized credit and exposure information about a counterparty.
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Industry • Child Counterparty • No of Account • No of Netting Agreement • No of Sub Netting Agreement • Expected Positive Exposure • Effective Expected Positive Exposure • Probability of Default AIRB • Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB
Dimensions	• Dimension Parent Counterparty • Dimension Counter Party
Base Measures	Fact MR PFE Group
Computed Measures	• No of Account • No of Netting Agreement • No of Sub Netting Agreement • Expected Positive Exposure • Effective Expected Positive Exposure • Probability of Default AIRB • Probability of Default FIRB • Loss Given Default AIRB • Loss Given Default FIRB
Drill-through On	Not applicable
Drill-through's	Not applicable

10.3.2.3 Trend in PFE

Report Name	Trend in PFE
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents changes in exposure amount for a counterparty over time.
Report Type	**Graphical report:** This line graph presents changes in exposure amount for a counterparty during a time period. **Tabular Report:** The following measures are displayed as row items: • Expected Positive Exposure • effective Expected Positive Exposure The following are displayed as column items: • MIS Date • Measure Value
Dimensions	Dimension Extraction Date
Base Measures	Fact MR PFE Group
Computed Measures	• Expected Positive Exposure • effective Expected Positive Exposure •
Drill-through On	Not applicable
Drill-through's	Not applicable

10.3.2.4 Range of PFE

Report Name	Range of PFE
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report represents minimum and maximum exposure amount for a counterparty during selected time period
Report Type	**Graphical report:** This line graph represents minimum and maximum exposure amount for a counterparty during selected time period **Tabular Report:** The following measures are displayed as row items: • Expected Positive Exposure • effective Expected Positive Exposure

	The following are displayed as column items: • MIS Date • Measure minimum value • Measure maximum value
Dimensions	Dimension Extraction Date
Base Measures	Fact MR PFE Group
Computed Measures	• Expected Positive Exposure • effective Expected Positive Exposure •
Drill-through On	Not applicable
Drill-through's	Not applicable

10.3.3 Regulatory Exposure

Report Name	Regulatory Exposure
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents regulatory exposure metrics of a parent counterparty
Report Type	**Tabular Report:** The following are displayed as column items: • Parent counterparty ID • Regulatory Expected Positive Exposure • Regulatory Effective Expected Positive Exposure
Dimensions	Dimension Parent Counterparty
Base Measures	Fact MR PFE Group
Computed Measures	• Regulatory Expected Positive Exposure • Regulatory Effective Expected Positive Exposure
Drill-through On	Counterparty Exposure – On Parent counterparty ID
Drill-through's	Not applicable

10.3.4 Exposure by Observation Date

Report Name	Exposure by Observation Date

Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents exposure metrics of a parent counterparty broken by observation dates
Report Type	**Tabular Report:** The following are displayed as column items: • Parent counterparty ID • Observation Date • Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure • Effective Potential Future Exposure • Effective Expected Positive Exposure • Effective Expected Negative Exposure • Effective Expected Exposure • Average Potential Future Exposure • Average Expected Positive Exposure • Average Expected Negative Exposure • Average Expected Exposure
Dimensions	• Dimension Parent Counterparty • Dimension Future Date
Base Measures	Fact MR PFE Group
Computed Measures	• Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure • Effective Potential Future Exposure • Effective Expected Positive Exposure • Effective Expected Negative Exposure • Effective Expected Exposure • Average Potential Future Exposure • Average Expected Positive Exposure • Average Expected Negative Exposure Average Expected Exposure
Drill-through On	Counterparty Exposure Detailed on Parent Counterparty ID

Drill-through's	Counterparty ID, Netting Agreement, Sub netting Agreement, Account Number

10.3.5 Counterparty Exposure Detailed - Trade

Report Name	Counterparty Exposure Detailed - Trade
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, XVA Result Type
Report Description	This report presents exposure metrics by observation dates at the level of counterparty, netting agreement, sub-netting agreement (credit support annex) and trade
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Counterparty ID • Netting Agreement • Sub Netting Agreement • Account Number • Observation Date • Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure • Effective Potential Future Exposure • Effective Expected Positive Exposure • Effective Expected Negative Exposure • Effective Expected Exposure • Average Potential Future Exposure • Average Expected Positive Exposure • Average Expected Negative Exposure • Average Expected Exposure
Dimensions	• Dimension Parent Counterparty • Dimension Counterparty • Dimension Netting Agreement • Dimension Sub Netting Agreement • Dimension Account
Base Measures	Fact MR PFE Trade

Computed Measures	• Potential Future Exposure • Expected Positive Exposure • Expected Negative Exposure • Expected Exposure • Effective Potential Future Exposure • Effective Expected Positive Exposure • Effective Expected Negative Exposure • Effective Expected Exposure • Average Potential Future Exposure • Average Expected Positive Exposure • Average Expected Negative Exposure • Average Expected Exposure
Drill-through On	Not applicable
Drill-through's	Not applicable

10.4 Monte Carlo VaR

This dashboard displays a detailed view of Value-at-Risk (VaR) calculated using monte-carle simulation. The following reports are displayed as part of Monte-Carlo VaR:

- Portfolio or Trading Desk VaR
- Monte-Carlo VaR Summary
- Monte-Carlo VaR Detailed
- Exposure Value -Trade

10.4.1 Portfolio or Trading Desk VaR

This page includes three reports:

- Monte-Carlo VaR and Expected Shortfall
- Monte-Carlo VaR (Trend)
- Monte-Carlo VaR (Range)

10.4.1.1 Monte-Carlo VaR and Expected Shortfall

Report Name	Monte-Carlo VaR and Expected Shortfall
Report Level Filters	Parent Counterparty ID, Adjustment Type
Report Description	This report present Value-at-Risk and Expected shortfall of a portfolio or trading desk

Report Type	**Graphical report:** This bar chart presents Value-at-Risk and Expected shortfall of a portfolio or trading desk **Tabular Report:** The following are displayed as column items: • Portfolio • Value at Risk • Expected Shortfall
Dimensions	Dimension MR Monte Carlo Execution Details
Base Measures	Fact MR MC VaR
Computed Measures	• Value at Risk • Expected Shortfall
Drill-through On	Not applicable
Drill-through's	Not applicable

10.4.1.2 Monte-Carlo VaR (Trend)

Report Name	Monte-Carlo VaR (Trend)
Report Level Filters	Parent Counterparty ID, Adjustment Type
Report Description	This report presents trend in VaR of a portfolio or trading desk during a time period
Report Type	**Graphical report:** This line graph presents trend in VaR of a portfolio or trading desk during a time period **Tabular Report:** The following measures are displayed as row items: • Portfolio The following are displayed as column items: • As of Date • Measure Value
Dimensions	• Dimension Extraction Date • Dimension MR Monte Carlo Execution Details
Base Measures	Fact MR MC VaR
Computed Measures	• Value at Risk
Drill-through On	Not applicable
Drill-through's	Not applicable

10.4.1.3 Monte-Carlo VaR (Range)

Report Name	Monte-Carlo VaR (Range)
Report Level Filters	Parent Counterparty ID, Adjustment Type
Report Description	This report presents minimum and maximum VaR of a portfolio or trading desk during a time period
Report Type	**Graphical report:** This line graph presents minimum and maximum VaR of a portfolio or trading desk during a time period **Tabular Report:** The following measures are displayed as row items: • Portfolio The following are displayed as column items: • As of Date • Minimum MC VaR • Maximum MC VaR
Dimensions	• Dimension Extraction Date • Dimension MR Monte Carlo Execution Details
Base Measures	Fact MR MC VaR
Computed Measures	• Value at Risk
Drill-through On	Not applicable
Drill-through's	Not applicable

10.4.2 Monte-Carlo VaR Summary

Report Name	Monte-Carlo VaR Summary
Report Level Filters	Parent Counterparty ID, Adjustment Type
Report Description	This report presents VaR and Expected Shortfall (ES) at parent counterparty level
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Value at Risk • Expected Shortfall (ETL)
Dimensions	Dimension Parent Counterparty
Base Measures	Fact MR MC VaR

Computed Measures	• Value at Risk • Expected Shortfall (ETL)
Drill-through On	Monte-Carlo VaR Summary on Parent Counterparty ID
Drill-through's	Observation Date

10.4.3 Monte-Carlo VaR Detailed

Report Name	Monte-Carlo VaR Detailed
Report Level Filters	Parent Counterparty ID, Adjustment Type
Report Description	This report presents VaR and Expected Shortfall (ES) at parent counterparty level by observation date
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID • Observation Date • Value at Risk • Expected Shortfall (ETL)
Dimensions	• Dimension Parent Counterparty , • Dimension Future Date
Base Measures	Fact MR MC VaR
Computed Measures	• Value at Risk • Expected Shortfall (ETL)
Drill-through On	Monte-Carlo VaR Summary on Parent Counterparty ID
Drill-through's	Counterparty, Netting Agreement, Sub Netting Agreement

10.4.4 Exposure Value –Trade

Report Name	Exposure Value Trade
Report Level Filters	Parent Counterparty ID, Counterparty ID, Adjustment Type, Netting Agreement, Sub Netting Agreement
Report Description	This report presents VaR and Expected Shortfall (ES) at trade level
Report Type	**Tabular Report:** The following are displayed as column items: • Parent Counterparty ID

	• Counterparty ID • Netting Agreement • CSA Agreement • Account Number • Exposure Present Value
Dimensions	• Dimension Parent Counterparty • Dimension Counterparty • Dimension Netting Agreement • Dimension Sub Netting Agreement
Base Measures	Fact MR MC VaR
Computed Measures	• Value at Risk • Expected Shortfall (ETL)
Drill-through On	Not applicable
Drill-through's	Not applicable

10.5 Audit

This dashboard shows reports which can used for verification purpose. These are not directly used for analysis but support them. The following reports are displayed as part of Audit:

- Execution History
- Audit Trail

10.5.1 Execution History

Report Name	Execution History
Report Level Filters	Not Applicable
Report Description	This report is a summary view of number of records processed during each execution for each trading desk or portfolio.
Report Type	**Tabular Report:** The following are displayed as column items: • Business Execution Date • Business Definition Execution ID • Reporting Flag • Business definition Name • Workflow Status • Execution Status

Dimensions	Dimension MR Monte Carlo Execution Details
Base Measures	Not Applicable
Computed Measures	• Not Applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

10.5.2 Audit Trail

Report Name	Audit Trail
Report Level Filters	Not Applicable
Report Description	This report is a summary view of process execution for each trading desk or portfolio and their status.
Report Type	**Tabular Report:** The following are displayed as column items: • Business Execution Date • Business Definition Execution ID • Reporting Flag • Number of Records Processed
Dimensions	Dimension MR Monte Carlo Execution Details
Base Measures	Not Applicable
Computed Measures	• Number of Records Processed
Drill-through On	Not applicable
Drill-through's	Not applicable

11 MR Assumptions

MR Assumptions tab consists of the following page level filters which are applicable to all the reports in this module.

Dashboard Name	MR Assumptions
Subject Area	MR Assumptions
Dashboard Level Filters	Not applicable
Page Level Display Parameters	Not applicable

The following dashboards are displayed as part of MR Assumptions:

- Default Configurations
- Portfolio

11.1 Default Configurations

This dashboard displays the default configurations available in MRMM. The following reports are displayed as part of Default Configurations:

- Currency
- Currency Pair
- Models and Methods
- Model Parameters
- Instrument Type Classification
- Liquidity Horizon

11.1.1 Currency

Report Name	Currency
Report Level Filters	Currency Name, Currency Code
Report Description	This report displays the default values at the granularity of currency.
Report Type	**Tabular Report:** The following are displayed as column items: • Currency Name • Currency Code • Rank • Interest Rate Index

	• Interest Rate Tenor • Discount Curve • Dual curve • Overnight Index • Holiday Calendar • Country • Allowed Yield curve Ids
Dimensions	Not Applicable
Base Measures	Not Applicable
Computed Measures	Not Applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

11.1.2 Currency Pair

Report Name	Currency Pair
Report Level Filters	Currency Pair Code, Term Currency, Base Currency
Report Description	This report displays the default values at the granularity of currency pair. It is used for pricing of cross-currency instruments
Report Type	**Tabular Report:** The following are displayed as column items: • Currency Pair Code • Base Currency • Term Currency • Base CC Basis Tenor • Term CC Basisi Tenor • Inverse Price • CC Basis Price • Basis Spread Leg
Dimensions	Not Applicable
Base Measures	Not Applicable
Computed Measures	Not Applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

11.1.3 Models and Methods

Report Name	Models and Method
Report Level Filters	Asset Class, Instrument Type
Report Description	This report is used to select models and methods that will be used to price the instruments, for a specific instrument type.
Report Type	**Tabular Report:** The following are displayed as column items: • Asset Class • Instrument Type • Model • Method
Dimensions	Not Applicable
Base Measures	Not Applicable
Computed Measures	Not Applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

11.1.4 Model Parameters

Report Name	Models parameters
Report Level Filters	Asset Class, Model Name
Report Description	This report is used to define parameters for models which are used for pricing and calibration.
Report Type	**Tabular Report:** The following are displayed as column items: • Model Parameter Name • Model Param Default Values
Dimensions	Not Applicable
Base Measures	Not Applicable
Computed Measures	Not Applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

11.1.5 Instrument Type Classification

Report Name	Instrument Type Classification
Report Level Filters	Bank Instrument Type, Standard Instrument Type
Report Description	This report displays the mapping between instrument type as per the financial institution, and the standard instrument type names used in MRMM application.
Report Type	**Tabular Report:** The following are displayed as column items: • Bank Instrument Type Description • Standard Instrument Type Description
Dimensions	• Dim Bank Instrument Type, Dim Standard Instrument Type
Base Measures	Not Applicable
Computed Measures	• Not Applicable
Drill-through On	Not applicable
Drill-through's	Not applicable

11.1.6 Liquidity Horizon

Report Name	Liquidity Horizon
Report Level Filters	Liquidity Horizon For (Portfolio, Trading Desk, Default), Liquidity Horizon type
Report Description	This report displays the mapping between the risk factor category and the values associated with each category.
Report Type	**Tabular Report:** The following are displayed as column items: • Risk Factor Category • Liquidity Horizon (in days)
Dimensions	• Dim MR Risk Factor Details
Base Measures	Fact MR Liquidity Horizon
Computed Measures	• Liquidity Horizon (in days)
Drill-through On	Not applicable
Drill-through's	Not applicable

11.2 Portfolio

This dashboard displays the portfolios used in analysis of instrument valuations and portfolio valuations. The following reports are displayed as part of Portfolio:

- Portfolio

11.2.1 Portfolio

Report Name	Portfolio
Report Level Filters	Portfolio Definition Type, Folder Name, Name, Version
Report Description	This report displays the portfolio defined.
Report Type	**Tabular Report:** The following are displayed as column items: • Instrument Code • Instrument Type Code • Entity Code • Counterparty Name • Currency Code • Start Date • Maturity Date
Dimensions	Not applicable
Base Measures	Not applicable
Computed Measures	Not applicable
Drill-through On	Not applicable
Drill-through’s	Not applicable

Oracle Financial Services Market Risk
Measurement and Management

Analytics User Guide
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