Oracle Financial Services
Credit Risk Analytics User Guide

Release 8.1.2.10.0

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Oracle Financial Services Credit Risk Analytics User Guide, Release 8.1.2.10.0

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Document Control

Table   **Document Version Control**

Version Number	Revision Date	Change Log
1.0	February 2025	Created the document for 8.1.2.8.0 release.
2.0	March 2025	Updated the document for 8.1.2.8.1 release.

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Preface

Welcome to release 8.1.2.0.0 of the Oracle Financial Services Credit Risk Analytics User Guide. This section provides a brief description of the scope, intended audience, related information sources, the organization of the user guide, and abbreviations used in the user guide.

1.1 Scope of the Guide

Oracle Financial Services Credit Risk Analytics (OFS CRA) User Guide, Release v8.1.0.0.0, contains all the essential information required by a user to understand and use the user interface and functionalities in the application. It includes a description of the system functions and capabilities and details the step-by-step process for system access and use.

1.2 Intended Audience

This manual is intended for the following audience:

- **Senior Executives and Managers:** This user is responsible for credit risk management of their Line of Business and overall organization. They constantly monitor credit risk and are actively involved in decision and policy making aimed at managing and mitigating credit risks.

- **Business Users:** This user reviews the functional requirements and information sources, such as reports.

- **Data Analysts:** This user is involved with cleaning, validating, and importing data into the OFSAA Download Specification Format.

- **Technical Analysts:** This user ensures that the data is populated in the relevant tables as per the specifications and executes, schedules, and monitors the execution of Runs.

1.3 What is New in this Release

The 8.1.2.8.0 release brings key enhancements to Oracle Financial Services Credit Risk Analytics, improving the depth and flexibility of credit risk analysis. These updates include expanded dimensionality for pre-aggregated materialized views and the introduction of new analytics for policy exceptions. Key updates include:

- **Policy Exceptions**
  - CRA 8128 introduces advanced capabilities for analyzing policy exceptions, enabling users to identify where exceptions were granted during the approval process. This feature enhances understanding of the impact these exceptions have on credit quality. Users can now evaluate the effects of funded exceptions and make informed decisions to adjust underwriting and credit policies. Analyzing exception rates across multiple dimensions allows users to identify segments within the portfolio that may require specific policy changes.

- **New Dimensions for Granular Analysis**

– Additional dimensions have been introduced at the application, account, and credit line levels, enhancing the materialized views and providing more granular insights for credit risk analysis.

- **New Measures for Enhanced Portfolio Monitoring**

  – Several new measures such as Total principal repayments, End-of-contract payments, Scheduled repayments, Re-advanceable and non-re-advanceable outstanding have been introduced at the account and credit line levels, to strengthen portfolio credit risk monitoring.

These additions improve the ability to track and manage credit risk across the portfolio with greater precision.

1.3.1 Installing this Major Release

For detailed instructions to install this Major Release, see the [Oracle Financial Services Credit Risk Analytics Installation Guide Release 8.1.2.0.0](#).

1.4 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.

1.5 Related Information Sources

You can access the following documents online from the Oracle Help Center (OHC) Documentation Library for [OFS CRA 8.1](#):

- OFS Credit Risk Analytics Release Notes
- OFS Credit Risk Analytics Installation Guide

You can access the OFS AAI documentation online from the documentation library for [OFS AAAI 8.x](#):

- OFS Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack Installation and Configuration Guide
- OFS Analytical Applications Infrastructure User Guide

The additional documents are:

- [OFS Analytical Applications Infrastructure Security Guide](#)
- [OFS Analytical Applications 8.1.2.0.0 Technology Matrix](#)

1.6 Conventions and Acronyms

The following table describes the conventions used in this document:

Table 1-1   Document Conventions

Convention	Meaning
Boldface	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.
Italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
Monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, file names, text that appears on the screen, or text that you enter.
Hyperlink	Hyperlink type indicates the links to external websites, internal document links to sections.

The following table lists the abbreviations used in this document.

Table 1-2   Abbreviations

Abbreviation	Meaning
ALM	Asset and Liability Management
CRA	Credit Risk Analytics
DM	Data Model
EOD	End of Day
EOP	End of Period
MoM	Month-on-Month
MRMM	Market Risk Measurement and Management
MTD	Month-To-Date
NPA	Non-Performing Assets
OFSAA	Oracle Financial Services Analytical Applications
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure
QoQ	Quarter- on -Quarter
QTD	Quarter To Date
RTD	Last Reporting-To-Date
YoY	Year-on Year
YTD	Year To Date

2

Introduction to Credit Risk Analytics

OFS CRA empowers financial institutions to proactively identify, measure, and mitigate enterprise wide credit risk though its comprehensive, dynamic, and high-quality reports. The application helps gain a holistic enterprise-wide view of credit risk present across the banking and trading book. It also enables financial institutions to mitigate credit and compliance costs by proactively identifying stressed pockets, credit concentrations, undifferentiated credit expansions, provisioning, capital shortfalls and so on, and realigning their Credit, Non-performing Assets (NPA), Provisioning, and Capital Management policy.

The application is packaged with prebuilt infographic reports and dashboards using Oracle Business Intelligence Enterprise Edition (OBIEE), which also offers enhanced flexibility to customize these prebuilt reports through the inbuilt Visual Analyzer. OFS CRA is a one-stop solution crafted to adequately address the credit risk management challenges faced by all categories of financial institutions.

OFS Credit Risk Management has the following key components:

- **Enterprise Credit Risk:** Provides an enterprise wise view of credit risk across the Banking and Trading Book.

- **Wholesale Credit Risk:** Provides an in-depth analysis of credit risk present in the Wholesale Book of the enterprise.

- **Counterparty Credit Risk:** Provides a detailed analysis of the Credit Risk and Counterparty Credit Risk present in the Trading Book of the enterprise.

- **Retail Credit Risk:** Provides a detailed analysis of the Credit Risk in retail lines of business and related products.

2.1 Process Flow

The following illustration shows the process flow of the OFS CRA Solution.

Figure 2-1   Materialized View for Account with credit line
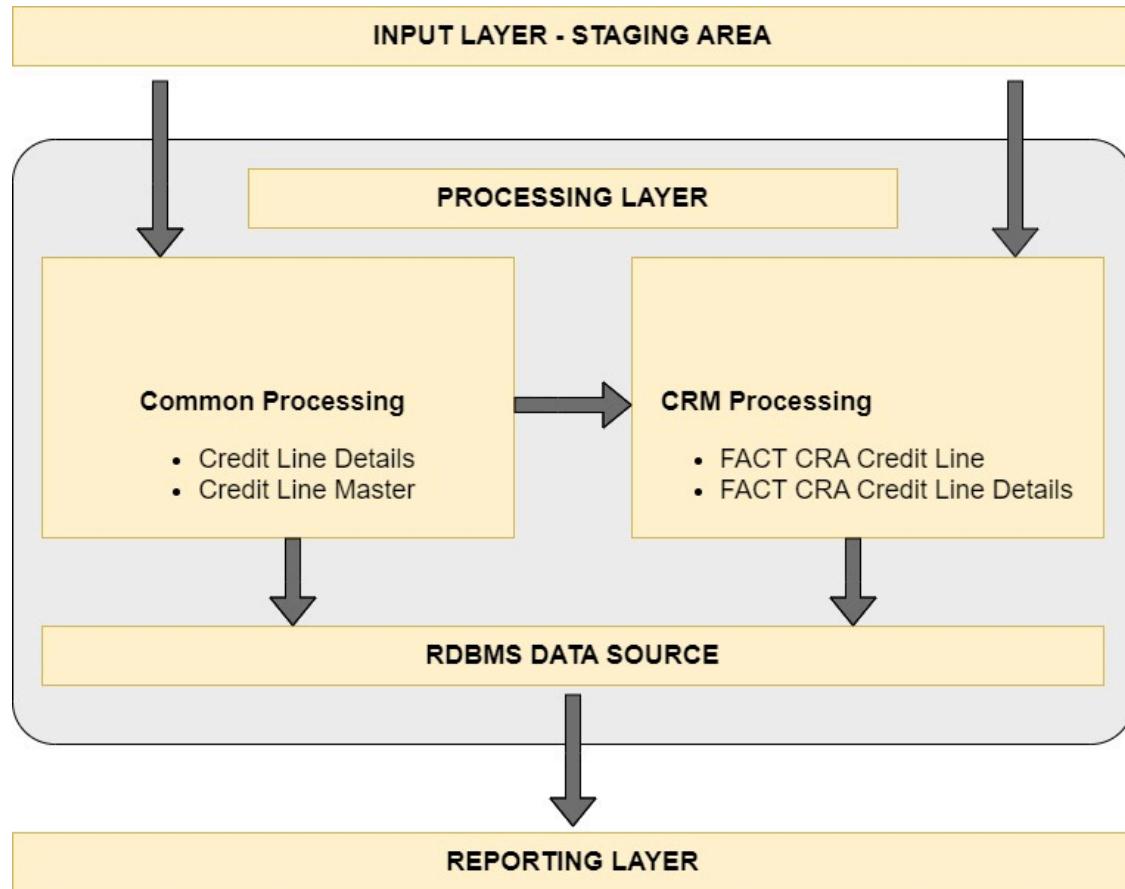
Figure 2-2   Materialized view for application
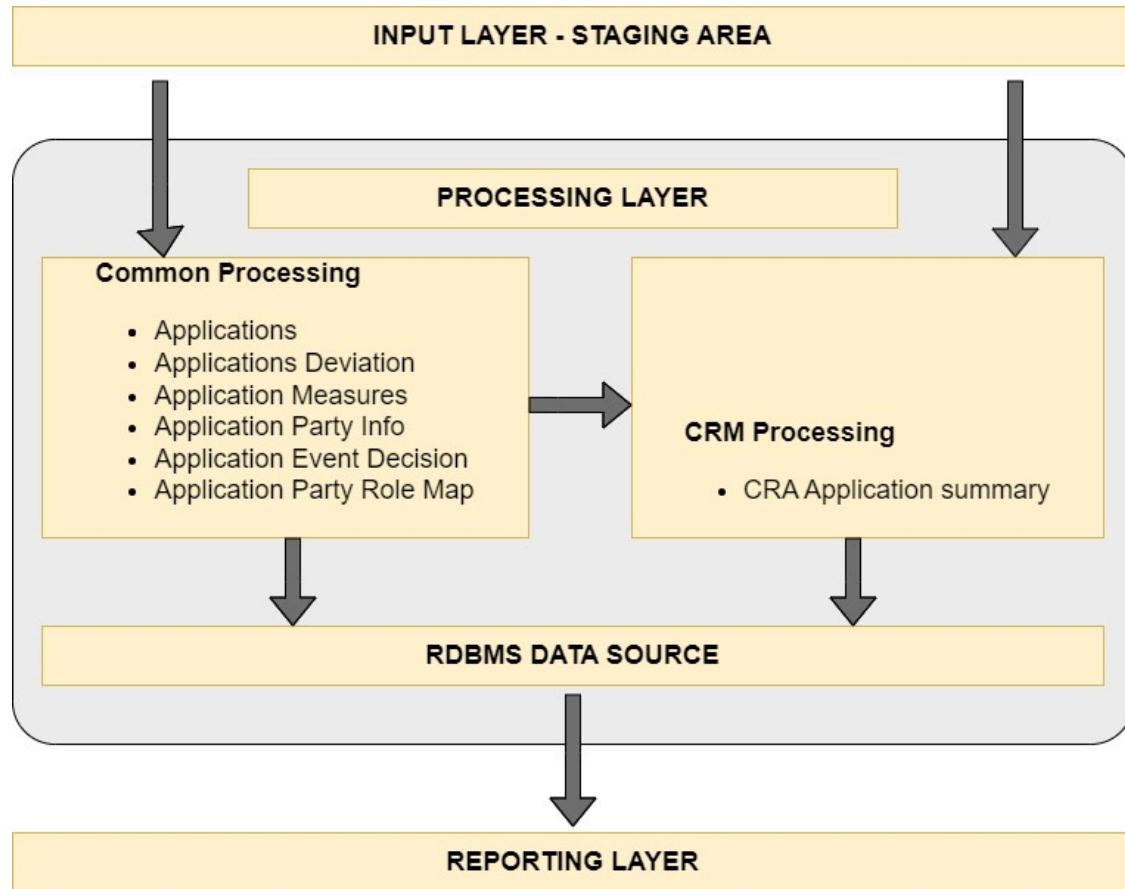
Figure 2-3   Materialized View with account level
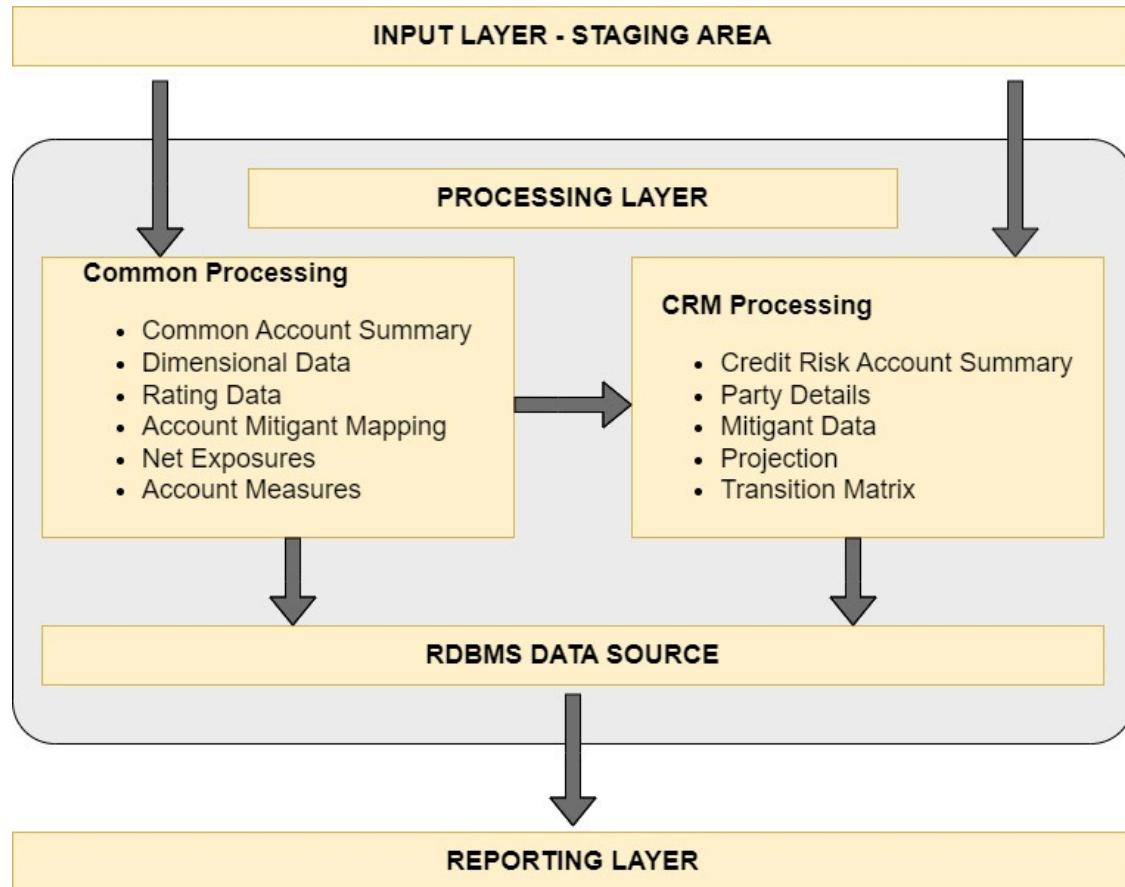
Figure 2-4   Summary of data movement
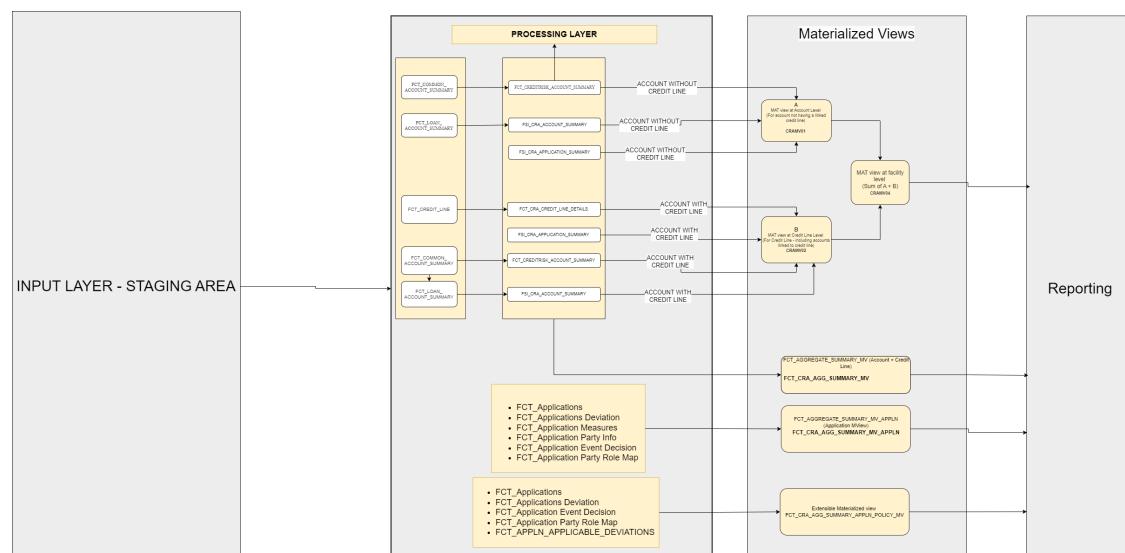
The following points describes the process flow:

- **Input Data Requirement:** In this layer, the required data must be loaded into the setup tables and Stage Tables.

- **Data Mapping:** In this layer, the application plots the processed data into data that can be readily consumed by OFS Credit Risk Analytics.

- **Processing:** In this layer, data is transferred from the input tables to the processing tables by Run Execution.

- **Materialized View**: This view provides data at the account level, focusing on account-related metrics or attributes and measures.

- **Reporting Layer:** This makes up the OFS Credit Risk Analytics Component. CRA has predefined reports to view and analyze data and results. Reports can be viewed in a user-friendly format using the Oracle Business Intelligence Enterprise Edition Components. The reports are presented in multiple dashboards that can be modified as per the specific requirements.

2.2 Logging into OFS CRA Application

To log in to the OFS CRA Application, follow these steps:

Figure 2-5   OFS CRA Application Navigation
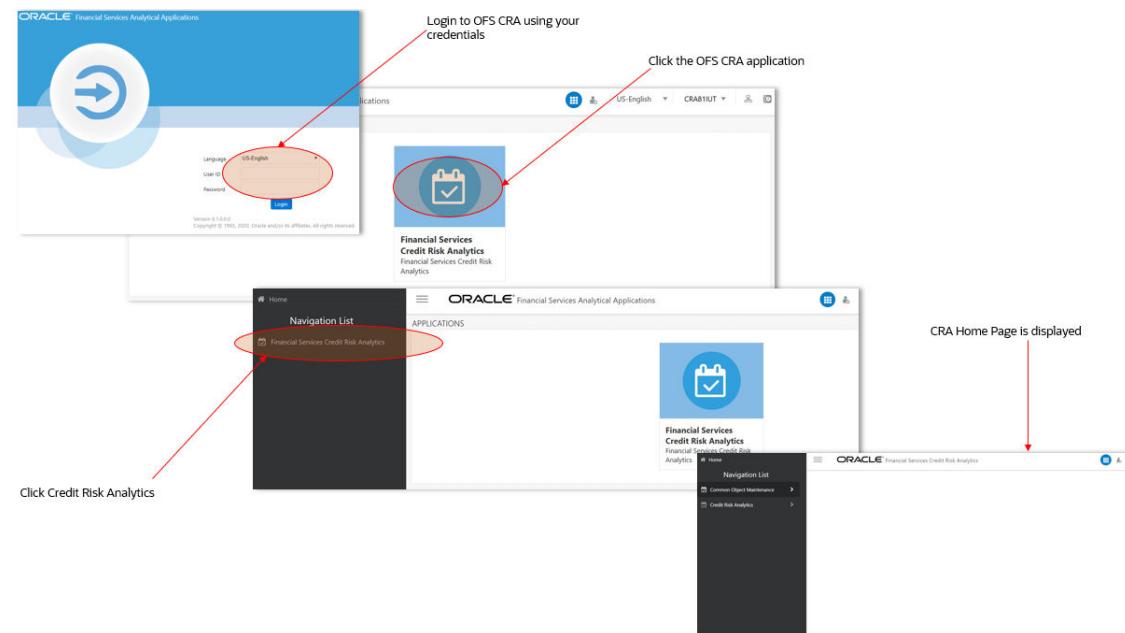
1. Access the OFS CRA Application using the login credentials (**User ID** and **Password**) provided and select the preferred language to navigate. The built-in security system ensures that you are only permitted to access the window and actions based on the authorization.

2. After logging in to **OFSAA Home Screen**, the Landing page is displayed.

Figure 2-6   Illustration of the Icons in OFSAA Landing Page Header
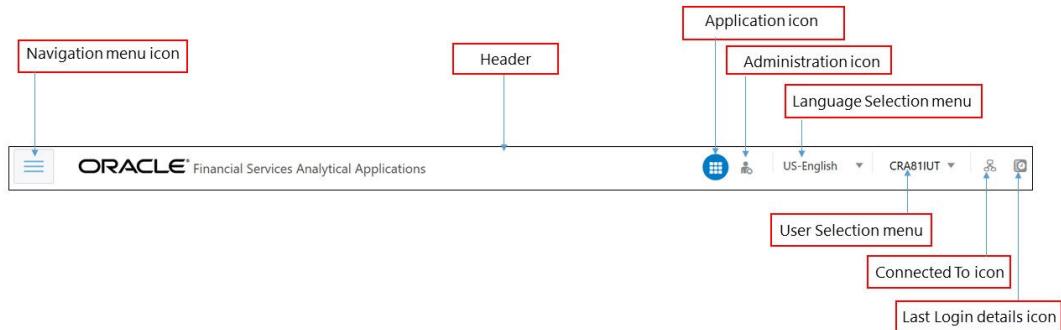
Use the information provided in the following table to set the application preferences.

Table 2-1   Icons in the OFSAA Landing page Masthead and their Descriptions

Field	Description
User Menu	Click this drop-down list to select the **Preferences, About, Change Password,** or **Logout** options.
Application Icon	Click this icon to view all the applications installed in your environment. Click the icon and select **Financial Services Credit Risk Analytics**.
Language Menu	This menu displays the language you selected in the OFSAA Login Window. The language options displayed in the Language Menu are based on the language packs installed in your OFSAA instance. Using this menu, you can change the language at any point in time.
Administration Icon	Click this icon to navigate to the **Administration** window. The Administration window displays modules such as **Object Administration, Utilities, Process Modelling Framework.**
Last Login Details	Click this icon to view the details of the last login and last failed login.
Object Administration	Object Administration is an integral part of the infrastructure and facilitates System Administrators to define the Security Framework. See the OFS Advanced Analytics Infrastructure User Guide for details.

Table 2-1   (Cont.) Icons in the OFSAA Landing page Masthead and their Descriptions

Field	Description
Common Object Maintenance	Common Object Maintenance is an integral part of the infrastructure system and facilitates system administrators to define the Security Framework with the capacity to restrict access to the data and metadata in the warehouse, based on a flexible, fine-grained access control mechanism. See the OFS Advanced Analytics Infrastructure User Guide for details.

3. Select OFS **Credit Risk Analytics** on the OFSAA Landing page.

4. Select **Credit Risk Analytics** in the Left-Hand Side (LHS) pane. The **Credit Risk Analytics** Landing page is displayed.

3

Input Data Preparation

The data required to be updated in the setup tables of the OFS Credit Risk Analytics Application is detailed in this section.

3.1 Setup Tables

A Setup Table is a set of Seeded Data that is static and does not change at regular intervals.

You must update the SETUP_MASTER table with the required data. During the Dimension Population Process, the SETUP_MASTER table is accessed by the Slowly Changing Dimension (SCD) Component.

The following table lists the variables and their descriptions.

Table 3-1   Variables and Their Descriptions

Variable Name	Variable Description	Variable Dummy Value
CRA_FISCAL_MONTH	Stores the Fiscal Month in DD/MM format.	01/04
DEFAULT_GAAP	Stores the default GAAP code.	USGAAP
DEFAULT_FX_RATE_SRC	Stores the default Foreign Exchange Rate source code.	DEFAULT
CRA_REP_CCY	Stores the Reporting Currency.	-1
CRA_LLFP	Stores the LLFP Run Skey.	-1
RA_STD_CCY_CD	Stores the Standard Currency used in currency conversion.	USD
CRA_MRMM	Stores the CRA MRMM Execution details.	-1
CRA_REGCAP	Stores the CRA Basel Execution details.	-1
CRA_ALM	Stores the ALM Execution details.	-1
CRA_CASHFLOW_PROCESS_ID_LIST	Stores the list of ALM Cash Flow Process ID.	-1
CRA_STANDARD_PROD_EXCLUSION	Excludes comma separated values of V_STANDARD_PRODUCT_TYPE_CODE while loading data in to the FCT_CREDITRISK_ACCOUNT_SUMMARY table.	EQ
CRA_LOAN_EXP_STD_PROD	Considers comma separated values of V_STANDARD_PRODUCT_TYPE_CODE for loan exposure computation	PCFC, PERLOANS, LOANS, CC, CSHCRED, LGS, DDL, SGUA, GURR, GUARANTEE, PC, SCPT, LCD, EDULNS, OD, LEASE

Table 3-1   (Cont.) Variables and Their Descriptions

Variable Name	Variable Description	Variable Dummy Value
CRA_INVESTMENT_EXP_STD_ PROD	Considers comma separated values of V_STANDARD_PRODUCT_TYP E_CODE for investment exposure computation	CP, ZCB
CRA_DERIVATIVE_EXP_STD_P ROD	Considers comma separated values of V_STANDARD_PRODUCT_TYP E_CODE for derivative exposure computation	CFUT, FDS, SWPS, OPT
CRA _STANDARD_PROD_EXCLUSIO N	Excludes comma separated values of V_STANDARD_PRODUCT_TYP E_CODE while loading data in to the FCT_CREDITRISK_ACCOUNT_ SUMMARY table.	EQ
CRA_STATS_PARALLEL_DOP	CRA_STATS_PARALLEL_DOP	8
DT_PARALLEL_DOP	Degree of parallelism to be used in DML and Queries statements in data transformations	2
DT_PARALLEL_ENABLE	Enables parallel sessions for DML and Queries statements in data transformations	Y
GATHER_TABLE_STATS	If the value is set to Y then process will gather table stats	N

OFS CRA Application provides the capability of reporting figures from other applications such as OFS Loan Loss Forecasting and Provisioning (LLFP), OFS Market Risk Measurement and Management (MRMM), OFS Asset and Liability Management (ALM), and OFS Basel Regulatory Capital. If the LLFP MRMM, ALM, and Basel Regulatory Capital implemented by the financial institution are from an external vendor, then you must manually populate the relevant target tables in the OFS CRA Application.

The following table lists the target tables to be populated.

Table 3-2   Target Tables to be Populated

Target Tables	Application Name
FCT_LLFP_ACCOUNT_SUMMARY	Loan Loss Forecasting and Provisioning
FCT_MR_PFE_GROUP_OUTPUT	Market Risk Measurement and Management
FCT_MR_PFE_TRADE_OUTPUT	Market Risk Measurement and Management
FCT_MR_MNTCRLO_SIM_EXEC_DTL	Market Risk Measurement and Management
FCT_CP_CVA_DETAILS	-
FCT_PROCESS_CASHFLOW	Asset and Liability Management
FCT_REG_CAP_ACCOUNT_SUMMARY	Basel Regulatory Capital

Stage tables are populated in product processors or other stage tables as listed in the Run Chart. Product Processor is an entity that stores data from the Operational Systems of the Bank. This entity is created based on the various financial products that the Bank caters to. A

snapshot of the data is expected as a download in all the Stage Tables. The Stage Data moves to the processing (fact) tables through Table-to-Table transformations (T2Ts).

The following are the main Fact Tables for OFS Credit Risk Analytics, which store all the download values:

- Fact Common Account Summary
- Fact Net Exposure
- Fact Counterparty Product Type Summary

Any computed measures are stored in the Fact Credit Risk Account Summary table.

Additionally, a Counterparty and a Product Granularity table is populated with the downloaded values at the counterparty level and product type level. The computed measures are calculated considering the data from the Fact Credit Risk Account Summary table and flows to the Fact Counterparty Product Type Summary table. Any additional measures are computed and stored in these tables.

The type of data expected as a download in the Stage tables is as follows:

- **Account Granularity Data**
  This input data is expected in the following Product Processor tables:
    - STG_BILLS_CONTRACTS
    - STG_CARDS
    - STG_GUARANTEES
    - STG_INVESTMENTS
    - STG_LC_CONTRACTS
    - STG_LEASES_CONTRACTS
    - STG_LOAN_CONTRACTS
    - STG_MM_CONTRACTS
    - STG_OD_ACCOUNTS
    - STG_FUTURES
    - STG_FX_CONTRACTS
    - STG_OPTION_CONTRACTS
    - STG_REPO_CONTRACTS
    - STG_SWAPS_CONTRACTS
    - STG_CREDIT_DERIVATIVES
    - STG_FORWARDS

- **Customer Data**
  This input data is expected as a download in the following tables:
    - Stage Party Master
    - Stage Party Role Map
    - Stage Party Type
    - Stage Party Details
    - Stage Rating Details

Data flows from the preceding tables to the corresponding Dimension Table, which is the:

– Dim Party Table

– Dim Party Type

– Fact Party Details

– Fact Rating Details

• **Rating Granularity Data**
This input data is expected as a download in the Stage Party Rating Details table which moves to the Fact Party Ratings Details table.

• **Mitigant Data**
This input data is expected as a download in the Stage Mitigants tables. Data flows from these Stage tables to the Fact Mitigants table.

Additionally, data flows from the Stage Account Mitigant Map table to the Fact Account Mitigant Map table. This Stage table stores the mapping between the accounts and the respective mitigants.

• **Exchange Rate Granularity Data**
This input data is expected as a download in the Stage Forward Exchange Rates table. From the Stage table, data is populated to the FSI Exchange Rate tables.

• **Net Exposure**
This input data is expected as a download in the Stage Net Exposure table. Data flows from this Stage table to the Fact Net Exposure Table. The computed measures at the netting level from the Fact Net Exposure table are stored in the Fact Credit Risk Account Summary table at the account level granularity. The measures are aggregated at a product type, party and legal entity level and stored in the Fact Counterparty Product Summary table.

3.2 Batch Execution

You must execute the individual batches for the Data Population. The batches are executed using the Operations Menu of the **Oracle Financial Services Analytical Applications Infrastructure Application**. See the OFS Analytical Applications Infrastructure User Guide, for more information on executing a batch.

The batches to be executed are as follows:

• **Dimension Table Population (<INFODOM>_CRA_DIMENSION_DATA_POP):**
Dimension Table Population Process refers to the process of moving the dimension data from the Processing Dimension tables to the Common Reporting Dimension tables shared by all of the OFSAA Business Intelligence (BI) Applications. The Dimension Table Population is handled by the Slowly Changing Dimension (SCD) Process and the Data Transformations (DT) Process. SCDs are used to maintain the history of Dimension Member changes over time.
The Run Chart details the tasks executed when the dimension table population batch is executed. It also states the order in which the tasks are executed as mentioned in the Precedence Section of the Run Chart. See the OFS CRA Run Chart (**MOS Document ID: 2017353.1**), for more details on the individual tasks executed. You must update this batch after installing the application. Later, if the data undergoes any change or new data is updated, then the relevant tasks must be updated.

• **Common Data Population (<INFODOM>_CRA_CAS_POP):** This batch is executed to populate data from the Stage Product Processors to the Fact Common Account Summary (FCT_COMMON_ACCOUNT_SUMMARY) tables. The Fact Common Account Summary

table is a Common Fact table used by all the Oracle Financial Services Analytical Applications. This is a T2T functionality and the order in which the tasks are executed is stated in the Run Chart. You must execute this batch for each MIS date. If there is any mismatch with the data then all the records for that MIS Date must be deleted and data must be loaded again.

- **CRA - ALM Integration:** This batch is executed only when the OFS ALM Cash Flows are considered for OFS CRA. You must execute the following batches for successful CRA - ALM Integration:

  - SCD2ALM2CRA2INTGRTION

  - ALM_CRA_Cashflows

- **Data Preparation (INFODOM_CRA_DATA_PREP):** This ICC Batch is configured to contain party data tasks required for Enterprise Credit Risk Calculation. You must execute this batch whenever there is a change, or a new download is received for the tables listed under this batch.

- **Exchange Rate (<INFODOM>_CRA_BATCHDAILY):** This ICC Batch is configured to contain Party Data Tasks required for Enterprise Credit Risk Calculation. You must execute this batch to populate the FSI_EXCHANGE_RATES table.

- **Instrument Data (<INFODOM>_CRA_SCDINSTRCONTRACT):** Execute this task first time for the date for which data is available in the stage table (VW_STG_INSTRUMENT_CONTRACT). Ensure to execute this task, whenever data is modified, or new data is entered.

- **Reporting Table Population (<INFODOM>_CRA_BI_POPULATION):** Execute this Run to move the data from the CRA Fact tables to the CRA Reporting tables, based on the date.

- **Customer Data (<INFODOM>_CRA_MAPPER_CUSTOMER_POP):** Execute this batch to load data to the dim_customer table.

- **Application Data (<INFODOM>_CRA_APPLN_DATA_LOAD):** Execute this batch to move data from stage applications related tables to fact tables.

- **Additional Batches:** Add the new CRA POI to the Application Table Population batch (<INFODOM>_CRA_EXTERNAL_ENGINE_DATA_POPULATION). This task should be executed only if POI_LLFP_ACCOUNT_SUMMARY is available. The T2T process populates the FCT_LLFP_ACCOUNT_SUMMARY table from POI_LLFP_ACCOUNT_SUMMARY.

> ⓘ **Note**
>
> To obtain the POI_LLFP_ACCOUNT_SUMMARY table, apply patch ID 36261347: ORACLE FINANCIAL SERVICES DATA FOUNDATION 8.1.2.5.0 ONE-OFF PATCH #1 RELEASE (8.1.2.5.1).

- **Derived Entities Resave (<INFODOM>_RESAVE_DE_CRA_COMMON):** Execute this batch to resave the derived entities of CRA.

> ⓘ **Note**
>
> This is a one-time activity and does not need to be executed for every run or for different dates.

- **Policy MV Batch (<INFODOM>_CRA_APPLN_POLICY_MV)** : Execute this batch to load the CRA_POLICY_MV_DYNAMIC_QUERY table with the DML of FCT_CRA_AGG_SUMMARY_APPLN_POLICY_MV table.

3.3 Materialized View

You to create a derived entity based on a dataset, an entity or a union of derived entities. For union and union all options, the metadata used in the participating derived entities determine the columns of the physicalized materialized view. For union based derived entity, even if the participating derived entities have metadata in common, the resultant materialized view in database will ensure unique columns. The supported materialized views are:

- **Application Materialized View**: Aggregates application-level data across multiple dimensions, offering insights into application origination and approval processes.

- **Credit Line Materialized View**: Aggregates data at the credit line level, capturing associated account data across dimensions, allowing for detailed analysis of credit lines and their linked accounts.

- **Account Materialized View (Accounts Not Linked to Credit Line)**: Provides aggregated measures for accounts that are independent of any credit line, enabling targeted insights into standalone account activity.

- **Aggregate Materialized View (Accounts Not Linked to Credit Lines and Stand-alone Accounts)**: Merges data from both credit lines and standalone accounts, offering a consolidated view of all financial facilities extended by the institution.

- **Account Materialized View (All Accounts)**: Aggregates data for all accounts, whether linked or unlinked to a credit line, supporting account-level analysis across a wide array of over 50 dimensions. This view enhances flexibility in reporting by enabling comprehensive account-level insights regardless of credit line linkages.

- **Extensible Materialized View**: This customizable materialized view is built on top of the Application Materialized View. It retains all the dimensions of the underlying view while also aggregating application policy applicability and exceptions, providing enhanced flexibility and analytical capabilities.

> ⓘ **Note**
>
> To customize or modify the derived entities, ensure that you make a copy of the derived entities and do your modifications on them since the default derived entities are overwritten with the new derived entities as part of the upcoming releases.

> ⓘ **Note**
>
> In the materialized views for date dimensions, if a date value is **null**, it is represented as **19000101**, and the corresponding description is **null**.

To enable partition for the derived entity, turn on the toggle button in the **Derived Entity Details** page. For more information, see the *Creating Derived Entity* section in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

Ensure that you add the partition values for the Derived Entity definitions that are created with prebuilt table flag set as Y. For more information see the **Adding Partition Values** section in the Oracle Financial Services Analytical Applications Infrastructure User Guide.

> ⓘ **Note**
>
> Ensure that you mark the reporting flag as 'Y' for the required run skey before running the BI population batch since the materialized views are refreshed in the BI population batch. The refresh happens for the run skey for which the reporting flag is marked as 'Y'. The refreshed materialized views contains data only for one run skey (of a date for which reporting flag is marked as 'Y').

3.3.1 Maintaining Hierarchies and Business Processes in Application Policy Materialized View

To extend, modify, or delete the hierarchy or business process definitions for the materialized view `FCT_CRA_AGG_SUMMARY_APPLN_POLICY_MV`, you can configure the required details in the seeded reference table `CRA_APPLN_POLICY_MV_REF_TBL`.

Table 3-3   CRA_APPLN_POLICY_MV_REF_TBL - Column Descriptions

Column Name	Description
TABLE_NAME	The materialized view for which the hierarchy or business process is being configured. Use `FCT_CRA_AGG_SUMMARY_APPLN_POLICY_MV` for application policy mview.
COLUMN_TYPE	The type of column to add. Valid values: **HIERARCHY**' or **BUSINESS_PROCESS**.
VAR_NAME	Name of the hierarchy or business process to be added.
VAR_DESC_EXPR	Expression used to populate the HCRA% column. Example: dim_service_channel.v_channel_desc.
VAR_EXPR	Expression used to populate the PK_HCRA% column. Example: n_channel_skey.
DIMENSION_TABLE	Name of the dimension table used. Example: dim_channel.
DIMENSION_ALIAS	Optional alias name if multiple hierarchies share the same dimension table. Example: dim_service_channel.
ANSI_JOIN_COND	Join condition between the transaction and dimension tables.

Example:

- **To add a hierarchy (for example, Service Channel):**
  - COLUMN_TYPE: 'HIERARCHY'
  - VAR_NAME: Based on available hierarchy code series (e.g., HCRA0088)
  - VAR_DESC_EXPR: dim_service_channel.v_channel_desc
  - VAR_EXPR: n_channel_skey
  - DIMENSION_TABLE: dim_channel
  - DIMENSION_ALIAS: dim_service_channel
  - ANSI_JOIN_COND: Join condition between fsi_cra_application_summary and dim_service_channel

- **To add a business process:**
    - COLUMN_TYPE: 'BUSINESS_PROCESS'
    - VAR_NAME: Appropriate series name
    - VAR_DESC_EXPR: Required aggregation expression
    - Other columns are filled as per requirement

4

Data Mapping

Data Mapping creates a mapping between the source data elements and OFS Credit Risk Analytics Data Structure. When a Run is executed, the input data from the staging tables and the dimension tables are populated in the relevant Fact tables in a sequence as mentioned in the Run Chart.

This section provides a high-level design of the Data Mapping Structure as per the tasks executed within a Run.

4.1 Application Analysis

The following is the data flow for application analysis.

Figure 4-1   Data Flow Application Analysis
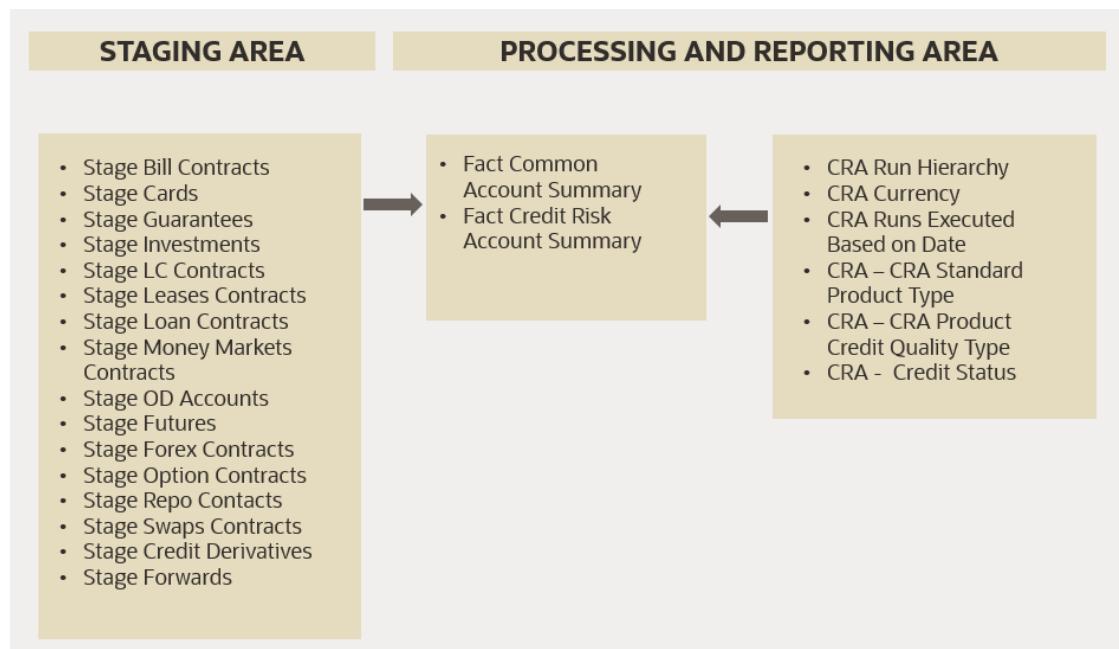
4.2 Exchange Rate Flow

The following is the data flow for Exchange Rate Flow.

Figure 4-2   Exchange Rate Flow
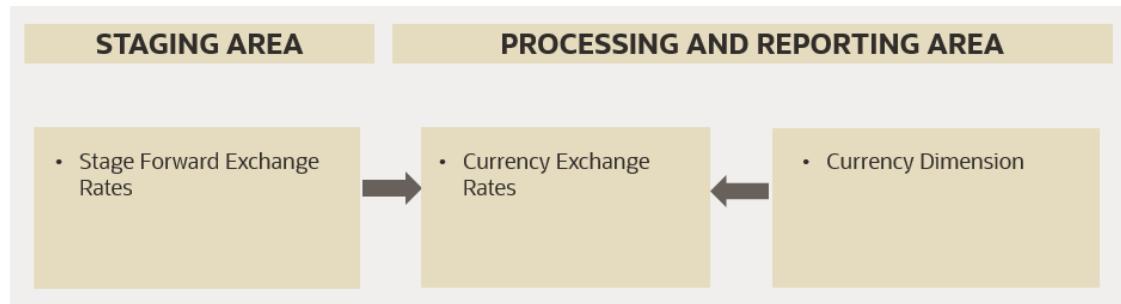
4.3 Account Cash Flow Analysis

The following is the data flow for Account Cash Flow Analysis.

Figure 4-3   Account Cash Flow Analysis
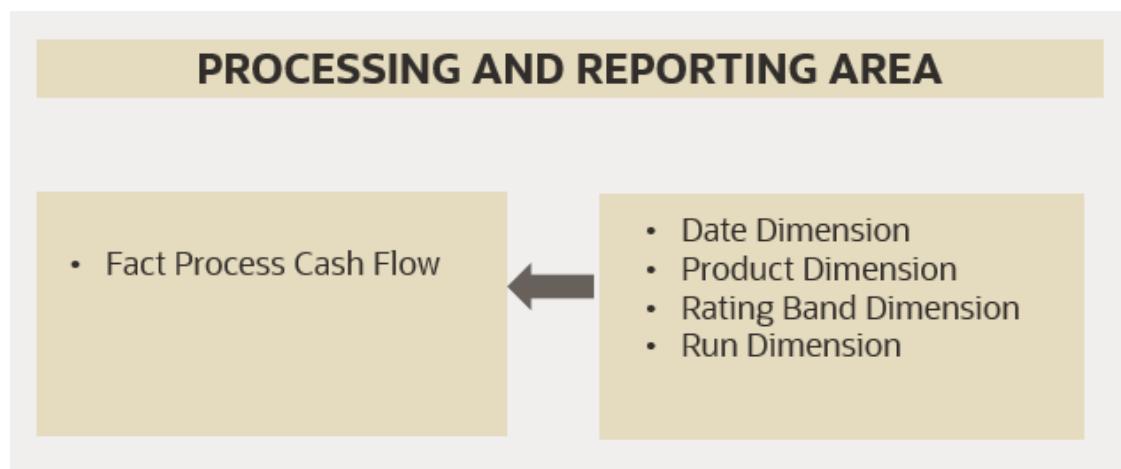
4.4 Account Mitigant Analysis

The following is the data flow for Account Mitigant Analysis.

Figure 4-4   Account Mitigant Analysis
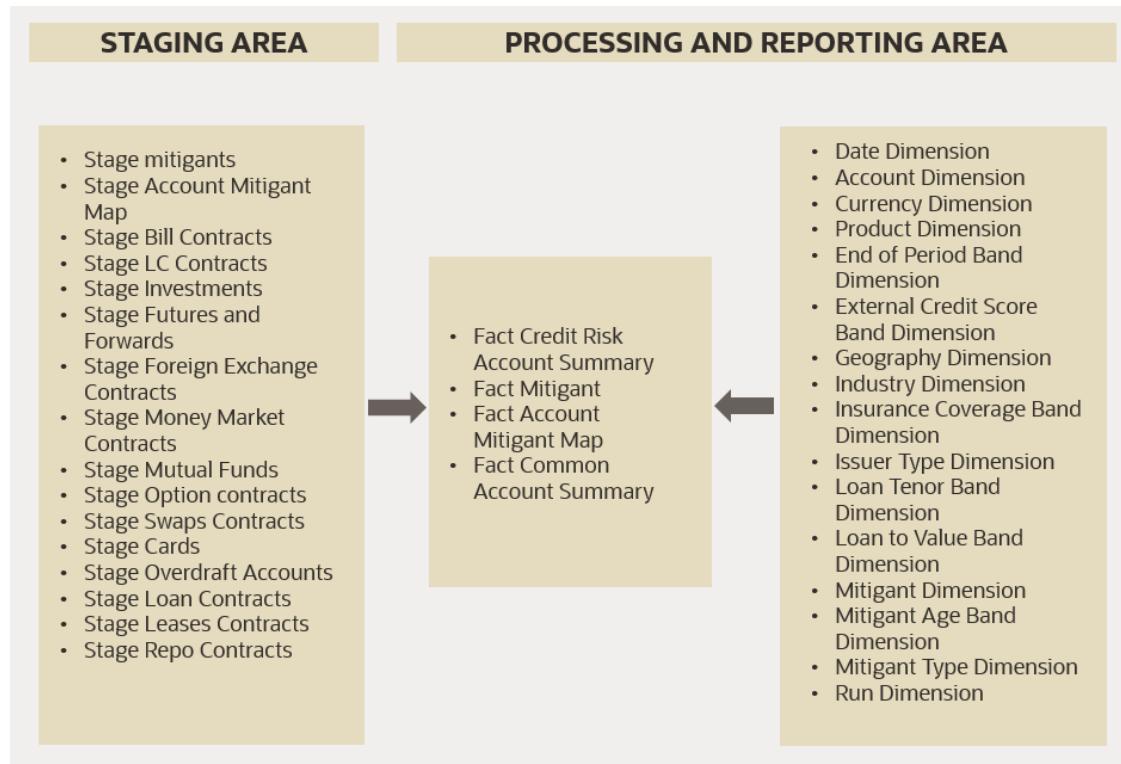
4.5 Counterparty Credit Risk Analysis

The following is the data flow for Counterparty Credit Risk Analysis.

Figure 4-5   Counterparty Credit Risk Analysis
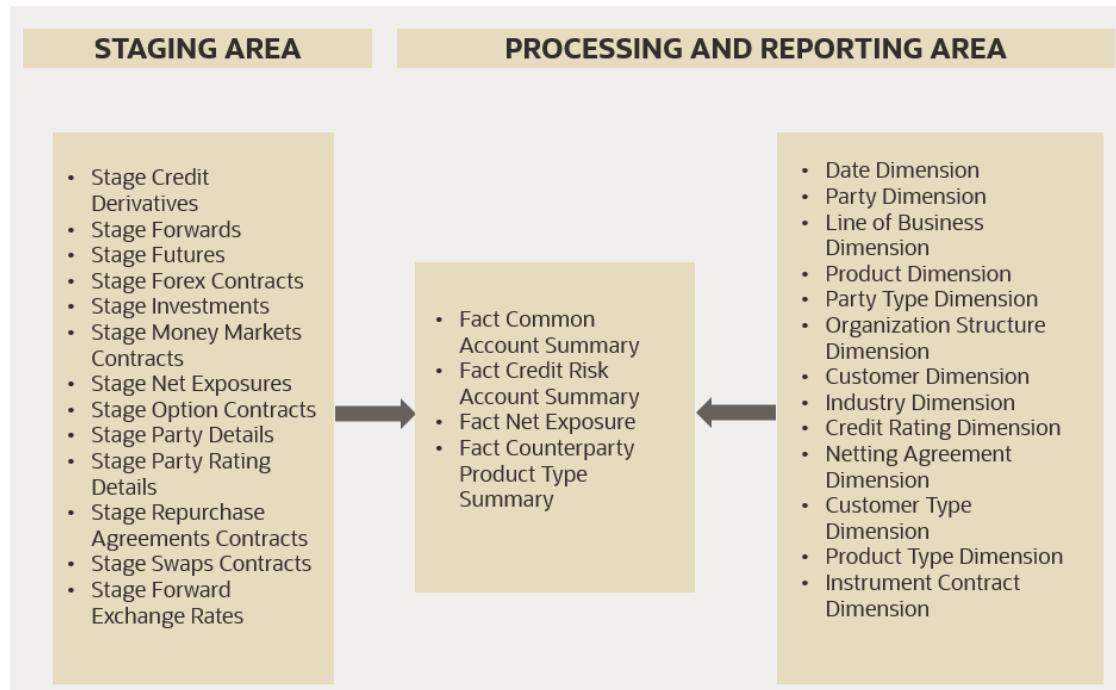
4.6 Predicted Wholesale Transition Matrix Analysis

The following is the data flow for Predicted Wholesale Transition Matrix Analysis.

Figure 4-6   Predicted Wholesale Transition Matrix Analysis
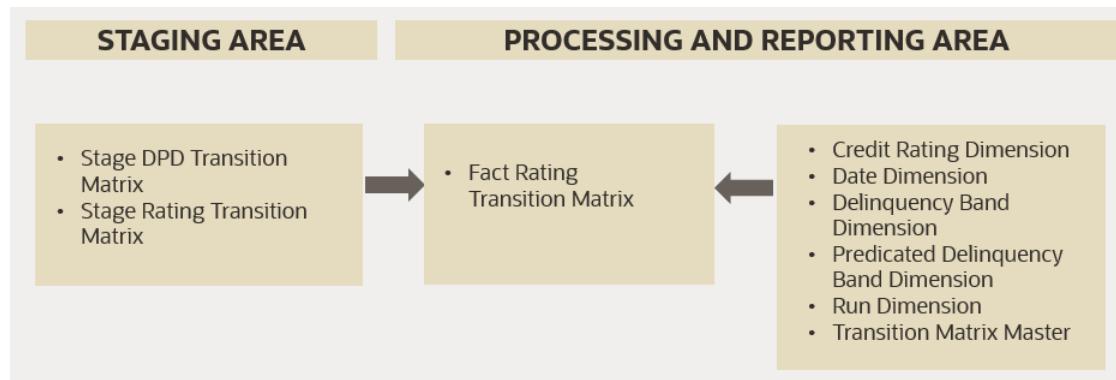
4.7 Collections Analysis

The following is the data flow for Collections Analysis.

Figure 4-7 Collections Analysis
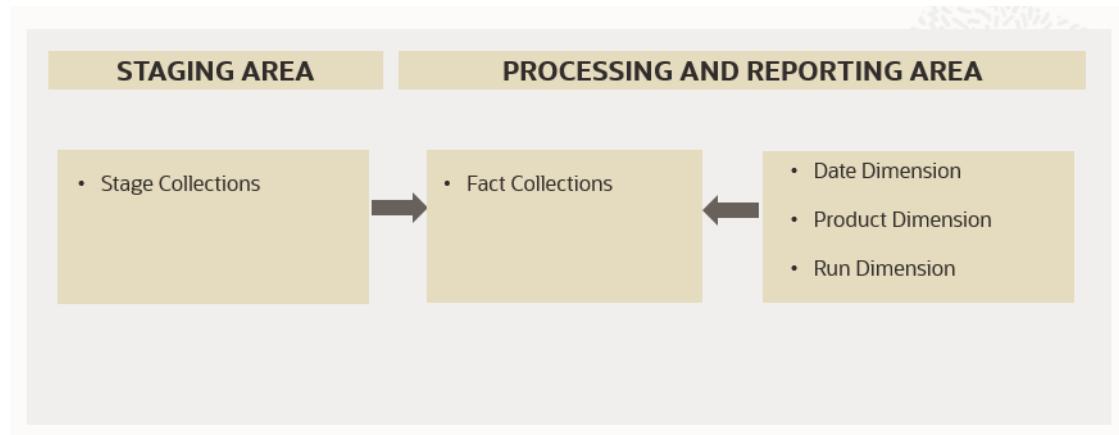
4.8 Adding new policy column in RPD

CRA supports out-of-the-box policies and custom policies. However, to add custom policies we need to import the metadata to the reporting layer.

4.8.1 Adding new policy columns in RPD

Application Policies (deviations) may change for different execution for each of the application.

By default, 20 placeholders are enabled in the CRMBI.rpd. If you need more columns, remaining placeholder columns need to be imported in CRMBI.rpd from physical layer to BMM layer to Presentation layer.

1. Go to CRMBI.rpd, Physical Layer, FCT_CRA_AGG_SUMMARY_APPLN_POLICY_MV, New Object and then Physical Column.

Figure 4-8   RPD screen
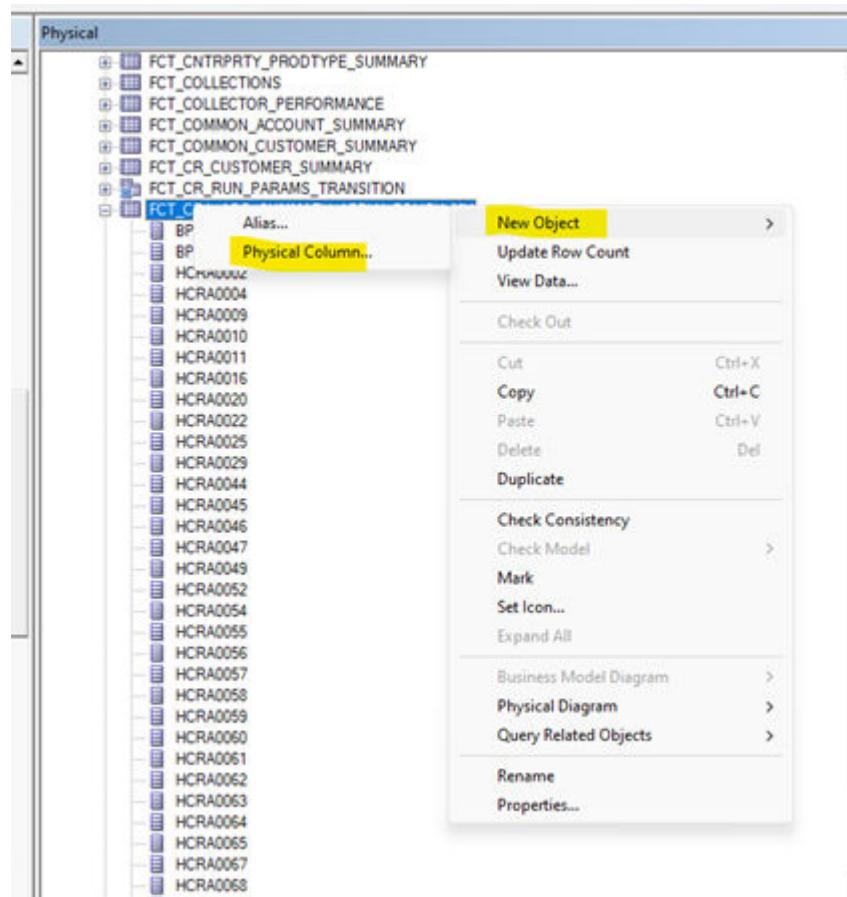
2. Add new physical column as per FCT_CRA_AGG_SUMMARY_APPLN_POLICY_MV table in Database.

Figure 4-9   Table view
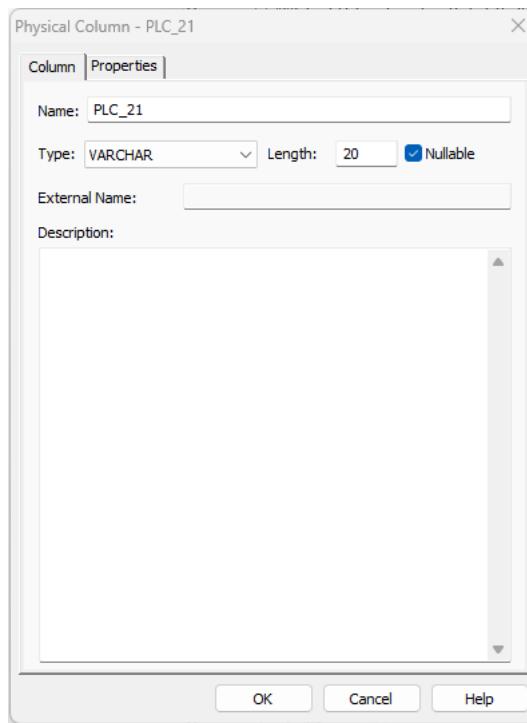
3. Similarly, add PLC21_APPL, PLC21_DEV, and PLC21_SKEY

4. Move the newly added columns from Physical layer to BMM layer.

   Move the columns from alias table **Physical layer - Fact CRA Aggregate Summary Application Policy to BMM layer - Fact CRA Aggregate Summary Application Policy table**

5. In BMM Layer Rename the columns as below.

   • PLC_21 to Placeholder 21

- PLC_21_APPL to Placeholder 21 Applicability
- PLC_21_DEV to Placeholder 21 Deviation
- PLC_21_SKEY to Placeholder 21 SKey
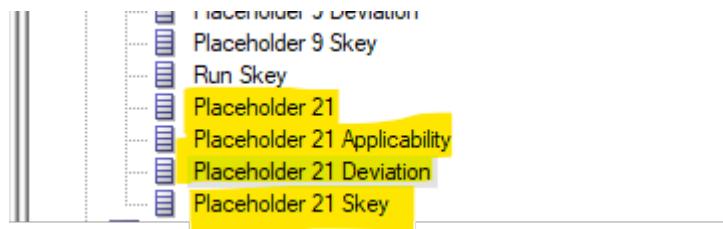
6. Move the columns from BMM Layer to Presentation Layer.

Subject Area: CRA Aggregate Summary Application Policy

Presentation Table : Fact CRA Aggregate Summary Application Policy

Figure 4-10　Prentation
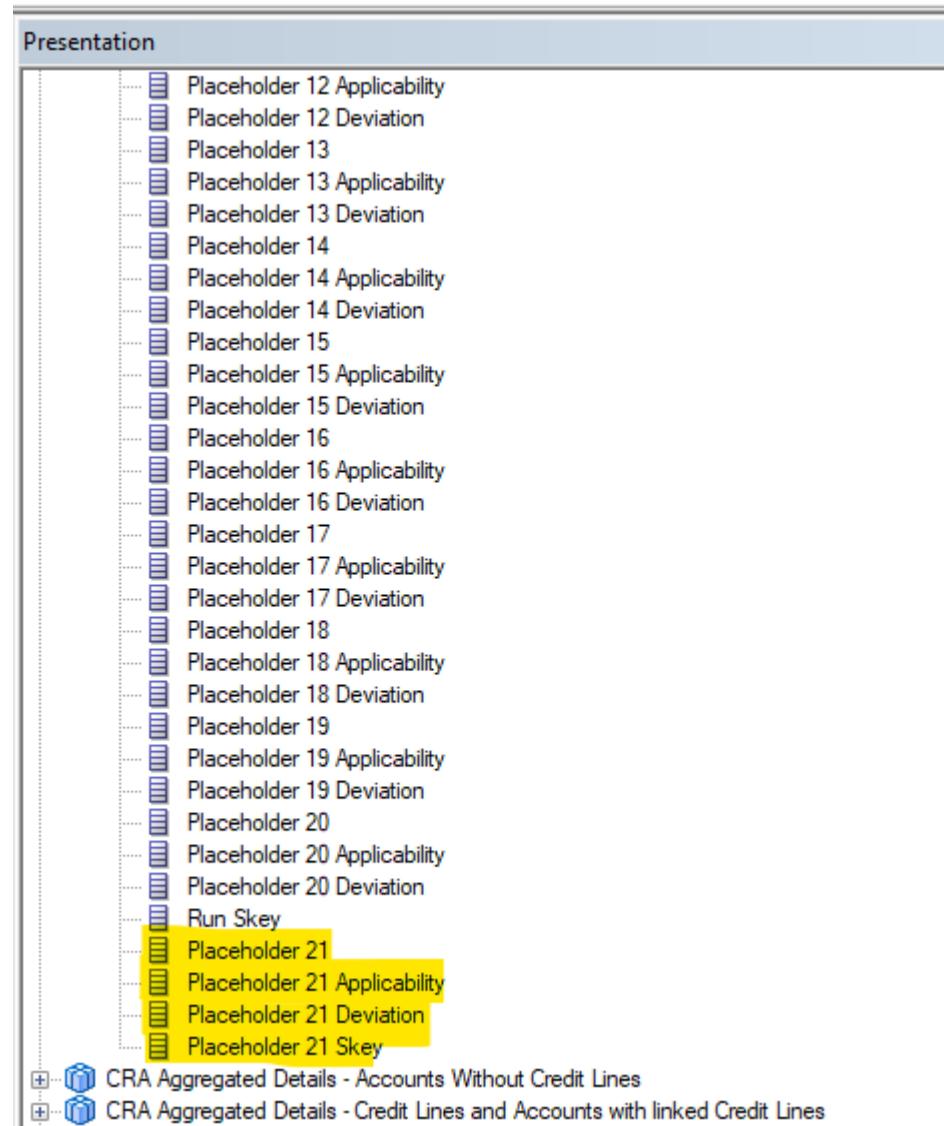
7. Save and deploy the rpd.

5
Reclassification of Standard Dimensions

This chapter provides information about Standard Dimension Tables in the Credit Risk Analytics application.

5.1 Overview of the Reclassification of Standard Dimensions

There are certain Standard Dimensions in Financial Services Data Foundation, which are pre-populated with standard set of values. These values are used by downstream applications for various reporting requirements. There are equivalent customer specific dimension tables which are populated using Slowly Changing Dimension (SCD) process. It is required to reclassify these user specific values to standard specific values as the reporting expects these standard set of values. The reclassification is done using out of the box Mapper Definitions under Mapper Maintenance screen.

5.2 Overview of the Mappers for the Reclassification of Standard Dimensions

Table 5-1   Overview of the Mappers for the Reclassification of Standard Dimensions

Mappers	Reclassification of Standard Dimensions
MAP_CRDLN_TYP_STD_CRDLN_TYP	Mapper for Credit Line Type to Standard Credit Line Type

5.3 Maintenance of the Mapper for the Reclassification of Standard Dimensions

5.3.1 Loading Mapper Maintenance through Backend

Load each physical table in the Atomic schema with **V_MAP_ID** as specified for each mapper.

- **V_MEMBER_1:** Customer-specific value dimension's member code.
- **V_MEMBER_2:** Standard dimension's member code

Table 5-2   The list and details of the Mapper physical tables

Physical Table	V_MAP_ID
MAP_CRDLN_TYP_STD_CRDLN_TYP	1511527713328

6

CRA Processing

The OFS Credit Risk Analytics Application includes an Enterprise Run for data transfer from the Input tables to the Processing tables and deals with only the asset products of the bank. The Enterprise Run must be executed on a monthly basis. Multiple Runs can be present for each of these Runs, but an indicator is present to identify the Reporting Run, from which data will be reported. You can update the reporting flag from the Run Execution Summary screen.

The Reporting Run Indicator is configured for reports which include trends over a period of time. If one of the previous Runs with the same Run ID has a Reporting Run Indicator with a different date, then data from this Run is used in displaying the Trend Reports.

6.1 Manage CRA Rules

Financial institutions require constant monitoring and measurement of risk to conform to prevalent Regulatory & Supervisory Standards. Such measurement often entails significant computations and validations with an organization's data. Data must be transformed to support such measurements and calculations. The data transformation is achieved through a set of defined Rules.

See the Components of Rules Run Framework section in the OFS Advanced Analytics Infrastructure User Guide for details.

6.2 Run Management

The Run Management screen of the OFS CRA Application allows you to view and execute Runs.

6.2.1 Understanding Run Management Summary

In the **Oracle Financial Services Analytical Applications Infrastructure** Home screen, select **Financial Services Credit Risk Analytics**.

To open the Run Management Window, select **Credit Risk Analytics**, and then select **Run Management** on the Left-Hand Side (LHS) menu.

The Run Management Summary page of the OFS CRA Application allows you to execute Run or Runs and view the Run Execution Summary.

Figure 6-1   Run Management Summary

The search section contains multiple parameters. You can specify one or multiple search criteria in this section. When you click the search icon, depending upon the search criteria, the application filters and displays the relevant search combination parameters under the Run Management Summary as a list.

The following table lists the Run Management - Fields and Descriptions.

Table 6-1   Run Management – Fields and Descriptions

Search Field or Icon	Description
Search	This icon allows you to search the Run definition based on the search criteria specified. Search criteria include a combination of Run Name and Folder. The Run definitions displayed in the Run Management Summary Table are filtered based on the search criteria specified on the clicking of this icon.
Reset	This icon allows you to reset the Search section to its default state that is, without any selections. Resetting the Search section displays all the existing Run definitions in the Run Management Summary Table.
Run Name	Enter the Run name. This field allows you to search the pre-defined Run based on the Run name.
Folder	This field allows you to search for the pre-defined Run definitions based on the selected folder. This field displays a list of folders that you have access to as a drop-down. The selection of a folder from the drop-down list displays only those Run definitions that have been defined within the selected folder/segment in the Run Management Summary Table.
Active	This field enables you to view all the active Runs. Select Yes to view only the active Runs.

The following table lists the Run Management - Summary icons.

Table 6-2   Run Management - Summary icons

Runs Icon Name	Icon	Description
Run Execution Parameters		This icon allows you to specify execution parameters and execute the Run from the Run Execution Parameters screen. Select the checkbox against a Run definition and click the Run Execution Parameters icon to view the Run Execution Parameter Specification Window.
Run Execution Summary		This icon displays the Run Execution Summary window. The Run parameters specified as part of the Run Definition Window are displayed in an un-editable form in the Run Parameters Window. The entire list of executions and their details are displayed for the selected definition on this screen.

6.3 Run Execution Parameters

In the **Run Management Summary** window, select a Run from the list of Runs, and click Execute. The **Run Execution Parameters** window is displayed.

Figure 6-2   Run Execution Parameters window
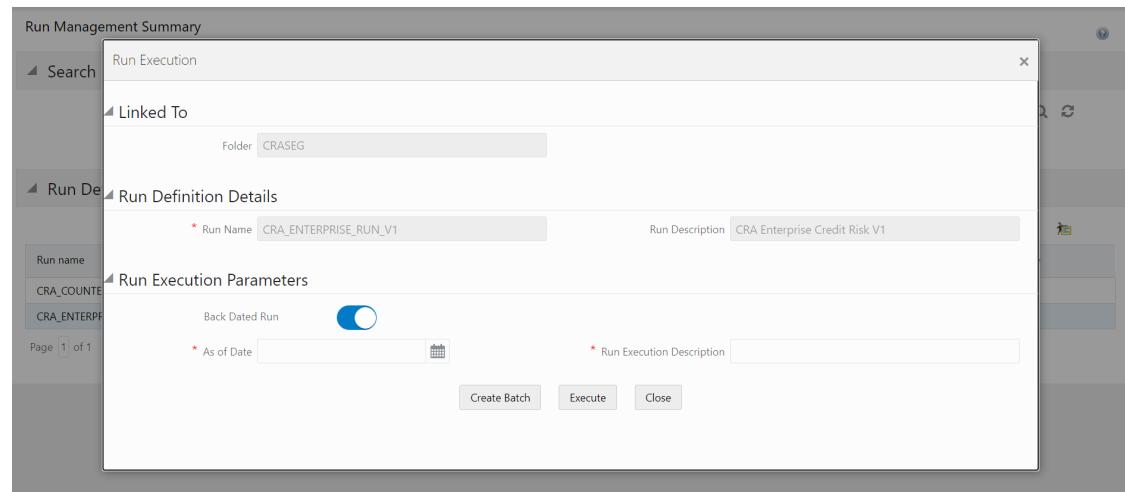
6.3.1 Linked To

This field displays the Folder name, which is specified during the Run Definition.

6.3.2 Run Definition Details

This section displays the Run Name and Run Description specified for the selected Run during the Run Definition. These details cannot be edited.

6.3.3 Run Execution Parameters

The Run Execution Parameters must be specified for the selected Run.

6.3.3.1 As-of-Date

Select an As-of-Date from the calendar.

The application uses the data available in the Staging Area with a date corresponding to the As-of-Date, for computations. This is different from the Execution Date.

6.3.3.2 Run Execution Description

This field allows you to provide a brief description of the Run Execution.

6.3.3.3 Back Dated Run

Prior to Release 8.1.0.0.3, during a Run Execution for a Previous Date, the application considered the dimensions that are currently used having the Latest Record Indicator (LRI) as Y, for execution.

Back Dated Execution feature enables you to specify a back dated MIS Date, which will consider the dimensions that were being used during that specific period, for execution.

Navigate to **Common Objects Maintenance**, select **Data Management**, select **Data Management Framework**, select **Data Management Tools**, and then select **DMT Configurations** to update the SCD Mode.

The SCD Mode field is applicable only if SCD uses a merge approach.

- CPP_V1: Select this option to perform SCD execution for Non – Backdated Execution Date.

- BACKDATED_V1: Backdated support for CPP_V1. Select this option to perform SCD execution for Backdated execution date.

> ⓘ **Note**
>
> For the Backdated Executions containing type 2 column mappings, the following column mappings are mandatory :
>
> - Start Date
> - End Date

6.4 Executing a Run

The Runs defined in the Run Framework of OFSAAI can be executed through the **Run Management** window.

A toggle button has been introduced in the Run Management Screen for back dated run execution. On enabling the toggle button, the execution is performed for backdated dates, else the execution is performed for non-backdated dates.

By default, the toggle button is disabled, you need to enable it for backdated execution dates.

To execute a Run, follow these steps:

1. Specify the Run execution parameters and Click **Create Batch** or Click **Execute**. This creates a batch. You can schedule the batch from the Scheduler Module of OFSAAI or execute the batch from the **Batch Execution** module of OFSAAI.

2. Click Execute, to monitor the status from the **Batch Monitor** module of OFSAAI.

   See the Operations Section in the [OFS Advanced Analytics Infrastructure User Guide](#) for details.

6.5 Run Execution Summary

To view the summary of all the Run executions for a particular Run:

1. Select the Run from the list of Runs in the **Run Management Summary** window and click **Run Execution Summary**.

   The **Run Execution Summary** window is displayed as follows:

   Figure 6-3   Run Execution Summary
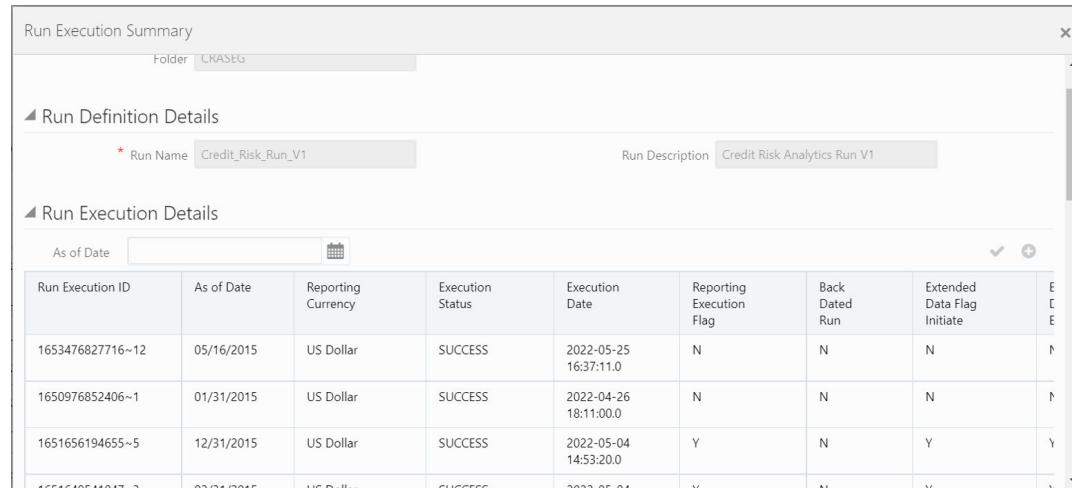
All the parameters entered as part of the **Run Definition** window are displayed in the **Run Execution Summary** window in an uneditable form. The **Run Execution Details** section displays the Run Execution Parameters specified for each execution.

You can filter the Run executions by **As-of-Date**.

2. Select a successful **Run Execution ID** and click **Reporting Execution Flag** to report it for execution.

   A confirmation message appears before updating the Reporting Flag.

Figure 6-4   Reporting Execution Flag

Figure 6-5   Modal Dialog

a. Click **Yes**.

This Run ID is now listed in the List of Reporting Run Execution per As-of-Date section.

b. When you select a Run execution that has failed, the **Reporting Execution Flag** is disabled.

The **List of Reporting Run Execution per As-of-Date** section displays the Run Execution Parameters, which are reported for execution.

3. Select a successful **Run Execution ID** and click **Create Extended Data Flag** to populate the data from the executed Run in the executables based on the date of the selected Run.

This feature enables you to select any one execution, out of the executions performed in a specific date. The selected Run is flagged as ready-to-execute. When you execute the **<INFODOM>_CRA_BI_POPULATION** batch, the data from the selected Run is populated in the respective tables, based on the date.

7

Viewing CRA Objects in the Metadata Browser

The Credit Risk Analytics under Oracle Financial Services Analytical Applications has the Metadata Browser (MDB). The MDB Window displays RRF Runs in application view and CRA Objects in object view.

For details, see the [Metadata Browser User Guide Release 8.1](#) available on the OHC Documentation Library.

8

OFSAA Infrastructure Components Used in OFS CRA

OFS CRA uses the following components and frameworks of OFSAA infrastructure:

• **Common Object Maintenance:** It is an integral part of the Infrastructure System and facilitates System Administrators to define the Security Framework. This framework has the capacity to restrict access to the data and metadata in the warehouse, based on a flexible, fine-grained access control mechanism. See the OFS Analytical Applications Infrastructure User Guide for features and details.

    – **Data Model Maintenance:** OFS CRA uses the **Data Model Maintenance** module of OFSAA. You can upload the data model using this component.

    – **Data Management:** OFS CRA uses the Data Management tools such as Data Sources, Data Mapping, Data File Mapping, and Post Load Changes. Data Quality Rules and Data Quality Groups in the OFSAA Data Quality Framework. OFS MRMM uses Excel Upload (Atomic), Forms Designer, Forms Authorization, Data Entry from the Data Entry Forms, and Queries module of OFSAA.

    – **Unified Analytical Metadata:** OFS CRA uses Dimension Management (Member, Attribute, and Hierarchy Management) from the **Unified Analytical Metadata** module of OFSAA.

    – **Operations:** OFS CRA uses Batch Maintenance, Batch Execution, Batch Monitor, Batch Cancellation, Batch Scheduler, and View Log from **Operations** module of OFSAA.

    – **Process Modeling Framework:** OFS CRA uses the **Process Modeling Framework** module of OFSAA.

    – **Rule Run Framework:** Process Modeling Framework internally uses **Process** and **Run** from the OFSAA Run Rule Framework.

• **Object Administration:** It is an integral part of the infrastructure and facilitates System Administrators to define the Security Framework. See the OFS Advanced Analytics Infrastructure User Guide for details.

9
Metadata Information

This chapter has all the metadata information for this release.

9.1 Rules

List of rules that are added or modified as part of this release are:

- CRARULE0014 - Delinquent Account Classification
  This Rule will update the BPCRA009 (F_ACCT_DELQ_FLAG) in
  FCT_CREDITRISK_ACCOUNT_SUMMARY table.

- CRARULE0015 - Impaired Asset Assignment
  This Rule will update the BPCRA015 (F_IMPAIRED_FLAG) in
  FCT_CREDITRISK_ACCOUNT_SUMMARY table.

- CRARULE0045 CRA - Age On Book Band
  This Rule will update the BPCRA044 (N_AGE_ON_BOOK_BAND_SKEY) in
  FCT_CREDITRISK_ACCOUNT_SUMMARY table.

- CRARULE0051 CRA - Adjusted EOP Population
  This Rule will update the BPCRA135 (N_ADJUSTED_EOP) and BPCRA136
  (n_adjusted_eop_rcy) in FSI_CRA_ACCOUNT_SUMMARY table by default based on
  standard product type as HELOC. If it is not Home Equity Line of Credit (HELOC), then
  BPCRA075 and BPCRA076 is updated based on n_eop_bal and n_eop_bal_rcy
  respectively.

- CRARULE0052 CRA - High Risk Account Classification
  This Rule will update the BPCRA074 (F_HIGH_RISK_ACCOUNT_FLAG) in
  FSI_CRA_ACCOUNT_SUMMARY table.

- CRARULE0053 CRA - Delinquent Amount Computation
  By default, this Rule will update the BPCRA085 (N_DELQ_AMOUNT) and BPCRA087
  (N_DELQ_AMOUNT_RCY) in FSI_CRA_ACCOUNT_SUMMARY table. This can be
  customized to the BPCRA084 (Account Delinquent Amount based on Adjusted EOP) and
  BPCRA086 (Account Delinquent amount in Reporting Currency based on Adjusted EOP).

- CRARULE0054 CRA - Delinquent Days above 30, 60 and 90 Flag Population
  This Rule will update the BPCRA081 (F_ABOVE_30_DAYS_DEL_FLAG),BPCRA082
  (F_ABOVE_60_DAYS_DEL_FLAG), BPCRA083 (F_ABOVE_90_DAYS_DELQ_FLAG) in
  FSI_CRA_ACCOUNT_SUMMARY table.

> ⓘ **Note**
>
> By default, N_DELQ_DAYS for F_ABOVE_30_DAYS_DEL_FLAG is 30 days, for
> F_ABOVE_60_DAYS_DEL_FLAG is 60 days and for
> F_ABOVE_90_DAYS_DEL_FLAG is 90 days. This can be updated accordingly in
> the **Rule Parameter** screen.

- CRARULE0055 CRA - Impaired Amount Computation

By default, this Rule will update the BPCRA089 (N_IMPAIRED_AMOUNT) and BPCRA091 (N_IMPAIRED_AMOUNT_RCY) in FSI_CRA_ACCOUNT_SUMMARY table. This can be customized to the BPCRA088 (Account Impaired Amount based on Adjusted EOP) and BPCRA090 (Account Impaired amount in Reporting Currency based on Adjusted EOP).

- CRARULE0011 CRA - Charge-Off Account Classification
  This Rule will update the BPCRA012 (F_WRITE_OFF_FLAG) in FCT_CREDITRISK_ACCOUNT_SUMMARY table.

- CRARULE0058 - CRA - Current Weighted Maximum Bureau Score
  This Rule will update the BPCRA093 (N_ECS_WTD_OUTSTANDING) in FSI_CRA_ACCOUNT_SUMMARY table.

- CRARULE0059 - CRA - Exposure Amount Population
  By default, in FSI_CRA_ACCOUNT_SUMMARY table:

  – For revolving indicator set to No:

    * This rule will update the BPCRA097 (N_EXPOSURE_AMOUNT). This can be customized to the BPCRA0101 (Sum of Outstanding and Undrawn Amount), BPCRA096 (Current Credit Limit) or BPCRA095 (Maximum of Current Credit Limit And Adjusted EOP).

    * This rule will update the BPCRA098 (N_EXPOSURE_AMOUNT_RCY). This can be customized to the BPCRA101 (Sum of Outstanding and Undrawn Amount RCY), BPCRA099 (Current Credit Limit RCY) or BPCRA100 (Max of CCL and Adjusted EOP Bal RCY)

  – For revolving indicator set to Yes:

    * This rule will update the BPCRA095 (Max of CCL and Adjusted EOP Balance). This can be customized to the BPCRA094 (Sum of Outstanding and Undrawn Amount), BPCRA097 (Adjusted EOP Balance) or BPCRA096 (Current Credit Limit).

    * This rule will update the BPCRA100 (Max of CCL and Adjusted EOP Bal RCY). This can be customized to the BPCRA101 (Sum of Outstanding and Undrawn Amount RCY), BPCRA098 (Adjusted EOP Balance RCY), or BPCRA099 (Current Credit Limit RCY)

- CRARULE0060 - CRA - Weighted Current and Combined LTV By Exposure Computation
  This rule will update the BPCRA102 (Weighted Current Combined LTV By Exposure) in the N_COM_LTV_WTD_BY_EXP in FSI_CRA_ACCOUNT_SUMMARY table.

- CRARULE0062- CRA - Account Funded Amount Computation
  By default, this rule will Update the BPCRA108 (Account Funded Amount As Drawn Amount) in the N_FUNDED_AMT and N_FUNDED_AMT_RCY in FSI_CRA_ACCOUNT_SUMMARY table. This can be customized to the BPCRA109 (Account Funded Amount As Line Utilized Amount in Credit Line Details).

- CRARULE0063- CRA - Application Funded Amount Computation
  This rule will update the BPCRA112 (Application Funded Amount As Drawn Amount) in the n_funded_amt, n_funded_amt_rcy in fsi_cra_application_summary table. This can be customized to the BPCRA115 (Application Level Funded Amount Based On Credit Line).

- CRARULE0064- CRA - Application Funded Flag Population
  This rule will update the BPCRA114 (Application Funded Flag) in the f_funded_flag in fsi_cra_application_summary table.

- CRARULE0066 - CRA - Age On Book
  This Rule will update the BPCRA121 (Age on Book) in the N_AGE_ON_BOOK in the FSI_CRA_ACCOUNT_SUMMARY table. This can be customized to BPCRA122 (Age on Book based on Value Date).

- CRARULE0067- CRA - Application Origination Credit Limit Population
  By default for the n_orig_credit_limit, n_orig_credit_limit_rcy in fsi_cra_application_summary tables are updated:
  - For CRA Standard Product Type:
    * This rule will update the BPCRA125 (Application Origination Credit Limit Based on Funded Amount). This can be customized to BPCRA123 (Application Origination Credit Limit Based on Exp Auth Amount) or BPCRA127 (Application Origination Credit Limit Based on Sanctioned Limit).
    * This rule will update the BPCRA126 (Application Origination Credit Limit Based on Funded Amount in RCY). This can be customized to BPCRA124 (Application Origination Credit Limit Based on Exp Auth Amt in RYC) or BPCRA128 (Application Origination Credit Limit Based on Sanction Limit in RCY).
  - For Home Equity Line of credit:
    * This rule will be update the BPCRA123 (Application Origination Credit Limit Based on Exp Auth Amount). This can be customized to BPCRA125 (Application Origination Credit Limit Based on Funded Amount) or BPCRA127 (Application Origination Credit Limit Based on Sanctioned Limit).
    * This rule will update the BPCRA124 (Application Origination Credit Limit Based on Exp Auth AMt in RYC). This can be customized to BPCRA126 (Application Origination Credit Limit Based on Funded Amt in RYC) or BPCRA128 (Application Origination Credit Limit Based on Sanctioned Limit in RYC).

- CRARULE0068- CRA - Application Weighted Measures Computation
  This rule will update the BPCRA117 (Application Weighted ECS by Origination Credit Limit) in the n_max_bureau_score_wtd_crlimit, n_rev_gds_wtd_org_crlimit, n_rev_ltv_wtd_org_crlimit, n_rev_tds_wtd_org_crlimit in fsi_cra_application_summary tables.

- CRARULE0069 - CRA - Application Summary Bands Population
  This rule will update the BPCRA129 (Origination Credit Score Band) in the n_org_credit_score_band_skey, n_rev_credit_score_band_skey, n_orig_ltv_band_skey, n_rev_gds_band_sky, n_rev_tds_band_skey in fsi_cra_application_summary tables.

- To add Business Process to Derived Entities, see

- To add Hierarchy to Derived Entities, see

9.2 Hierarchies and measures in Materialized View

Table 9-1   Hierarchy codes mapping to MVs

HCY Code	DIM Table	Hierarchy Name	CRAMV01	CRAMV02	CRAMV04	FCT_CRA_AGG_ SUMMARY_MV	FCT_CRA_AGG_ SUMMARY_MV_APPLN	FCT_CRA_AGG_ SUMMARY_APPLN_POLICY_MV
HCRA0001	DIM_RUN	v_run_execution_id	Y	Y	Y	Y		
HCRA0002	DIM_CURRENCY	v_currency_name	Y	Y	Y	Y	Y	Y

Table 9-1   (Cont.) Hierarchy codes mapping to MVs

HCY Code	DIM Table	Hierarchy Name	CRAMV01	CRAMV02	CRAMV04	FCT_CRA_AGG_ SUMMARY_MV	FCT_CRA_AGG_ SUMMARY_MV_A PPLN	FCT_CRA_AGG_ SUMMARY_APPL N_POLIC Y_MV
HCRA0004	DIM_STA NDARD_ PARTY_T YPE	V_STAND ARD_PAR TY_TYPE _D ESC	Y	Y	Y	Y	Y	Y
HCRA0009	DIM_PRO DUCT_TY PE	v_acct_pr od_type_ desc	Y	Y	Y	Y	Y	Y
HCRA0010	DIM_STA NDARD_ PRODUC T_T YPE	v_standar d_product _type_des c	Y	Y	Y	Y	Y	Y
HCRA0011	DIM_Prod uct	v_prod_d esc	Y	Y	Y	Y	Y	Y
HCRA0014	DIM_CRE DIT_STAT US	V_CREDI T_STATU S_DESC	Y	Y	Y	Y		
HCRA0016	DIM_LOB	V_LINE_ OF_BUSI NESS_D ESC	Y	Y	Y	Y	Y	Y
HCRA0020	DIM_WH OLESALE _RETAIL_ CAT EGORY	V_WHOL ESALE_R ETAIL_DE SC	Y	Y	Y	Y	Y	Y
HCRA0022	DIM_DEL Q_BAND	V_BAND_ SHORT_ DESC	Y	Y	Y	Y	Y	Y
HCRA024	DIM_RUN	FIC_MIS_ DATE	Y	Y	Y	Y	Y	Y
HCRA025	DIM_OR G_STRU CTURE	V_ENTIT Y_CODE	Y	Y	Y	Y	Y	Y
HCRA026	DIM_IND USTRY	V_D_IND USTRY_D ESC	Y	Y	Y	Y		
HCRA028	DIM_AGE _BOOK_ BAND	V_BAND_ SHORT_ DESC	Y	Y	Y	Y		
HCRA029	DIM_OR G_UNIT	V_ORG_ UNIT_CO DE	Y	Y	Y	Y	Y	Y
HCRA0041	DIM_LTV _BAND	V_BAND_ SHORT_ DESC	Y	Y	Y	Y	Y	

Table 9-1   (Cont.) Hierarchy codes mapping to MVs

HCY Code	DIM Table	Hierarchy Name	CRAMV01	CRAMV02	CRAMV04	FCT_CRA_AGG_ SUMMARY_MV	FCT_CRA_AGG_ SUMMARY_MV_A PPLN	FCT_CRA_AGG_ SUMMARY_APPL N_POLIC Y_MV
HCRA043	DIM_ACC T_INSUR ED	V_FLAG_ CODE	Y	Y	Y	Y		
HCRA004 4	DIM_EVE R_30_DE LQ	V_FLAG_ DESC	Y	Y	Y	Y	Y	Y
HCRA004 5	DIM_EVE R_60_DE LQ	V_FLAG_ DESC	Y	Y	Y	Y	Y	Y
HCRA004 6	DIM_EVE R_90_DE LQ	V_FLAG_ DESC	Y	Y	Y	Y	Y	Y
HCRA004 7	DIM_EVE R_X_DEL Q	V_FLAG_ DESC	Y	Y	Y	Y	Y	Y
HCRA004 9	DIM_CHA NNEL	V_CHAN NEL_DES C	Y	Y	Y	Y	Y	Y
HCRA005 1	DIM_UTIL IZATION_ BAND	V_BAND_ SHORT_ DESC	Y	Y	Y	Y		
HCRA005 2	DIM_APP LICATION _STATUS	N_APPLN _STATUS _SKEY			Y		Y	Y
HCRA005 4	DIM_DAT ES	N_DATE_ SKEY					Y	Y
HCRA005 5	DIM_PRO PERTY_T YPE	v_propert y_type_de sc	Y	Y	Y	Y	Y	Y
HCRA005 6	DIM_LOC ATION	V_LOCAT ION_DES C					Y	Y
HCRA005 7	DIM_APP ROVED_ DATE	N_DATE_ SKEY			Y		Y	Y
HCRA005 8	DIM_LEN DING_PR OGRAM	V_LENDI NG_PRO GRAM_D ESC	Y	Y	Y	Y	Y	Y
HCRA005 9	DIM_APP RAISAL_ TYPE	V_APPRA ISAL_TY PE_DES C					Y	Y
HCRA006 0	DIM_INT EREST_T YPE	V_INTER EST_TYP E_DESC	Y	Y	Y	Y	Y	Y

Table 9-1   (Cont.) Hierarchy codes mapping to MVs

HCY Code	DIM Table	Hierarchy Name	CRAMV01	CRAMV02	CRAMV04	FCT_CRA_AGG_ SUMMARY_MV	FCT_CRA_AGG_ SUMMARY_MV_A PPLN	FCT_CRA_AGG_ SUMMARY_APPL N_POLIC Y_MV
HCRA0061	DIM_APPLICATION _TYPE	V_APPLN _TYPE_D ESC			Y		Y	Y
HCRA0062	DIM_MORTGAGE _OCCUPANCY	V_MORTGAGE_O CCUPANY_D ESC	Y	Y	Y	Y	Y	Y
HCRA0063	DIM_APP _FUND_D ATE	D_CALEN DAR_DAT E	Y	Y	Y	Y	Y	Y
HCRA0064	DIM_STD _COUNT RY_DIVIS ION	V_STD_D IVISION_ DESCRIP TIO N	Y	Y	Y	Y	Y	Y
HCRA0065	DIM_STD _COUNT RY_REGI ON	V_STD_R EGION_D ESCRIPTI O N	Y	Y	Y	Y	Y	Y
HCRA0067	DIM_PRE PAY_IND_ FLAG	V_FLAG_ DESC	Y	Y	Y	Y	Y	Y
HCRA0068	DIM_REV _GDS_BA ND	N_BAND_ SKEY					Y	Y
HCRA0069	DIM_REV _TDS_BA ND	V_BAND_ SHORT_ DESC	Y	Y	Y	Y	Y	
HCRA0070	DIM_SUB MITTED_ DATE	N_DATE_ SKEY					Y	Y
HCRA0071	DIM_ORI G_LTV_R ANGE	N_BAND_ SKEY					Y	Y
HCRA0072	DIM_MAX _ORG_B EACON_ SCO RE_RAN GE	V_BAND_ SHORT_ DESC	Y	Y	Y	Y	Y	Y
HCRA0073	DIM_REV _BEACO N_SCOR E_R ANGE	V_BAND_ SHORT_ DESC					Y	Y

Table 9-1   (Cont.) Hierarchy codes mapping to MVs

HCY Code	DIM Table	Hierarchy Name	CRAMV01	CRAMV02	CRAMV04	FCT_CRA_AGG_SUMMARY_MV	FCT_CRA_AGG_SUMMARY_MV_APPLN	FCT_CRA_AGG_SUMMARY_APPLN_POLICY_MV
HCRA0074	DIM_INDICATOR_VALUES	V_INDICATOR_VALUE_DESCRIPTION	Y	Y	Y	Y		Y
HCRA0078	DIM_HIGH_RISK_ACCOUNT_FL AG	V_FLAG_DESC	Y	Y	Y	Y		
HCRA0079	DIM_CONFORMING_FLAG	V_FLAG_DESC	Y	Y	Y	Y	Y	Y
HCRA0080	DIM_DEVIATION_FLAG	V_FLAG_DESC	Y	Y	Y	Y	Y	Y
HCRA0085	DIM_CRA_ORIG_AMRT_BAND	V_BAND_SHORT_DESC	Y	Y	Y	Y	Y	Y
HCRA0086	DIM_CRA_AMRT_BAND	V_BAND_SHORT_DESC	Y	Y	Y	Y		
HCRA0087	DIM_LTI_BANDS	V_BAND_SHORT_DESC	Y	Y	Y	Y	Y	Y
HCRA0088	DIM_SERVICE_CHANNEL	V_CHANNEL_DESC	Y	Y	Y	Y	Y	Y
HCRA0089	DIM_ADJU_CHANNEL	V_CHANNEL_DESC	Y	Y	Y	Y	Y	Y
HCRA0090	DIM_RESIDENCY_STATUS_IND	V_INDICATOR_VALUE_DESCRIPTION	Y	Y	Y	Y	Y	Y
HCRA0091	DIM_APPLICATION_PURPOSE	V_APPLN_PURPOSE_DESC					Y	Y
HCRA0092	DIM_LOAN_TERM_BAND	V_BAND_SHORT_DESC	Y	Y	Y	Y		
HCRA0093	DIM_ADJUDICATION_TYPE	V_INDICATOR_VALUE_DESCRIPTION	Y	Y	Y	Y		

Table 9-1   (Cont.) Hierarchy codes mapping to MVs

HCY Code	DIM Table	Hierarchy Name	CRAMV01	CRAMV02	CRAMV04	FCT_CRA_AGG_ SUMMARY_MV	FCT_CRA_AGG_ SUMMARY_MV_A PPLN	FCT_CRA_AGG_ SUMMARY_APPL N_POLIC Y_MV
HCRA0094	DIM_PRO PERTY_U SE	V_PROP ERTY_US E_CODE _DE SC	Y	Y	Y	Y	Y	Y
HCRA0095	DIM_REV _LTV_BA ND	V_BAND_ SHORT_ DESC	Y	Y	Y	Y	Y	Y
HCRA0096	DIM_MAX _CUR_BE ACON_S CO RE_RAN GE	V_BAND_ SHORT_ DESC	Y	Y	Y	Y		
HCRA0097	DIM_INS URER	V_INSUR ER_NAM E	Y	Y	Y	Y	Y	Y
HCRA0098	DIM_CO MBINED_ HELOC_F LAG	V_FLAG_ DESC	Y	Y	Y	Y	Y	Y
HCRA0101	DIM_NU MBER_O F_DEVIA TION	V_INDICA TOR_VAL UE_DES CRIPTIO N					Y	Y
HCRA0102	DIM_NU M_OF_U NITS_RA NGE	V_BAND_ SHORT_ DESC					Y	Y
HCRA0103	DIM_WRI TE_OFF_ FLAG	V_FLAG_ DESC					Y	Y
HCRA0104	DIM_FUN DED_FLA G	V_FLAG_ DESC					Y	Y

List of Measures

Table 9-2   Mapping of all hierarchies and measures and their descriptions

Measure Name (CRAMV01)	Measure Name (CRAMV02)	Measure Name (CRAMV04)	Measure Name (FCT_CRA_AGG_SUMMARY_MV)	Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
Account Adjusted Outstanding Balance	CRA -MV - CreditLine Adjusted Outstanding Balance	CRA -MV - Adjusted Outstanding	CRA - Adjusted Outstanding Balance		The adjusted remaining balance.
Account Current Credit Limit	CRA -MV - CreditLine Current Credit Limit	CRA -MV - Current Credit Limit	CRA - Account Current Credit Limit		The current maximum credit available.
Account Outstanding Balance	CRA -MV - CreditLine Outstanding Balance	CRA -MV - Outstanding Balance	CRA - Outstanding Balance		The total unpaid balance due.
Account Original Credit Limit	CRA -MV - CreditLine Original Credit Limit	CRA -MV - Original Credit Limit	CRA - Account Original Credit Limit		The initial credit limit set.
Account Exposed Amount	CRA -MV - CreditLine Exposed Amount	CRA -MV - Exposed Amount	CRA - Exposure Amount RCY - MV		The total amount at risk or exposed.
Account Impaired Amount	CRA -MV - CreditLine Exposed Amount	CRA -MV - Impaired Amount	CRA - Impaired Amount		The portion of the balance that is unlikely to be recovered.
Account Delinquent Amount	CRA -MV - CreditLine Delinquent Amount	CRA -MV - Delinquent Amount	CRA - Delinquent Amount		The overdue amount not paid by the due date.
CRA -MV - Account written Off	CRA -MV - Number of Credit Line written Off	CRA -MV - Number of Accounts written Off	CRA - Number of accounts written off		The total amount deemed uncollectible and written off.
CRA -MV - Account Greater than 60 Delinquent Amount	CRA -MV - Credit Line Greater than 60 Delinquent Amount	CRA -MV - Greater than 60 Delinquent Amount	CRA - Greater than 60 Delinquent Amount		The balance overdue by more than 60 days.
CRA -MV - Account Greater than 30 Delinquent Amount	CRA -MV - Credit Line Greater than 30 Delinquent Amount	CRA -MV - Greater than 30 Delinquent Amount	CRA - Greater than 30 Delinquent Amount		The balance overdue by more than 30 days.
CRA -MV - Account Greater than 90 Delinquent Amount	Credit Line Greater than 90 Delinquent Amount	CRA -MV - Greater than 90 Delinquent Amount	CRA - Greater than 90 Delinquent Amount		The balance overdue by more than 90 days.

Table 9-2   (Cont.) Mapping of all hierarchies and measures and their descriptions

Measure Name (CRAMV01)	Measure Name (CRAMV02)	Measure Name (CRAMV04)	Measure Name (FCT_CRA_AGG_SUMMARY_MV)	Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
CRA -MV - Accounts Total Income	CRA -MV - Credit Line Total Income	CRA -MV - Total Income	CRA - Accounts Total Income		The total income associated.
CRA -MV - Account Funded Amount	CRA -MV - Credit Line Funded Amount	CRA -MV - Funded Amount	CRA - Account Funded Amount		The amount of funds provided.
CRA -MV - Account Overdrawn Amount	CRA -MV - Credit Line Overdrawn Amount	CRA -MV - Overdrawn Amount	CRA - Account Overdrawn Amount		The amount by which the balance exceeds the credit limit.
CRA - MV - Account Drawn Amount	CRA - MV - Credit Line Drawn Amount	CRA - MV - Drawn Amount	CRA - Account Drawn Amount		The amount withdrawn or utilized.
CRA - MV - Account Funded Amount MTD	CRA - MV - Credit Line Funded Amount MTD	CRA - MV - Funded Amount MTD	CRA - Account Funded Amount MTD	CRA - Application Funded Amount MTD	The amount funded month-to-date.
CRA - MV - Account Funded Amount QTD	CRA - MV - Credit Line Funded Amount QTD	CRA - MV - Funded Amount QTD	CRA - Account Funded Amount QTD	CRA - Application Funded Amount QTD	The amount funded quarter-to-date.
CRA - MV - Account Funded Amount YTD	CRA - MV - Credit Line Funded Amount YTD	CRA - MV - Funded Amount YTD	CRA - Account Funded Amount YTD	CRA - Application Funded Amount YTD	The amount funded year-to-date.
CRA - MV - Account Current Loan To Income	CRA - MV - Credit Line Current Loan To Income	CRA -MV - Current Loan to Value	CRA - Account Current Loan to Value		The current loan amount as a ratio of the borrower's income.
CRA -MV - Account Current Loan to Value	CRA -MV - CreditLine Current Loan to Value	CRA -MV - Value of Security	CRA - Account Value of Security		The current loan amount as a percentage of the value.
CRA -MV - Account Value of Security	CRA -MV - CreditLine Value of Security	CRA - MV - Current Loan To Income	CRA - Account Current Loan To Income		The value of assets securing.
CRA - MV - Account Revised Origination LTI	CRA - MV - Credit Line Revised Origination LTI	CRA - MV - Revised Origination LTI	CRA - Account Revised Origination LTI		The loan-to-income ratio revised at origination.
CRA -MV - Account ECS Weighted By Outstanding Computation	CRA -MV - Credit Line ECS Weighted By Outstanding Population	CRA -MV - ECS Weighted By Outstanding Computation	Current Weighted Maximum Bureau Score - MV		The economic capital score weighted by outstanding balance.

Table 9-2   (Cont.) Mapping of all hierarchies and measures and their descriptions

Measure Name (CRAMV01)	Measure Name (CRAMV02)	Measure Name (CRAMV04)	Measure Name (FCT_CRA_AGG_SUMMARY_MV)	Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
CRA -MV - Account Origination Credit Limit	CRA -MV - Credit Line Origination Credit Limit	CRA -MV - Origination Credit Limit	CRA - Account Origination Credit Limit		The credit limit established at origin.
CRA -MV - Account Origination Max Credit Score	CRA -MV - Credit Line Origination Max Credit Score	CRA -MV - Origination Max Credit Score	CRA - Account Origination Max Credit Score		The highest credit score at origination.
CRA -MV - Account 1 Year PD	CRA -MV - Credit Line 1 Year PD	CRA -MV - 1 Year PD	CRA - Account 1 Year PD		The probability of default within one year.
CRA - MV - Account Write Off Amount	CRA - MV - Credit Line Write Off Amount	CRA - MV - Write Off Amount	CRA - Account Write Off Amount		The total amount written off.
CRA - MV - Account Write Off Amount MTD	CRA - MV - Credit Line Write Off Amount MTD	CRA - MV - Write Off Amount MTD	CRA - Account Write Off Amount MTD		The amount written off month-to-date.
CRA - MV - Account Write Off Amount QTD	CRA - MV - Credit Line Write Off Amount QTD	CRA - MV - Write Off Amount QTD	CRA - Account Write Off Amount QTD		The amount written off quarter-to-date.
CRA - MV - Account Write Off Amount YTD	CRA - MV - Credit Line Write Off Amount YTD	CRA - MV - Write Off Amount YTD	CRA - Account Write Off Amount YTD		The amount written off year-to-date.
CRA - MV - Account Recovery Amount	CRA - MV - Credit Line Recovery Amount	CRA - MV - Recovery Amount	CRA - Account Recovery Amount		The amount recovered from previously written-off balances.
CRA - MV - Account Recovery Amount MTD	CRA - MV - Credit Line Recovery Amount MTD	CRA - MV - Recovery Amount MTD	CRA - Account Recovery Amount MTD		The recovery amount month-to-date.
CRA - MV - Account Recovery Amount QTD	CRA - MV - Credit Line Recovery Amount QTD	CRA - MV - Recovery Amount QTD	CRA - Account Recovery Amount QTD		The recovery amount quarter-to-date.
CRA - MV - Account Recovery Amount YTD	CRA - MV - Credit Line Recovery Amount YTD	CRA - MV - Recovery Amount YTD	CRA - Account Recovery Amount YTD		The recovery amount year-to-date.
CRA - MV - Account Net Write Off Amount	CRA - MV - Credit Line Net Write Off Amount	CRA - MV - Net Write Off Amount	CRA - Account Net Write Off Amount		The net amount written off after recoveries.

Table 9-2   (Cont.) Mapping of all hierarchies and measures and their descriptions

Measure Name (CRAMV01)	Measure Name (CRAMV02)	Measure Name (CRAMV04)	Measure Name (FCT_CRA_AGG_SUMMARY_MV)	Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
CRA - MV - Account Net Write Off Amount MTD	CRA - MV - Credit Line Net Write Off Amount MTD	CRA - MV - Net Write Off Amount MTD	CRA - Account Net Write Off Amount MTD		The net write off amount month-to-date.
CRA - MV - Account Net Write Off Amount QTD	CRA - MV - Credit Line Net Write Off Amount QTD	CRA - MV - Net Write Off Amount QTD	CRA - Account Net Write Off Amount QTD		The net write off amount quarter-to-date.
CRA - MV - Account Net Write Off Amount YTD	CRA - MV - Credit Line Net Write Off Amount YTD	CRA - MV - Net Write Off Amount YTD	CRA - Account Net Write Off Amount YTD		The net write off amount year-to-date.
CRA -MV - Account Weighted CLTV by Outstanding	CRA - MV - Credit Line Net Write Off Amount YTD	CRA -MV - Weighted CLTV by Outstanding	CRA - Account Weighted CLTV by Outstanding		The combined loan-to-value ratio weighted by outstanding balance.
CRA -MV - Account Principal Portion of Current Payment Amount	CRA -MV - Credit Line Principal Portion of Current Payment Amount	CRA -MV - Principal Portion of Current Payment	CRA - Account Principal Portion of Current Payment Amount		The principal amount in the current payment.
CRA -MV - Account Gross Credit Exposure	CRA -MV - Credit Line Gross Credit Exposure	CRA -MV - Gross Credit Exposure	CRA - Account Gross Credit Exposure		The total credit exposure.
CRA -MV - Account Revised Origination TDS	CRA -MV - Credit Line Revised Origination TDS	CRA -MV - Revised Origination TDS	CRA - Account Revised Origination TDS		The total debt service ratio revised at origination.
CRA -MV - Account Revised Origination GDS	CRA -MV - Credit Line Revised Origination GDS	CRA -MV - Revised Origination GDS	CRA - Account Revised Origination GDS		The gross debt service ratio revised at origination.
CRA -MV - Account Exposure At Default	CRA -MV - Credit Line Exposure At Default	CRA -MV - Exposure At Default	CRA - Exposure at Default		The exposure amount at the point of default.
CRA -MV - Account Principal Outstanding Balance	CRA -MV - Credit Line Principal Outstanding Balance	CRA -MV - Principal Outstanding Balance	CRA - Principal Outstanding Balance		The principal amount still outstanding.
CRA -MV - Number Of Outstanding Accounts	CRA -MV - Number of Outstanding Facilities	CRA -MV - Number of Outstanding Accounts	CRA - Number of outstanding accounts		The total number of balances outstanding.

Table 9-2   (Cont.) Mapping of all hierarchies and measures and their descriptions

Measure Name (CRAMV01)	Measure Name (CRAMV02)	Measure Name (CRAMV04)	Measure Name (FCT_CRA_AGG_SUMMARY_MV)	Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
CRA -MV - Account Weighted Current LTV By Exposure	CRA -MV - Credit Line Weighted Current LTV By Exposure	CRA -MV - Weighted CLTV by Exposure	CRA - Weighted Current LTV By Exposure - MV		The current loan-to-value ratio weighted by exposure.
CRA - MV - Account Current Credit Score	CRA -MV - CreditLine Current Credit Score	CRA -MV - Current Credit Score	CRA - Account Current Credit Score		The current credit score.
CRA - MV - Account Readvanceable Outstanding	CRA -MV - Credit Line Readvanceable Outstanding	CRA -MV - Readvanceable Outstanding	CRA - Account Readvanceable Outstanding		The amount available for future draws or advances.
CRA - MV - Account Weighted Original Interest Rate By Funded Amount	CRA - MV - Credit Line Weighted Original Interest Rate By Funded Amount	CRA - MV - Weighted Original Interest Rate By Funded Amount	CRA - Account Weighted Original Interest Rate By Funded Amount		The original interest rate weighted by the funded amount.
CRA - MV - Account Weighted Current Interest Rate by Outstanding	CRA - MV - Credit Line Weighted Current Interest Rate by Outstanding	CRA - MV - Weighted Current Interest Rate by Outstanding	CRA - Account Weighted Current Interest Rate by Outstanding		The current interest rate weighted by the outstanding balance.
CRA - MV - Account Non Readvanceable Outstanding	CRA -MV - Credit Line Non Readvanceable Outstanding	CRA -MV - Non Readvanceable Outstanding	CRA - Account Non Readvanceable Outstanding		The outstanding amount that cannot be re-advanced.
CRA - MV - Account Current Payment Amount	CRA -MV - Credit Line Current Payment Amount	CRA -MV - Current Payment Amount	CRA - Account Current Payment Amount		The total amount due in the current payment.
CRA - MV - Account 1 Year PD weighted by EAD	CRA -MV - Credit Line 1 Year PD weighted by EAD	CRA -MV - 1 Year PD weighted by EAD	CRA - 1 Year PD weighted by EAD		The one-year probability of default weighted by exposure at default (EAD).
Readvanceable Outstanding Revolving Portion	Readvanceable Outstanding Revolving Portion	Readvanceable Outstanding Revolving Portion	Readvanceable Outstanding Revolving Portion	Readvanceable Outstanding Revolving Portion	
Readvanceable Outstanding Non Revolving Portion	Readvanceable Outstanding Non Revolving	Readvanceable Outstanding Non Revolving	Readvanceable Outstanding Non Revolving	Readvanceable Outstanding Non Revolving	

Table 9-2   (Cont.) Mapping of all hierarchies and measures and their descriptions

Measure Name (CRAMV01)	Measure Name (CRAMV02)	Measure Name (CRAMV04)	Measure Name (FCT_CRA_AGG_SUMMARY_MV)	Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
Total Readvanceable Outstanding (No change)	Total Readvanceable Outstanding (No change)	Total Readvanceable Outstanding (No change)	Total Readvanceable Outstanding (No change)	Total Readvanceable Outstanding (No change)	
Non Readvanceable Outstaniding Revolving Portion	Non Readvanceable Outstaniding Revolving Portion	Non Readvanceable Outstaniding Revolving Portion	Non Readvanceable Outstaniding Revolving Portion	Non Readvanceable Outstaniding Revolving Portion	
Non Readvanceable Outstanding Non Revolving Portion	Non Readvanceable Outstanding Non Revolving Portion	Non Readvanceable Outstanding Non Revolving Portion	Non Readvanceable Outstanding Non Revolving Portion	Non Readvanceable Outstanding Non Revolving Portion	
Total Non Readvanceable Outstanding (No change)	Total Non Readvanceable Outstanding (No change)	Total Non Readvanceable Outstanding (No change)	Total Non Readvanceable Outstanding (No change)	Total Non Readvanceable Outstanding (No change)	
Weighted Interest Rate by Funded Amount	Weighted Interest Rate by Funded Amount	Weighted Interest Rate by Funded Amount	Weighted Interest Rate by Funded Amount	Weighted Interest Rate by Funded Amount	
Weighted Interest Rate by Outstanding	Weighted Interest Rate by Outstanding	Weighted Interest Rate by Outstanding	Weighted Interest Rate by Outstanding	Weighted Interest Rate by Outstanding	
				Purchase Price	
End Of Contract Principal Repayment Amount	End Of Contract Principal Repayment Amount	End Of Contract Principal Repayment Amount	End Of Contract Principal Repayment Amount	End Of Contract Principal Repayment Amount	
Lump sum Payment Amount MTD	Lump sum Payment Amount MTD	Lump sum Payment Amount MTD	Lump sum Payment Amount MTD		
Lump sum Payment Amount QTD	Lump sum Payment Amount QTD	Lump sum Payment Amount QTD	Lump sum Payment Amount QTD		
Lump sum Payment Amount YTD	Lump sum Payment Amount YTD	Lump sum Payment Amount YTD	Lump sum Payment Amount YTD		
Scheduled Periodic Repayments MTD	Lump sum Payment Amount YTD	Lump sum Payment Amount YTD	Lump sum Payment Amount YTD		
Scheduled Periodic Repayments QTD	Scheduled Periodic Repayments QTD	Scheduled Periodic Repayments QTD	Scheduled Periodic Repayments QTD		

Table 9-2   (Cont.) Mapping of all hierarchies and measures and their descriptions

Measure Name (CRAMV01)	Measure Name (CRAMV02)	Measure Name (CRAMV04)	Measure Name (FCT_CRA_AGG_SUMMARY_MV)	Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
Scheduled Periodic Repayments YTD	Scheduled Periodic Repayments YTD	Scheduled Periodic Repayments YTD	Scheduled Periodic Repayments YTD		
Total Principal Repayment MTD	Total Principal Repayment MTD	Total Principal Repayment MTD	Total Principal Repayment MTD		
Total Principal Repayment QTD	Total Principal Repayment QTD	Total Principal Repayment QTD	Total Principal Repayment QTD		
Total Principal Repayment YTD	Total Principal Repayment YTD	Total Principal Repayment YTD	Total Principal Repayment YTD		

Table 9-3   Hierarchies and their descriptions

Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
CRA - Number of Funded Applications	The number of applications that have been funded.
CRA - Application Origination Credit Limit - MV	The maximum credit limit at the time of application origination.
CRA - Weighted Revised GDS by Origination Credit Limit -MV	The gross debt service ratio weighted by the origination credit limit.
CRA - Weighted Revised TDS by Origination Credit Limit - MV	The total debt service ratio weighted by the origination credit limit.
CRA - Weighted Revised LTV by Origination Credit Limit - MV	The loan-to-value ratio weighted by the origination credit limit.
CRA - Weighted ECS by Origination Credit Limit - MV	The economic capital score weighted by the origination credit limit.
CRA - Origination Max Bureau Score	The highest bureau score at origination.
CRA - House Price	The price of the property.
CRA - Number Of First Auto Approval Applications	The number of applications that received first auto-approval.
CRA - Number Of First Auto Decline Applications	The number of applications that received first auto-decline.
CRA - Application Adjusted Outstanding Balance	The adjusted remaining balance on the application.
CRA - Application Revised Origination LTI - MV	The loan-to-income ratio revised at application origination.
CRA - Application Revised Origination LTI Weighted Origination Credit Limit - MV	The revised loan-to-income ratio weighted by the origination credit limit.
CRA - Total Property Value	The total value of the property.
CRA - Number of Approved Applications	The total number of approved applications.
CRA - Number of Approved Applications MTD	The number of applications approved month-to-date.
CRA - Number of Approved Applications QTD	The number of applications approved quarter-to-date.

Table 9-3   (Cont.) Hierarchies and their descriptions

Measure Name (FCT_CRA_AGG_SUMMARY_MV_APPLN)	Description
CRA - Number of Approved Applications YTD	The number of applications approved year-to-date.
CRA - Revised LTV	The revised loan-to-value ratio.
CRA - Revised GDS	The revised gross debt service ratio.
CRA - Revised TDS	The revised total debt service ratio.
CRA - Number of Rejected Applications	The total number of rejected applications.
CRA - Total Number of Applications	The total number of applications submitted.
CRA - Applications Total Income	The total income from applications.
CRA - Application Funded Amount	The amount of funds provided to the application.

10

OFS Credit Risk Analytics Dashboards and Reports

OFS Credit Risk Analytics Application integrates the results generated with Oracle Business Intelligence Enterprise Edition. It provides you with a Reporting-cum-Information Framework which can be used for generating reports and viewing information relevant to computations and other features of the OFS Credit Risk Analytics Application.

OFS Credit Risk Analytics Application serves as a single regulatory and management reporting solution. It leverages the capabilities of Oracle Business Intelligence Enterprise Edition, to provide ready-to-use reporting of your OFS Credit Risk Analytics Application Results. Through OBIEE, you have access to a Robust Reporting Engine for managing all your Business Intelligence requirements.

The key elements are:

- **Tabular and Pivot Table Reporting**
- **Drill across Capability**
- **Dashboard Publishing**
- **Graphing and Charting**
- **Export options, such as Excel, PowerPoint, and PDF**

10.1 OFS Credit Risk Analytics List of Dashboards

The following table lists the reports available in OFS Credit Risk Analytics Release v8.1.2.1.0.

Table 10-1   Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
1	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio-Summary	• Credit Portfolio - Summary • Key Credit Metrics • Key Credit Metrics - Composition
2	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio-Variance	• Credit Portfolio – Variance • EOP Balance - Total – Variance • Key Credit Metrics – Variance

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
3	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio-Trend	• Credit Portfolio – Trend • Credit Portfolio – Trend of Variance Percentage • Key Credit Metrics - Yearly Trend • Key Credit Metrics - Yearly Variance
4	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio – Inflows and Outflows	• Credit Portfolio – Inflows and Outflows • Key Credit Metrics - Inflows and Outflows
5	Enterprise Credit Risk	Credit Portfolio Overview	Credit Exposure Distribution by Tenor - Fund based Exposures	• Credit Exposure Distribution by Tenor - Fund Based Exposures • Credit Exposure - Maturity Profile (Actuals) • Credit Exposure - Maturity Profile (Percentage)
6	Enterprise Credit Risk	Credit Quality	Credit Quality Ratio – Summary	• Credit Quality Ratio – Summary • Key Stressed Asset Ratios • Key Credit Loss Reserve Ratios • Key Coverage Ratios
7	Enterprise Credit Risk	Credit Quality	Credit Quality Ratio – Trend	• Credit Quality Ratio – Trend • Key Credit Quality Ratios – Yearly Trend

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
8	Enterprise Credit Risk	Credit Quality	Stressed Assets Classification Summary	• Stressed Assets Classification Summary • Stressed Assets Classification • Delinquent Exposures Classification • NPA Exposures Classification
9	Enterprise Credit Risk	Credit Quality	Credit Quality and Stressed Assets – Trend	• Credit Quality and Stressed Assets – Trend • Credit Quality and Stressed Assets – Variance • Stressed Assets Classification & Reserves – Trend • Stressed Assets Classification & Reserves – Variance
10	Enterprise Credit Risk	Credit Quality	Stressed Assets - Cost Analysis	• Credit Quality and Stressed Assets – Trend • Credit Quality and Stressed Assets – Variance • Stressed Assets Classification & Reserves – Trend • Stressed Assets Classification & Reserves – Variance

Table 10-1 (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
11	Enterprise Credit Risk	Credit Quality	Stressed Assets - Change Analysis	• Stressed Assets – Change Analysis (tabular report) • Stressed Assets - Change Analysis (graphical report)
12	Enterprise Credit Risk	Credit Quality	Allowance For Loans and Lease Losses - Change Analysis	• Allowance For Loans and Lease Losses - Change Analysis • Allowance for Loan and Lease Losses – Change
13	Enterprise Credit Risk	New Business	New Business – Summary	• New Business Summary • Incremental Business (GCE) – Analysis • Current GCE Composition • Net Incremental GCE Existing Business Incremental Business (GCE)

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
14	Enterprise Credit Risk	New Business	Top New Business	• Top Incremental Business - New and Existing Customers • Top Incremental Business - Existing Accounts - Quality and Concentration • Top Incremental Business - New Customers - Quality and Concentration • Incremental Business
15	Enterprise Credit Risk	New Business	New Business – Trend	• New Business Trend • Incremental Business – Trend • Incremental Business – Trend of Proportions
16	Enterprise Credit Risk	Concentration	Concentration Analysis	• Concentration Analysis • GCE Concentration • Delinquent Concentration • NPA Concentration
17	Enterprise Credit Risk	Capital Requirement	Capital Requirement Summary	• Capital Requirement Summary • Capital and Reserves – Summary • Capital Requirement – Composition

Table 10-1 (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
18	Enterprise Credit Risk	Capital Requirement	Capital Holding Summary	• Capital Holding Summary • Capital Holding - Summary and Composition
19	Enterprise Credit Risk	Capital Requirement	Capital Requirement Trend	• Capital Requirement Trend • Capital Holding, Expected Loss and Reserves – Trend • Capital Holding, Reserves, and Expected Loss – Variance
20	Enterprise Credit Risk	Top Exposures	Top Exposures	• Top Exposures (Tabular reports) • Top Exposures (Bar Graphs) • Summary of Total exposure • Account Level Detailed Summary • Gross Credit Exposure & EOP of Top Exposures • Top Exposure Proportion • Top Exposures - Composition by PD, Concentration & Growth
21	Wholesale Credit Risk	Credit Portfolio Overview	Credit Portfolio Summary	• Credit Portfolio - Summary • Key Credit Metrics • Key Credit Metrics - Composition

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
22	Wholesale Credit Risk	Credit Portfolio Overview	Credit Portfolio – Inflows and Outflows	• Credit Portfolio – Inflows and Outflows • Key Credit Metrics - Inflows and Outflows– Fund based Exposures
23	Wholesale Credit Risk	Credit Quality	Stressed Assets Classification Summary	• Stressed Assets Classification Summary • Stressed Assets Classification • Delinquent Exposures Classification • NPA Exposures Classification
24	Wholesale Credit Risk	Credit Quality	Loan Loss Reserves Summary	• Loan Loss Reserves Summary • Loan Loss Reserves Key Metrics • Loan Loss Reserves - Composition

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
25	Wholesale Credit Risk	Credit Quality	Credit Quality Trend	• Credit Portfolio and Asset Quality – Trend • Credit Portfolio and Asset Quality – Trend of Variance • Key Credit Metrics – Trend • Key Credit Metrics – Variance Trend • Stressed Asset Classification Trend • Stressed Asset Classification – Variance Trend • Loan Loss Reserves – Trend • Loan Loss Reserves – Variance Trend
26	Wholesale Credit Risk	Credit Quality	Credit Quality Ratio Summary	• Credit Quality Ratio – Summary • Key Stressed Asset Ratios • Key Credit Loss Reserve Ratios • Key Coverage Ratios
27	Wholesale Credit Risk	Credit Quality	Credit Quality Ratio Trend	• Credit Quality Ratio – Trend • Key Credit Quality Ratios - Trend
28	Wholesale Credit Risk	Credit Quality	Stressed Assets - Change Analysis	• Stressed Assets – Change Analysis (tabular report) • Stressed Assets - Change Analysis (graphical report)

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
29	Wholesale Credit Risk	Credit Quality	Allowance For Loans and Lease Losses - Change Analysis	• Allowance for Loans and Lease Losses - Change Analysis • Allowance for Loan and Lease Losses – Change
30	Wholesale Credit Risk	Top Exposures	Top Exposures	• Top Exposures (tabular report) • Top Exposures (graphical report) • Gross Credit Exposure & EOP of Top Exposures • Top Exposure Proportion • Top Exposures - Composition by PD, Concentration & Growth

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
31	Wholesale Credit Risk	Rating Migration and Transition	Rating Migration Analysis	• Migration Ratios • Rating Migration Matrix • Rating Migration Analysis - Upgrades and Downgrades (tabular report) • Rating Migration - Change Analysis • BASEL Migration Ratios • BASEL Rating Migration Matrix • BASEL Rating Migration Analysis – Upgrades and Downgrades • BASEL Rating Migration - Change Analysis • Migration Ratios • Rating Migration Matrix • Rating Migration Analysis – Upgrades and Downgrades • Rating Migration - Change Analysis
32	Wholesale Credit Risk	Rating Migration and Transition	Rating Transition Probability	• Rating Transition Probability (tabular report) • Rating Transition Probability (graphical report)

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
33	Wholesale Credit Risk	New Business	New Business – Summary	• New Business Summary • Incremental Business (GCE) – Analysis • Current GCE Composition • Incremental Business (GCE) – Composition
33	Wholesale Credit Risk	New Business	Top New Business	• Top Incremental Business – New & Existing Accounts • Top Incremental – Existing Accounts – Quality & Concentration • Top Incremental – New Accounts – Quality & Concentration • Incremental Business
34	Wholesale Credit Risk	New Business	New Business – Trend	• New Business Trend • Incremental Business – Trend • Incremental Business – Trend of Proportions
35	Wholesale Credit Risk	Concentration	Concentration Analysis	• Concentration Analysis. • GCE Concentration • Delinquent Concentration • NPA Concentration

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
36	Wholesale Credit Risk	Concentration	Concentration Trend	• Concentration - Trend (tabular report) • Concentration - Trend (graphical report)
37	Wholesale Credit Risk	Concentration	Top Concentration	• Top GCE Concentration • Top Delinquent Concentration • Top NPA Concentration
38	Wholesale Credit Risk	Group Exposure	Group Exposure Summary	• Group Exposure Summary • Top Group Exposures – Credit quality & Concentration • Top Group Exposures
39	Credit Risk – Trading Book	Single Counterparty Credit Exposures	Single Counterparty Credit Exposures	• Top Single Counterparty Credit Exposures • Top CCE – Asset Quality and Concentration
40	Credit Risk – Trading Book	Group Exposure	Group of Connected Counterparties Credit Exposures (GCCE)	• Top Group of Connected Counterparty Exposures • Top GCCE – Asset Quality and Concentration
41	Credit Risk – Trading Book	Portfolio Summary – Obligor Type	Portfolio Summary- Obligor Type	• Portfolio Summary – Obligor Type • Key Metrics Summary • Key Metrics Composition • Asset Quality and Concentration

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
42	Retail Credit Risk	Credit Portfolio Overview	Credit Portfolio - Summary	• Credit Portfolio Summary • Key Credit Metrics • Key Credit Metrics - Composition
43	Retail Credit Risk	Credit Portfolio Overview	Credit Portfolio – Inflows and Outflows	• Credit Portfolio – Inflows and Outflows – Fund Based Exposures • Key Credit Metrics - Inflows and Outflows – Fund Based Exposures
44	Retail Credit Risk	Credit Quality	Stressed Assets Classification Summary	• Stressed Assets Classification Summary • Stressed Assets Key Classification • Delinquent Exposures Classification • NPA Exposures Classification • Foreclosures and Charge Offs - Summary • Stressed Assets Composition

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
45	Retail Credit Risk	Credit Quality	Credit Quality – Summary	• Credit Quality Summary • Number of Accounts – Portfolio Summary • Loan Loss Reserves Key Metrics • Exposure Utilization Summary • Exposure Mitigation Summary • Key Credit Quality Metrics Composition • Overdues/ Foreclosures Summary
46	Retail Credit Risk	Credit Quality	Credit Portfolio & Asset Quality - Trend	• Credit Portfolio and Asset Quality – Trend • Credit Portfolio and Asset Quality - Trend of Variance • Key Credit Metrics Trend • Key Credit Metrics Variance Trend • Stressed Assets Classification Trend • Stressed Assets Classification Variance Trend • Loan Loss Reserves - Trend • Loan Loss Reserves - Variance Trend

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
47	Retail Credit Risk	Credit Quality	Credit Quality Ratio – Summary	• Credit Quality Ratio – Summary • Key Stressed Asset Ratios • Key Credit Loss Reserve Ratios • Key Coverage Ratios • Mitigant Value Analysis • Key Credit Quality Metrics
48	Retail Credit Risk	Credit Quality	Credit Quality Ratio – Trend	• Credit Quality Ratio – Trend • Key Credit Quality Ratios - Trend • Credit Quality Ratios - Detailed Trend
49	Retail Credit Risk	Credit Quality	Stressed Assets - Change Analysis	• Stressed Assets – Change Analysis (tabular report) • Stressed Assets – Change Analysis (graphical report)
50	Retail Credit Risk	Credit Quality	Allowance For Loans and Lease Losses - Change Analysis	• Allowance for Loans and Lease Losses - Change Analysis • Allowance for Loan and Lease Losses – Change

Table 10-1　(Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
51	Retail Credit Risk	Rating Migration and Transition	Migration Analysis	• Migration Ratios • Migration Matrix • Migration Analysis – Upgrades and Downgrades (tabular report) • Migration Change Analysis (tabular report) • Migration Analysis – Upgrades and Downgrades (graphical report) • Migration ChangeAnalysis • Migration Change Analysis (graphical report)
52	Retail Credit Risk	Rating Migration and Transition	Transition Probability	• Transition Probability Matrix ECS Bands • Transition Probability (Delinquency Bands)
53	Retail Credit Risk	Concentration	Concentration Analysis	• Concentration Analysis • GCE Concentration • Delinquent Concentration • NPA Concentration • Concentration – Other Key Measures
54	Retail Credit Risk	Concentration	Concentration Analysis - Trend	• Concentration Analysis – Trend • Concentration – Trend

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
55	Retail Credit Risk	New Business	New and Existing Business - Summary	• New and Existing Business Summary • New Business – Key Credit Metrics • New Business – Key Metrics Composition • New Business – Credit Quality and Concentration • Existing Business – Key Credit Metrics • Existing Business – Key Metrics Composition
56	Retail Credit Risk	New Business	New Business - Trend	• New Business Trend (tabular report) • New Business – Trend (graphical report) • New Business – Trend of Variance • New Business – Detailed Trend • New Business – Trend of Proportions
57	Retail Credit Risk	New Business	New Business – Ability to Pay Summary	• New Business Ability to Pay Summary • New Business – Ability to Pay and Liquidity Analysis • New Business – Ability to Pay Composition

Table 10-1   (Cont.) Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
58	Retail Credit Risk	Collections	Collections	• Collections • Collections Overview • Collections Detailed Summary • Collections Performance Summary

> ⓘ **Note**
>
> In all the drill-down reports, the Days Past Due column displays the maximum overdue date for that obligor.

11

Enterprise Credit Risk Dashboard - Credit Portfolio Overview

The following table lists the page level filters which apply to all the analysis on this page.

Table 11-1   Parameters in the Page – Credit Portfolio Overview

Parameters	Description
Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	Credit Portfolio Overview
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

11.1 Credit Portfolio - Summary

This section describes the parameters of the Credit Portfolio - Summary Analysis.

Table 11-2   Credit Portfolio - Summary Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio - Summary
Report Level Filters	• **Tabular Report**: Not Applicable • **Graphical Report**: All the dimensions covered by this analysis.
Analysis Description	This analysis provides a multidimensional overview of the credit portfolio across the trading and banking book, through a combination of key credit measures such as Gross Credit Exposure (GCE), EOP Balance – Fund Based (EOP-FB), EOP Balance – Non-Fund Based (EOP-NFB), EOP Balance Total (EOP-Total), Undrawn Balance, Non-Performing Assets (NPA), Non-Performing Assets/ Total EOP Balance, Allowance for Loan and Lease Losses (ALLL), Allowance for Loan and Lease Losses/ Total EOP Balance and Security Value.

Table 11-2 (Cont.) Credit Portfolio - Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following:
	• **Credit Portfolio - Summary**: A multidimensional Tabular Report displaying all the measures for all the listed dimensions.
	• **Key Credit Metrics**: A combination chart where for a given measure and selected dimension, the stacked column chart displays the Undrawn Balance Commitments, EOP Balance –Total, NPA/Total EOP Balance, and Allowance for Loan and Lease Loss/Total EOP Balance and the line charts display the amount and percentage. To view the drill-down report, click on the graph and then click Key Credit Metrics – Detail. The following metrics are listed; Obligor, Obligor ID, Gross Credit Exposure, EOP Balance – Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Days Past Due, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, PD, Rating, Credit Score, Credit Status, and Watchlist Status.
	• **Key Credit Metrics - Composition**: A Radar Chart displaying the composition or percentage proportion of all the key credit measures (except ratios) by a selected combination of dimensions and measures.
Dimensions	• Product • Product Type • Organization Type • Line of Business • Natural Currency • Maturity Profile • Credit Status (In Graphical Reports) • Watchlist Status (In Graphical Reports)
Drill-down details	To view a detailed drill-down report, click on the Bar Graph and select the Key Credit Metrics – Details. The following metrics are listed; Obligor, Obligor ID, Gross Credit Exposure, EOP Balance – Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Days Past Due, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, PD, Rating, Credit Score, Credit Status and Watchlist Status. In the Credit Portfolio – Summary under Key Credit Metrics bar graph, click on any bar in graph and select the Key Credit Metrics – Details to drill-down to a table considering various measures.

Table 11-2   (Cont.) Credit Portfolio - Summary Analysis Parameters

Parameters	Description
Drill-down Path	The various measures available as part of the drill-down are Borrower, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, PD, Rating, Credit Score, Credit Status and Watchlist Status.

11.2 Credit Portfolio - Variance

This section describes the parameters of the Credit Portfolio - Variance Analysis.

Table 11-3   Credit Portfolio - Variance Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio – Variance
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis. • **Graphical Reports**: All the dimensions and measures covered by this analysis and the reference period for measuring the variance.
Analysis Description	This analysis presents how a selected measure, on a selected date varies from the Last Reporting Date, beginning of the financial year, and the previous year on the same day. Along with the actual values of the selected measure, the report also displays the Year on Year (YoY), Year to Date (YTD), and Last Reporting to Date (RTD) variance in actuals and percentage. The measures covered by this analysis are; Gross Credit Exposure (GCE), EOP Balance – Fund Based (EOP-FB), EOP Balance – Non-Fund Based (EOP-NFB), EOP Balance Total (EOP-Total), Undrawn Balance, Non-Performing Assets (NPA) and Allowance for Loan and Lease Losses (ALLL).

Table 11-3   (Cont.) Credit Portfolio - Variance Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, including the following: • **Credit Portfolio – Variance**: A multidimensional tabular report displaying the variance of a selected measure over three periods (Year on Year (YoY), Year to Date (YTD), and Last Reporting to date (RTD). • **EOP Balance - Total – Variance**: A combination chart where for a selected measure and dimension, a clustered column chart displays the comparison between current balance and the balance for the selected reference period (previous year, beginning of the current financial year, and last reporting date) and the scatter plot displays the variance between these two balances. • **Key Credit Metrics – Variance**: A line chart which displays the variance of the current balance (As-of-Date) over the last reporting date, beginning of the financial year and previous year same date, for all the key credit measures, for a combination of dimensions.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	**In Credit Portfolio** – Variance Report the following measures are covered; Current Balance, Balance Previous Year, Balance Beginning of the Year, Balance Last Reporting Date, YoY Variance Amount, YoY Variance Percentage, YTD Variance Amount, YTD Variance Percentage, Variance Over Last Reporting Date Amount and Variance Over Last Reporting Date percentage.
Drill- down Path	Not Applicable

11.3 Credit Portfolio - Trend

This section describes the parameters of the Credit Portfolio - Trend Analysis.

Table 11-4   Credit Portfolio - Trend Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio - Trend
Report Level Filters	• **Tabular Report**: Periodicity of trend and all the measures covered by this analysis. • **Graphical Reports**: All dimensions covered by the analysis and periodicity of the trend.

Table 11-4   (Cont.) Credit Portfolio - Trend Analysis Parameters

Parameters	Description
Analysis Description	This analysis gives a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. In addition to the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period.
	The measures covered by this analysis are Gross Credit Exposure (GCE), EOP Balance – Fund Based (EOP-FB), EOP Balance – Non-Fund Based (EOP-NFB), EOP Balance Total (EOP-Total), Undrawn Balance, Non-Performing Assets (NPA) and Allowance for Loan and Lease Losses (ALLL).
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, comprising the following: • **Credit Portfolio – Trend**: A multidimensional tabular report displaying the trend of a selected measure, over 8 years or 8 quarters or 8 months. • **Credit Portfolio – Trend of Variance Percentage**: A multidimensional tabular report displaying the variance and the variance percentage for the selected reference period, over 8 years or 8 quarters, or 8 months. • **Key Credit Metrics - Yearly Trend**: A line chart displaying the trend of all the key measures over the 8 years or 8 quarters, or 8 months for a given dimension type. • **Key Credit Metrics - Yearly Variance**: A line chart displaying the variance of all the key measures over 8 years or 8 quarters, or 8 months for a given dimension type.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not applicable

11.4 Credit Portfolio – Inflows and Outflows – Fund Based Exposures

This section describes the parameters of the Credit Portfolio – Inflows and Outflows Fund Based Exposures Analysis.

Table 11-5   Credit Portfolio – Inflows and Outflows – Fund Based Exposures Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio – Inflows and Outflows – Fund Based Exposures
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and reference period. • **Graphical Reports**: All the measures, dimensions and reference periods covered by this analysis.
Analysis Description	This analysis provides a multidimensional view of the change in the selected measure through inflows and outflows during a selected period. The reports in the analysis display the Opening Balance, Inflows, Outflows, Current Balance, Variance Amount (between the opening and closing balance), and Variance In Percentage. The periods covered in this analysis are Last Reporting Date, Beginning of the Quarter, Beginning of the Month, Beginning of the Financial Year and Previous year on the Same Day. The measures covered in this analysis are EOP Balance – Total and Gross Credit Exposure.
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, including the following: • **Credit Portfolio – Inflows and Outflows**: A multidimensional Tabular Report displaying the change in the selected measure through inflows and outflows during the selected period. • **Key Credit Metrics - Inflows and Outflows**: A clustered column chart displaying the change in the selected measure through inflows and outflows during the selected period.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

11.5 Credit Portfolio Distribution by Tenor - Fund Based Exposures

This section describes the parameters of the Credit Portfolio Distribution by Tenor - Fund Based Exposures Analysis.

Table 11-6   Credit Portfolio Distribution by Tenor - Fund Based Exposures Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio Distribution by Tenor - Fund Based Exposures
Report Level Filters	• **Tabular Report**: Not Applicable • **Graphical Reports**: All the dimensions covered by this analysis.
Analysis Description	This analysis provides a multidimensional view of credit exposure and its spread across different tenors.
Reports Covered	This analysis is presented through a combination of a tabular report and graphical report, comprising the following: • **Credit Exposure Distribution by Tenor-Fund Based Exposures**: A multidimensional Tabular Report displaying the EOP Balance (Current balance) and the spread of EOP Balance across different tenors such as Repayments due in 12 months, Repayments due in 12 months %, Repayment due after 12 months but not later than 24 months, Repayment due in 12 months to 24 months %, Repayment due after 24 months but not later than 36 months, Repayment due in 24 months to 36 months %, Repayment due after 36 months but not later than 48 months, Repayment due in 36 months to 48 months %, Repayment due after 48 months, and Repayment due above 48 months %. • **Credit Exposure - Maturity Profile** (Actuals): A bridge chart displaying the spread of the exposure (EOP Balance) in actuals across different tenors, for the selected combination dimensions. • Credit Exposure - Maturity Profile (Percentage): A bridge chart displaying the spread of the exposure (EOP Balance) in percentage across different tenors, for the selected combination of dimensions.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

12

Enterprise Credit Risk Dashboard - Credit Quality

The following table displays the Page Level Filters which apply to all the analysis in this page.

Table 12-1   Parameters in the Page – Credit Quality

Parameters	Descriptions
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable
Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	Credit Quality
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit

12.1 Credit Quality Ratio - Summary

This section describes the parameters of the Credit Quality Ratio - Summary Analysis.

Table 12-2   Credit Quality Ratio - Summary Analysis Parameters

Parameters	Descriptions
Analysis Name	Credit Quality Ratio - Summary
Report Level Filters	• **Tabular Report**: Not Applicable • **Graphical Reports**: All the dimensions covered by this analysis. • Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Exposure Bands • Customer Type • Natural Currency

Table 12-2   (Cont.) Credit Quality Ratio - Summary Analysis Parameters

Parameters	Descriptions
Analysis Description	This analysis provides a multidimensional overview of the key credit quality ratios across the trading and banking book, through measures such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, Allowance for Loans Lease and Losses, ALLL Ratio, ALLL-NPA Coverage Ratio, Provisions, Current Provisions Ratio, Net Charge Off, ALLL-NCO Coverage Ratio, Charge Off Ratio and WAPD.
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, including the following: • **Credit Quality Ratio – Summary**: A multidimensional tabular report displaying the Watchlist Ratio, Delinquent Ratio, NPA Ratio, Allowance for Loans Lease and Losses, ALLL Ratio, ALLL-NPA Coverage Ratio, Provisions, Current Provisions Ratio, Net Charge Off, ALLL- NCO Coverage Ratio, Charge Off Ratio and WAPD for all the listed dimensions. Various dimension filters are listed for the following reports. To view the filtered data, select the dimension and various filters and click Apply. • **Key Stressed Asset Ratios**: A column chart displaying the key stressed assets ratios such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, and WAPD for the selected combination of dimensions. • **Key Credit Loss Reserve Ratios**: A column chart displaying the Key Credit Loss Reserve ratios such as ALLL Ratio, Current Provision Ratio, and Charge off Ratio for the selected combination of dimensions. • **Key Coverage Ratios**: A column chart displaying the key coverage ratios such as ALLL-NPA Coverage Ratio and ALLL-NCO Coverage Ratio for the selected combination of dimensions.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Customer Type • Natural Currency • Exposure Band
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

Chapter 12
Credit Quality Ratio – Trend

12.2 Credit Quality Ratio – Trend

This section describes the parameters of the Credit Quality Ratio - Trend Analysis.

Table 12-3   Credit Quality Ratio - Trend Analysis Parameters

Parameters	Descriptions
Analysis Name	Credit Quality Ratio - Trend
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and periodicity of the trend. • **Graphical Reports**: All dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis provides a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. The measures covered in this analysis are Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provision Ratio, ALLL-NCO Coverage Ratio and Charge off Ratio.
Reports Covered	This analysis is presented through a combination of a tabular and a Graphical Report, consisting of the following: • **Credit Quality Ratio – Trend**: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters, or 8 months. • **Key Credit Quality Ratios – Yearly Trend**: A line chart displaying the trend of all the measures over the 8 years or 8 quarters, or 8 months for the selected combination of dimensions and measures. You can filter data from the following list of measures, All Measures, Delinquent Ratio, NPA Ratio, Watchlist Ratio, ALLL Ratio, Current Provision Ratio, ALLL – NPA Coverage Ratio, ALLL - NCO Coverage Ratio and Charge off Ratio.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

12.3 Credit Quality and Stressed Assets – Trend

This section describes the parameters of Credit Quality and Stressed Assets – Trend Analysis.

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Table 12-4   Credit Quality and Stressed Assets – Trend Analysis Parameters

Parameters	Descriptions
Analysis Name	Credit Quality and Stressed Assets – Trend
Report Level Filters	• **Tabular Report**: All measures covered by this analysis and periodicity of the trend. • **Graphical Reports**: All dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis gives a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. Along with the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period. The measures covered by this analysis are Watchlisted Exposures, Delinquent Exposures- up to 30 DPD, Delinquent Exposures 31-60 DPD, Delinquent Exposures- more than 60 DPD, Total Delinquent Exposures, NPA Exposures - Substandard Assets, NPA Exposures - Doubtful Assets, NPA Exposures - Loss Assets, Total NPAs, Allowance for Loans and Lease Losses, Provisions and Net Charge Off.

Table 12-4   (Cont.) Credit Quality and Stressed Assets – Trend Analysis Parameters

Parameters	Descriptions
Reports Covered	This analysis is presented through a combination of Tabular and Graphical Reports, comprising the following:
	• **Credit Quality and Stressed Assets – Trend**: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters or 8 months.
	• **Credit Quality and Stressed Assets – Variance**: A multidimensional tabular report displaying the variance of a selected measure over 8 years or 8 quarters or 8 months.
	• **Stressed Assets Classification & Reserves – Trend**: A line chart displaying the trend of all measures over 8 years or 8 quarters or 8 months for the selected dimensions, selected combinations of dimensions, and measures. You can filter the data based on the following measures All Measures, Watchlisted Exposures, Delinquent Exposure – upto 30 days DPD, Delinquent Exposure – 31 to 60 days DPD, Delinquent Exposure – More than 60 days DPD, Total Delinquent Exposures, NPA – Sub-Standard Exposure, NPA-Doubtful Exposure, NPA -Loss Exposure, Total Non-Performing Assets, Allowance for Loans & Lease Losses, Provisions and Net Charge Off.
	• **Stressed Assets Classification & Reserves – Variance**: A line chart displaying the variance of all measures, over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and measures. You can filter the data based on the following measures, All Measures, Watchlisted Exposures, Delinquent Exposure – upto 30 days DPD, Delinquent Exposure – 31 to 60 days DPD, Delinquent Exposure – More than 60 days DPD, Total Delinquent Exposures, NPA – Sub-Standard Exposure, NPA-Doubtful Exposure, NPA -Loss Exposure, Total Non-Performing Assets, Allowance for Loans & Lease Losses, Provisions and Net Charge Off.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

12.4 Stressed Assets - Cost Analysis

This section describes the parameters of the Stressed Assets - Cost Analysis.

Table 12-5   Stressed Assets - Cost Analysis Parameters

Parameters	Descriptions
Analysis Name	Stressed Assets - Cost Analysis
Report Level Filters	• **Tabular Report**: All the measures (Stressed Asset Class) such as Watchlisted Exposures, Delinquent Exposures, and NPA. • **Graphical Reports**: All the dimensions and measures (stressed asset class).
Analysis Description	This analysis provides a multidimensional cost analysis of various stressed asset classes such as Watchlisted Assets, Delinquent Assets, and Non-Performing Assets.
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following: • **Stressed Assets - Cost Analysis**: A multidimensional Tabular Report displaying the Number of borrowers, Carrying Cost and Amortized Cost, for the selected stressed asset class, for all the listed dimensions. • **Watchlisted Exposures - Cost Composition**: A radar chart displaying the composition of Number of borrowers, Carrying Cost and Amortized Cost for the selected combination of dimensions, for a selected stressed asset class. You can filter the results based on the following measures All Measures, Number of Accounts, Carrying Cost and Amortized Cost. • Stressed Assets **Exposures - Cost Analysis**: A column chart displaying the number of accounts, amortized cost, and carrying cost, for a selected stressed asset class, across a selected combination of dimensions. You can filter the results based on the following measures Watchlisted Exposures, Delinquent Exposures and Non-Performing Assets.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Filter the results for **Watchlisted Exposures - Cost Composition** report based on the following measures: All Measures, Number of Accounts, Carrying Cost and Amortized Cost.
Drill-down Path	Not Applicable

12.5 Stressed Assets - Change Analysis

This section describes the parameters of the Stressed Assets – Change Analysis.

Table 12-6   Stressed Assets – Change Analysis Parameters

Parameters	Descriptions
Analysis Name	Stressed Assets – Change Analysis
Report Level Filters	• **Tabular Report**: All the measures (such as Watchlisted Exposures, Delinquent Exposures, Non-Performing Assets) and Reference Period. • **Graphical Reports**: All dimensions and measures (stressed asset class) covered by the analysis, and Reference Period.
Analysis Description	This analysis provides an understanding of the changes and reasons for changes in the credit exposure to a selected stressed asset class (measure), between a Selected Reference Period and Current Date. The reference periods covered by this analysis are Previous Year, Beginning of Year, Beginning of the Quarter, and Beginning of the Month. The measures (Stressed Asset Class) covered by this analysis are Watch listed Assets, Delinquent Assets and Non-Performing Assets.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • **Stressed Assets – Change Analysis**: A multidimensional tabular report, displaying change and reasons for the changes in exposure to a selected stressed asset class (measure), between a selected reference period and current date. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance. • **Stressed Assets - Change Analysis**: A bridge chart that analyzes the change and reasons for the change in exposure to selected stressed asset class(measure), between a selected reference period and current date, for a selected combination of dimensions. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

12.6 Allowance for Loans and Lease Losses - Change Analysis

This section describes the parameters of the Allowance for Loans and Lease Losses - Change Analysis.

Table 12-7   Allowance for Loans and Lease Losses - Change Analysis Parameters

Parameters	Descriptions
Analysis Name	Allowance For Loans and Lease Losses - Change Analysis
Report Level Filters	• **Tabular Report**: Reference period • **Graphical Reports**: Reference period and all the dimensions covered by this analysis
Analysis Description	This analysis provides an understanding of the changes and reasons for changes in the ALLL, between a selected reference period and the current date. The reference periods covered by this analysis are Previous Year, Beginning of Year, Beginning of the Quarter and Beginning of the Month.
Reports Covered	This analysis is a combination of Tabular and Graphical Reports, consisting of the following: • Allowance **for Loans and Lease Losses - Change Analysis**: A multidimensional tabular report displaying the changes and reasons for changes in the ALLL between a selected reference period and current date. The report displays the Opening Balance of ALL, Net Charge Off, During the Period, Reserves before Provisions, Commercial Provisions made during the period, Consumer Provisions made during the period, Total Provisions made during the period, Other Changes and Current Balance of ALLL. • **Allowance for Loan and Lease Losses – Change**: A bridge chart that analyzes the change and reasons for the changes in the ALLL, between a selected reference period and current date, for the selected combination of dimensions. The report displays the Opening Balance of ALLL, Net Charge Off, During the Period, Reserves before Provisions, Commercial Provisions made during the period, Consumer Provisions made during the period, Total Provisions made during the period, Other Changes, and Current Balance of ALLL.
Dimensions	• Line of Business • Legal Entity • Product Type • Product • Organization Structure • Customer Type • Natural Currency
Drill-down details	Not Applicable

Table 12-7   (Cont.) Allowance for Loans and Lease Losses - Change Analysis Parameters

Parameters	Descriptions
Drill-down Path	Not Applicable

13

Enterprise Credit Risk Dashboard - New Business

The following table displays the page level filters which apply to all the reports in this page.

Table 13-1   Parameters in the Page – New Business

Parameters	Descriptions
Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	New Business
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

13.1 New Business - Summary

This section describes the parameters of the New Business - Summary Analysis.

Table 13-2   New Business Summary Analysis Parameters

Parameters	Description
Analysis Name	New Business Summary
Report Level Filters	• **Tabular Report**: The time period covered by the analysis such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing. • **Graphical Report**: All the dimensions covered by this analysis and time period mentioned above.

Table 13-2   (Cont.) New Business Summary Analysis Parameters

Parameters	Description
Analysis Description	This analysis presents the changes in the gross credit exposure during the selected reference period (such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing), along with details of incremental business (GCE) from existing customers and new customers, which caused the changes in the GCE. Additionally, it analyzes the percentage composition of incremental business from new and existing customers, percentage proportion of incremental GCE (new and existing customers) by product types, products, line of business and other such dimensions. The analysis helps identify pockets that have disproportionally contributed to the incremental business during the specified period of analysis.

Table 13-2   (Cont.) New Business Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:
	• **New Business Summary**: A multidimensional tabular report displaying the following measures for all listed dimensions and the selected reference period. The measures are Open balance, Net Incremental GCE from Existing Business, Net Incremental GCE from New Business, Current balance, Percentage of Incremental GCE from Existing Business, Percentage of Incremental GCE from New Business, Composition of Incremental GCE from New Business, Composition of Incremental GCE (Total), Incremental GCE from New Business/Current GCE, Incremental GCE from Existing Business/Current GCE and Total Incremental GCE/Current GCE.
	• **Incremental Business (GCE) – Analysis**: A combination chart displaying the Incremental GCE from Existing Business, Incremental GCE from New Business, and Total Incremental GCE. Filter and view the data by selecting any one of the measures; All Measures, Net Incremental GCE from Existing Business, Net Incremental GCE from New Business and Total Incremental GCE.
	• **Current GCE Composition**: A stacked column chart displaying Incremental GCE Existing Business as a percentage of Current GCE and Incremental GCE from New Business as a percentage of Current GCE. Filter and view the data by selecting any one of the measures; All Measures and Incremental GCE New Business.
	• **Net Incremental GCE Existing Business Incremental Business (GCE) – Composition**: A radar chart displaying the composition of Incremental GCE - Existing Business, Incremental GCE - New Business, and Total Incremental GCE, for the new business garnered during the selected reference period, for a selected combination of dimensions. Filter and view the data by selecting any one of the measures; All Measures, Net Incremental GCE from Existing Business, Net Incremental GCE from New Business and Total Incremental GCE.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable

Table 13-2   (Cont.) New Business Summary Analysis Parameters

Parameters	Description
Drill-down Path	Not Applicable

13.2 Top New Business

This section describes the parameters of the Top New Business Analysis.

Table 13-3   Top New Business Analysis Parameters

Parameters	Description
Analysis Name	Top New Business
Report Level Filters	• **Tabular Report**: All the dimensions covered by this analysis, Time Period, and Display Top x (10, 25, 50, 100, 250, 500). • **Graphical Report**: All the dimensions covered by this analysis, Time Period and Display Top x (10, 25, 50, 100, 250, 500).
Analysis Description	The analysis provides details of the Top x incremental business from existing as well as new borrowers during the selected period. Additionally, the report analyzes the top incremental business during the selected period in terms of their probability of default and name concentration.

Table 13-3   (Cont.) Top New Business Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:
	• **Top Incremental Business - New and Existing Customers:** A tabular report, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new customers are displayed. The percentage change in GCE is also displayed for the existing customers.
	• **Top Incremental Business - Existing Customers - Quality and Concentration:** A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing customers are analyzed for their credit quality and concentration.
	• **Top Incremental Business - New Customers - Quality and Concentration:** A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from new customers are analyzed for their credit quality and concentration.
	• **Incremental Business:** A horizontal bar chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new customers are displayed in the decreasing order of incremental GCE. Filter and view the data by selecting any one of the measures: All Measures, New Incremental Business – GCE, Existing Incremental Business – GCE and Total Incremental Business – GCE.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down path	Not Applicable

13.3 New Business - Trend

This section describes the parameters of the New Business - Trend Analysis.

Table 13-4   New Business Trend Analysis Parameters

Parameters	Description
Analysis Name	New Business Trend

Table 13-4   (Cont.) New Business Trend Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and periodicity of the trend. • **Graphical Reports**: All the dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis gives a multidimensional view of the past trend of Incremental Business GCE over the last 8 years or 8 quarters or 8 months. The tabular report highlights the Incremental Business GCE and percentage composition of Incremental Business GCE across 8 years or 8 quarters or 8 months. The measures covered in this analysis are Incremental Business GCE - New Business Customers, Incremental Business GCE - Existing Customers and Total Incremental Business GCE.
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, comprising the following: • **New Business Trend**: A multidimensional tabular report displaying the trend of the selected new business measure (Incremental GCE - New Customers, Incremental GCE Existing customers, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months. • **Incremental Business – Trend**: A line chart displaying the trend of all the new business measures (Incremental GCE - New Customers, Incremental GCE Existing Customers, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. • **Incremental Business – Trend of Proportions**: A stacked column chart displaying the Incremental business - Trend of Proportions, for a selected new business measure over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. The following dimensions are available: Line of Business, Product Type, Product, Organization Structure and Natural Currency.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

14

Enterprise Credit Risk Dashboard - Concentration

The following table displays the Page Level Filters which apply to all the analysis in this page.

Table 14-1   Parameters in the Page – Concentration

Parameters	Description
Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	Concentration
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

14.1 Concentration Analysis

This section describes the parameters of the Concentration Analysis.

Table 14-2   Concentration Analysis Parameters

Parameters	Description
Analysis Name	Concentration Analysis
Report Level Filters	• **Tabular Report**: Not Applicable. • **Graphical Reports**: All the dimensions covered by this analysis and Display Top x (10, 25, 50, 100, 250).
Analysis Description	This analysis provides a comprehensive and multidimensional view of the credit concentrations across the enterprise. This analysis enables spotting of credit exposure, delinquency, and default concentrations in the credit portfolio of the enterprise, across multiple combinations of dimensions.

Table 14-2   (Cont.) Concentration Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following:
	• **Concentration Analysis**: A multidimensional tabular report displaying the Gross Credit Exposure concentration, Delinquent Exposure Concentration and NPA Exposure Concentration across all listed dimensions. The report displays the current balance and percentage of total (percentage proportion). Also, based on the dimensions selected a bar chart is populated for concentration analysis. Change the dimensions and apply the selection to view the data.
	• **GCE Concentration**: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for GCE concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	• **Delinquent Concentration**: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for delinquent exposure, concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	• **NPA Concentration**: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for NPA Exposure concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Natural Currency • Industry
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

15

Enterprise Credit Risk Dashboard - Capital Requirement

The following table displays the Page Level Filters which apply to all the reports in this page.

Table 15-1   Parameters in the page – Capital Requirement

Parameters	Description
Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	Capital Requirement
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification • Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Delinquency Bands • Customer Type • Natural Currency
Page-Level Display Parameters	Not Applicable

15.1 Capital Requirement Summary

This section describes the parameters of the Capital Requirement- Summary Analysis.

Table 15-2   Capital Requirement Summary Analysis Parameters

Parameters	Description
Analysis Name	Capital Requirement Summary
Report Level Filters	• Tabular Report: Not Applicable. • Graphical Report: All the dimensions covered by the analysis.
Analysis Description	This analysis provides a multidimensional view of the capital held against the bank's credit portfolio, through a combination of measures such as EOP Balance, Capital, ALLL, WALGD, WAPD, and Expected Loss.

Table 15-2   (Cont.) Capital Requirement Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: • **Capital Requirement Summary**: A multidimensional tabular report displaying all the measures such as EOP Balance Total, Capital, Allowance for Loan and Lease Losses, Expected Loss, WALGD, and WAPD, for all the listed dimensions. • **Capital and Reserves – Summary**: A combination chart, where for a given date and selected combination of dimensions, the stacked column chart displays the Capital, Expected Loss and the scatter plot displays the WAPD, WALGD and Capital as a percentage of EOP Balance. You can filter data through the following measures: Expected Loss, Regulatory Capital and Allowance for Loan and Lease Losses. • **Capital Requirement – Composition**: A radar chart displaying the composition or percentage proportion of EOP Balance, Capital, Expected Loss, and ALLL. You can filter the data using the following measures: All Measures, EOP Balance – Total, Expected Loss and Allowance for Loan and Lease Losses.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Delinquency Bands • Customer Type • Natural Currency
Drill-down details	You can filter data in the **Capital and Reserves – Summary** reportthrough the following measures: Expected Loss, Regulatory Capital, and Allowance for Loan and Lease Losses.
Drill-down Path	Not Applicable

15.2 Capital Holding Summary

This section describes the parameters of the Capital Holding - Summary Analysis.

Table 15-3   Capital Holding Summary Analysis Parameters

Parameters	Description
Analysis Name	Capital Holding Summary

Table 15-3   (Cont.) Capital Holding Summary Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: Not applicable. • **Graphical Report**: All the dimensions covered by the analysis.
Analysis Description	This analysis gives a multidimensional view of the capital holding.
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: • **Capital Holding Summary:** A multidimensional tabular report displaying the Tier I Capital, Tier II Capital, Total Capital for all the listed dimensions. • **Capital Holding - Summary and Composition**: A stacked column chart, where for the selected combination of dimensions, the break-up of capital is displayed.
Dimensions	• Legal Entity • Line of Business
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

15.3 Capital Requirement Trend

This section describes the parameters of the Capital Requirement-Trend Analysis.

Table 15-4   Capital Requirement Trend Analysis Parameters

Parameters	Description
Analysis Name	Capital Requirement Trend
Report Level Filters	• **Tabular Report**: All the measures covered in this analysis and periodicity of the trend. • **Graphical Report**: Dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis gives a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. Along with the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period. The measures covered by the analysis are EOP Balance – Total, Capital, Allowance for lease and loan and Losses, Expected Loss, WALGD, WAPD, Capital and Capital/ EOP Balance Total.

Table 15-4   (Cont.) Capital Requirement Trend Analysis Parameters

Parameters	Description
Reports Covered	Filter the data based on following Time Period options: Yearly, Quarterly and Monthly.
	This analysis is presented through a combination of a tabular and a graphical report, comprising the following:
	• **Capital Requirement Trend**: A multidimensional tabular report displaying the trend and variance of the selected measure over 8 years or 8 quarters or 8 months.
	• **Capital Holding, Expected Loss and Reserves – Trend**: A line chart displaying the trend of all measures over the 8 years or 8 quarters or 8 months for a selected combination of dimensions.
	• **Capital Holding, Reserves, and Expected Loss – Variance**: A line chart displaying the variance of all measures over 8 years or 8 quarters or 8 months for a selected combination of dimensions.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Delinquency Bands • Customer Type • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

16

Enterprise Credit Risk Dashboard - Top Exposures

The following table displays the Page Level Filters which apply to all the analysis in this page.

Table 16-1   Parameters in the Page – Top Exposures

Parameters	Description
Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	Top Exposures
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

16.1 Top Exposures

This section describes the parameters of the Top Exposures Analysis.

Table 16-2   Top Exposures Analysis Parameters

Parameters	Description
Analysis Name	Top Exposures
Report Level Filters	• **Tabular Report**: Dimensions and measures covered in this analysis, and Top x (provide the relevant value). • **Graphical Report**: Dimensions covered by this analysis, measures mentioned above for sorting the top exposures, and Top x (provide the relevant value).

Table 16-2   (Cont.) Top Exposures Analysis Parameters

Parameters	Description
Analysis Description	This analysis provides a multidimensional analysis of the Top x borrowers of the bank. You can analyze the Top x by various measures such as GCE, EOP Balance, Delinquent Exposures, NPA exposures, and Watchlisted exposures.
	Additionally, the report analyzes the top exposures in the portfolio against their probability of default, name concentration, and incremental exposure assumed on the borrower in the last one year.
	The report enables you to analyze the credit quality and single name concentration of the banks top exposures and helps analyze how the organization has dealt with increasing the exposures to the top borrowers during the last one year.

Table 16-2   (Cont.) Top Exposures Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and graphical reports, consisting of the following:

- **Top Exposures**: A tabular report, where for the selected combination of dimensions, and choice of measure, the Top x borrowers of the bank are displayed along with the details of the borrower's Industry, Line of Business, Product Type, Product, Organization Structure, Legal entity, Rating, GCE, GCE Proportion, EOP Balance, EOP Proportion and PD percentage.

- **Top Exposures**: A horizontal bar graph, where for the selected combination of dimensions, and choice of measure, the Top x borrowers of the bank are displayed along with the details of the borrower's GCE and EOP Balance. To view the drill down report, click on the graph and then click the **Top Exposure Detail**. The following drill-down reports are displayed with the following columns:

- **Summary of Total exposure** – The fields in this report are Obligor, Obligor ID, PD %, Rating, Credit Score, Watchlist Status, Credit Status, Onboarding Date, Days Past Due, Gross Credit Exposure, Gross Credit Exposure Proportion %, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Total EOP Balance Proportion %, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Allowance for Loan and Lease Loss/ Total EOP Balance, Expected Loss, Utilization Percent and Security Value.

- **Account Level Detailed Summary** – The fields in this report are Account Number, Product Name, Gross Credit Exposure, Top EOP Balance, Undrawn Amount, Overdue, Days Past Due and Credit Status. Watchlist Status, Allowance for Loan and Lease Losses, Security Value and Onboarding Date.

- **Gross Credit Exposure & EOP of Top Exposures**: A combination chart, where for the selected combination of dimensions, and choice of measure. The total GCE of Top x, GCE of Top x/ Total GCE, Total EOP Balance of Top x and EOP Balance of Top x by Total EOP Balance is displayed.

- **Top Exposure Proportion**: A speedometer chart, where for the selected combination of dimensions, it shows the proportion (top/total) of the selected measure for Top x borrowers of the bank.

- **Top Exposures - Composition by PD, Concentration and Growth:**A bubble chart, where for the selected combination of dimensions, and choice of measure, the Top x exposures of the bank are analyzed for their

Table 16-2   (Cont.) Top Exposures Analysis Parameters

Parameters	Description
	probability of default, increase in exposure to the borrower during the last one year and single name concentration.
Dimensions	• Product Type • Product • Industry • Line of Business • Organization Structure • Legal Entity • Natural Currency • Rating
Drill-down details	The following drill-down reports are displayed with the following columns for **Top Exposures Reports,** Summary of Total Exposure, and Account Level Detailed Summary. The **Summary of Total Exposure** has the following options; Obligor, Obligor ID, PD %, Rating, Credit Score, Watchlist Status, Credit Status, Onboarding Date, Days Past Due, Gross Credit Exposure, Gross Credit Exposure Proportion %, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Total EOP Balance Proportion %, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Allowance for Loan and Lease Loss/ Total EOP Balance, Expected Loss, Utilization Percent and Security Value. The **Account Level Detailed Summary** exposure has the following options: Account Number, Product Name, Gross Credit Exposure, Top EOP Balance, Undrawn Amount, Overdue, Days Past Due, Credit Status, Watchlist Status, Allowance for Loan and Lease Losses, Security Value and Onboarding Date.
Drill-down Path	Not Applicable

17

Wholesale Credit Risk Dashboard - Credit Portfolio Overview

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 17-1   Parameters in the Page – Credit Portfolio Overview

Parameters	Description
Dashboard Name	Wholesale Credit Risk
Subject Area	Wholesale Credit Risk
Page Name	Credit Portfolio Overview
Page-Level Filters	• As-of-Date
	• Run
	• Run Execution ID
	• Amount Unit
Report-Level Filters	• Book Classification
	• Credit Exposure Classification
	• Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

17.1 Credit Portfolio Summary

This section describes the parameters of the Credit Portfolio Summary Analysis.

Table 17-2   Credit Portfolio Summary Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio Summary
Report Level Filters	• **Tabular Report**: Not Applicable
	• **Graphical Reports**: All the dimensions covered by this analysis.
Analysis Description	This analysis provides a multidimensional overview of the wholesale credit portfolio, through a combination of key credit measures such as: Number of Accounts, Gross Credit Exposure (GCE), EOP Balance – Fund Based (EOP-FB), EOP Balance – Non-Fund Based (EOP-NFB), EOP Balance Total (EOP-Total), Undrawn Balance, Non-Performing Assets (NPA), Non-Performing Assets/ Total EOP Balance, Allowance for Loan and Lease Losses (ALLL), Allowance for Loan and Lease Losses/Total EOP Balance and Security Value.
	The tabular and graphical report supports drill-down to Obligor Level details.

Table 17-2   (Cont.) Credit Portfolio Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Credit Portfolio - Summary: A multidimensional tabular report displaying all the measures covered by the analysis for all the selected combination of dimensions. This report provides a drill-down to Obligor Level details. • **Key Credit Metrics**: A combination chart where for a given date and selected dimension, the stacked column chart displays the EOP Balance – Total, Undrawn Balance Commitments and the scatter plot displays the NPA/Total EOP Balance, and Allowance for Loan and Lease Loss/Total EOP Balance. The graphs can be further drill down to obligor level details. • **Key Credit Metrics - Composition**: A radar chart displaying the composition or percentage proportion of all the key credit measures (except ratios) by a selected measure. You can filter data by selecting one of the following measures: All Measures, EOP Balance – Fund Based, EOP Balance – Non Fund Based, EOP Balance Total, Gross Credit Exposure, Undrawn Balance Commitments, Non-Performing Assets, Allowance for Loan and Lease Losses and Security Value.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Collateral type • Customer Type • Obligor Rating • LTV • Natural Currency • Credit Status (graphical report) • Maturity Profile • Watchlist Status (graphical report)

Table 17-2   (Cont.) Credit Portfolio Summary Analysis Parameters

Parameters	Description
Drill-down details	The credit portfolio summary tabular report has drill-down capabilities. Click on Natural Currency, to drill-down to the list of obligors represented by the row/portfolio (based on the combination of dimension representing each row). After clicking the row, the following details are displayed: Obligor Name, Obligor ID, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn balance commitments, Asset classification, Delinquent status, Watchlist status, Rating, Allowance for Loans and Lease Loss and Allowance for Loans and Lease Loss/ EOP Balance - Fund Based.
	In the Key credit metrics graphical report click on any stacked column and select option 'Key Credit Metrics' to view a detailed drill-down report. The detailed report with Obligor level details is displayed with the following metrics: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit status, Watchlist status, Days Past due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value and Utilization Percent.
Drill-down Path	In the Credit Portfolio - Summary (Tabular Report), click Natural Currency to view the Drill-down Report to Obligor level.
	In the Key credit metrics graphical report click on any stacked column and select Key Credit Metrics to view a detailed drill-down report to Obligor level.

17.2 Credit Portfolio Inflows and Outflows - Fund Based Exposures

This section describes the parameters of the Credit Portfolio Inflows and Outflows – Fund based exposures Analysis.

Table 17-3   Credit Portfolio Inflows and Outflows – Fund based Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio - Inflows and Outflows - Fund Based Exposures

Table 17-3   (Cont.) Credit Portfolio Inflows and Outflows – Fund based Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and reference period: Legal Entity, Line of Business, Product Type, Product, Organization Structure, Industry, Customer Type, Obligor Rating and Natural Currency. • **Graphical Reports**: All the measures, dimensions and reference periods covered by this analysis.
Analysis Description	This analysis provides a multidimensional view of the change in the selected measure through inflows and outflows during a selected period. The reports in the analysis display the Opening Balance, Inflows, Outflows, Current Balance, Variance Amount (between the opening and closing balance), and Variance Percentage. The periods covered in this analysis are: Last Reporting Date, Beginning of the Quarter, Beginning of the Month, Beginning of the Financial Year and Previous year on the Same Day. The measures covered in this analysis are EOP Balance – Total and Gross Credit Exposure.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Credit Portfolio – Inflows and Outflows: A multidimensional tabular report displaying the change in the selected measure through inflows and outflows during the selected reference period. • Key Credit Metrics - Inflows and Outflows– Fund based Exposures: A combination chart where the column chart displays the change in the selected measure through inflows and outflows and scatter plot as variance % during the selected period.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Customer Type • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

18

Wholesale Credit Risk Dashboard - Credit Quality

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 18-1   Parameters in the Page – Credit Quality

Parameters	Description
Page-Level Display Parameters	Not Applicable
Dashboard Name	Wholesale Credit Risk
Subject Area	Wholesale Credit Risk
Page Name	Credit Quality
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification

18.1 Stressed Assets Classification Summary

This section describes the parameters of the Stressed Assets Classification Summary Analysis.

Table 18-2   Stressed Assets Classification Summary Analysis Parameters

Parameters	Description
Analysis Name	Stressed Assets Classification Summary
Report Level Filters	• **Tabular Report**: Not Applicable • **Graphical Reports**: All dimensions covered by this analysis.
Analysis Description	This analysis gives a multidimensional view of the credit quality of the portfolio by displaying how the credit exposure is spread across various stressed asset classes such as: Watchlisted Exposures, Delinquent Exposure- upto 30 days DPD, Delinquent Exposure – 31 to 60 days DPD, Delinquent Exposure- More than 60 days DPD, Total Delinquent Exposures, NPA - Substandard Exposure, NPA - Doubtful exposure, NPA - Loss Exposure and Total Non-Performing Assets.

Table 18-2   (Cont.) Stressed Assets Classification Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • **Stressed Assets Classification Summary**: A multidimensional tabular report displaying the spread of the credit exposure across various stressed asset classes. The tabular report also provides drill-down facility where you can click on any cell (measures) on any row for the portfolio and drill-down to Obligor level details. • Stressed Assets Classification: A column chart that provides a multidimensional view of the credit quality of the portfolio and its spread across key stressed asset classes such as Watchlisted, Delinquent, and Non-Performing Assets, for the selected combinations of dimensions. The graphical report can be drill down to the obligor level details. Click on any column in the graph and then click on Stressed Assets Classification Detail to view the detailed drill-down report. • Delinquent Exposures Classification: A column chart that provides an in-depth analysis of the Delinquent Exposure and its spread across delinquency bands such as Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, and Delinquent Exposure – more than 60 Days DPD, for the selected combinations of dimensions. The graphical report can be drill down to the obligor level details. Click on any column in the graph and then click on Delinquent Exposures Classifications to view the detailed drill-down report. • NPA Exposures Classification: A column chart that provides an in-depth analysis of the Non-Performing Assets and its spread across various NPA subclasses such as NPA – Sub-Standard Exposure, NPA-Doubtful Exposure, and NPA Loss Exposures, for the selected combinations of dimensions. The graphical report can be drill down to the obligor level details. Click on any column in the graph and then click on NPA Exposures Classification Detail to view the detailed drill-down report.

Table 18-2   (Cont.) Stressed Assets Classification Summary Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line Of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Customer Type • Natural Currency

Table 18-2   (Cont.) Stressed Assets Classification Summary Analysis Parameters

Parameters	Description
Drill-down details	In the Stressed Assets Classification Summary (tabular report), click on any measure cell in table to drill-down to the list of Watchlisted, Delinquent and non-performing accounts (based on the combination of dimension representing each row).
	This report has drill down capabilities to assess Obligor level details such as the Obligor Name, Obligor ID, Gross Credit Exposure, EOP balance Fund based, EOP Balance Non-Fund Based, EOP Balance – Total, Undrawn Balance, Asset Classification, Days Past Due Date, Obligor Rating and ALLL.
	In the Stressed asset classification graph click on any column and click on stressed asset classification detail to drill down to obligor level details. In theStressed Asset Classification Detailreportthe following metrics are displayed; Obligor, Obligor ID, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Days Past Due, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, PD%, Rating, Credit Score, Credit Status, Watchlist Status and Total Delinquent Exposure.
	In the Delinquent exposures classification graph click on any column and click on delinquent exposure classification detail to drill down to obligor level details. The detailed report is displayed with the following metrics; Obligor, Obligor ID, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Days Past Due, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, PD, Rating, Credit Score, Credit Status, Watchlist Status, Delinquent Exposure Upto 30 days DPD, Delinquent Exposure 31 to 60 days DPD and Delinquent Exposure – more than 60 days DPD.
	In the NPA exposures classification graph click on any column and click on NPA exposures classification detail to drill down to obligor level details. The detailed report is displayed with the following metrics; Obligor, Obligor ID, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Days Past Due, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, PD, Rating, Credit Score, Credit Status, Watchlist Status, NPA – Sub -Standard Exposure, NPA - Doubtful Exposure, NPA – Loss Exposure and Total Non-Performing Assets.

Table 18-2 (Cont.) Stressed Assets Classification Summary Analysis Parameters

Parameters	Description
Drill-down Path	In the Stressed Assets Classification Summary (tabular report), click the following cells (measures) to view the drill-down reports: Watchlisted Exposures, Delinquent Exposure - Up to 30 days DPD, Delinquent Exposure - 31 to 60 days DPD, Delinquent Exposure – More than 60 days DPD, Total Delinquent Exposure, NPA Sub-standard Exposure, NPA-Doubtful Exposure, NPA-Loss Exposure and Total Non-Performing Assets.
	In the Stressed asset key classification graph click on any column and click **stressed asset classification** detail to drill down to obligor level details.
	In the Delinquent exposures classification graph click on any column and click on delinquent exposure classification detail to drill down to obligor level details.
	In the NPA exposures classification graph click on any column and click on NPA exposures classification detail to drill down to obligor level details.

18.2 Loan Loss Reserves - Summary

This section describes the parameters of the Loan Loss Reserves Summary Analysis.

Table 18-3 Loan Loss Reserves Summary Analysis Parameters

Parameters	Description
Analysis Name	Loan Loss Reserves Summary
Report Level Filters	• **Tabular Report**: Not Applicable • **Graphical Reports**: All dimensions covered by this analysis.
Analysis Description	This analysis gives a multidimensional view of the credit quality of the portfolio by displaying how the Allowance for Loans and Lease Losses (ALLL) and Net Charge Off (NCO) is spread across various dimensions (line of business, Product Types, Products and such other dimensions). The measures covered by this analysis are ALLL, Provisions, Gross Charge Off, Recoveries from written-off accounts, and Net Charge Off.

Table 18-3   (Cont.) Loan Loss Reserves Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Loan Loss Reserves Summary: A multidimensional tabular report displaying all the measures such as ALLL, Provisions, Gross Charge Off, Recoveries from written-off accounts, Net Charge Off for all listed dimensions. • Loan Loss Reserves Key Metrics: A combination, where for a selected combination of dimensions, the Allowance for Loan and Lease Losses (ALLL), Provisions (YTD), Provisions, Gross charge Off (YTD), Recoveries from WO Accounts (YTD), and Net Charge off (YTD) are displayed by the clustered columns, and Provision Ratio, Gross Charge Off Ratio, Net Charge Off Ratio, ALLL - NCO Ratio, Provisions - ALLL Ratio are displayed by the scatter plot. You can filter and view data for any one of the following measures: All Measures, Allowance for Loan and Lease Losses, Provisions, Gross Charge Off, Recoveries from WO Accounts and Net Charge Off. • Loan Loss Reserves - Composition: A radar chart displaying the composition/percentage proportion of all the key measures, for the selected combination of dimensions. You can filter data for the following measures: All Measures, Allowance for Loan and Lease Losses, Provisions, Gross Charge Off, Recoveries from WO Accounts and Net Charge Off.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Customer Type • Credit Status • Impaired Asset Class • Delinquency Bands • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

18.3 Credit Portfolio and Asset Quality – Trend

This section describes the parameters of the Credit Portfolio And Asset Quality Trend Analysis.

Table 18-4   Credit Quality Trend Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio And Asset Quality – Trend
Report Level Filters	• **Tabular Report**: Periodicity of the trend and all the measures covered by this analysis. • **Graphical Reports**: All the dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis provides a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. In addition to the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period. The measures covered by this analysis are EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Watchlisted Exposures, Delinquent Exposure - up to 30 days DPD, Delinquent Exposure - 31 to 60 days DPD, Delinquent Exposure - More than 60 days DPD, Total Delinquent Exposures, NPA - Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure, Total Non-Performing Assets, Allowance for Loans & Lease Losses, Provisions, Net Charge Off and Gross Charge Off.

Table 18-4   (Cont.) Credit Quality Trend Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • **Credit Portfolio and Asset Quality – Trend**: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters or 8 months. • **Credit Portfolio and Asset Quality – Trend of Variance**: A multidimensional tabular report displaying the variance of a selected measure over 8 years or 8 quarters or 8 months. • Key Credit Metrics – Trend: A line chart displaying the trend of EOP Balance – Total, Gross Credit Exposure, Total Undrawn Balance, Total NPA, and ALLL over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Total Non-Performing Assets and Allowance for Loan and Lease Losses. • Key Credit metrics – Variance Trend: A line chart displaying the variance of selected measure over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Total Non-Performing Assets and Allowance for Loan and Lease Losses. • Stressed Asset Classification Trend: A line chart displaying the trend of selected measure over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, Watchlisted Exposures, Delinquent Exposures – Up to 30 days DPD, Delinquent Exposures – 31 to 60 days DPD, Delinquent Exposures – more than 60 days DPD, Total Delinquent Exposures, NPA-Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure and Total Non-Performing Assets. • Stressed Asset Classification – Variance Trend: A line chart displaying the variance of the selected measure over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, Watchlisted Exposures, Delinquent Exposures – Up to 30 days DPD, Delinquent

Table 18-4   (Cont.) Credit Quality Trend Analysis Parameters

Parameters	Description
	Exposures – 31 to 60 days DPD, Delinquent Exposures – more than 60 days DPD, Total Delinquent Exposures, NPA-Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure and Total Non-Performing Assets. • Loan Loss Reserves – Trend: A line chart displaying the trend of all the loan loss reserves of the selected measure over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, Allowance for Loans and Lease Losses, Provisions, Net Charge Off, Gross Charge Off and Recoveries from WO Accounts. • Loan Loss Reserves – Variance Trend: A line chart displaying the variance of all the loan loss reserves of the selected measure over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, Allowance for Loans and Lease Losses, Provisions, Net Charge Off, Gross Charge Off, and Recoveries from WO Accounts.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Exposure Bands • Customer Type • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

18.4 Credit Quality Ratio - Summary

This section describes the parameters of the Credit Quality Ratio - Summary Analysis.

Table 18-5   Credit Quality Ratio - Summary Analysis Parameters

Parameters	Description
Analysis Name	Credit Quality Ratio - Summary

Table 18-5   (Cont.) Credit Quality Ratio - Summary Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: Not Applicable • **Graphical Reports**: All the dimensions covered by the analysis.
Analysis Description	This analysis provides a multidimensional overview of the key credit quality ratios for the wholesale portfolio, through measures such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provisions Ratio, ALLL- NCO Coverage Ratio, Charge Off Ratio and WAPD.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Credit Quality Ratio – Summary: A multidimensional tabular report displaying the Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL ratio, ALLL-NPA Coverage ratio, Current Provisions ratio, ALLL- NCO Coverage ratio, Charge Off ratio and WAPD for all the listed dimensions. • **Key Stressed Asset Ratios**: A column chart displaying the key stressed assets ratios such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, and WAPD for the selected combination of dimensions. • **Key Credit Loss Reserve Ratios**: A column chart displaying the key credit loss reserve ratios such as ALLL Ratio, Current Provision Ratio, and Charge off Ratio for the selected combination of dimensions. • **Key Coverage Ratios**: A column chart displaying the key coverage ratios such as ALLL-NPA Coverage Ratio and ALLL-NCO Coverage Ratio for the selected combination of dimensions.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Customer Type • Exposure Band • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

18.5 Credit Quality Ratio – Trend

This section describes the parameters of the Credit Quality Ratio - Trend Analysis.

Table 18-6   Credit Quality Ratio - Trend Analysis Parameters

Parameters	Description
Analysis Name	Credit Quality Ratio – Trend
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and periodicity of the trend. • **Graphical Reports**: All the dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis gives a multidimensional view of the past trend for a selected ratio over the last 8 years or 8 quarters or 8 months. The measures covered in this analysis are Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provision Ratio, ALLL-NCO Coverage Ratio, Charge off Ratio and WAPD.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Credit Quality Ratio – Trend: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters, or 8 months. • Key Credit Quality Ratios - Trend: A line chart displaying the trend of all the measures over the 8 years or 8 quarters, or 8 months for the selected combination of dimensions.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Customer Type • Exposure Band • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

18.6 Stressed Assets - Change Analysis

This section describes the parameters of the Stressed Assets – Change Analysis.

Table 18-7   Stressed Assets – Change Analysis Parameters

Parameters	Description
Analysis Name	Stressed Assets – Change Analysis

Table 18-7   (Cont.) Stressed Assets – Change Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: All the measures (such as Watchlisted Exposures, Delinquent Exposures, Non-Performing Assets, NPA Sub-Standard Assets, NPA – Doubtful Assets, NPA – Loss Assets) covered in this analysis and reference Period. • **Graphical Reports**: All the dimensions, measures (stressed asset class) covered by the analysis and Reference Period. This analysis provides an understanding of the changes and reasons for changes in the credit exposure to a selected stressed asset class (measure), between a selected reference period and current date. The reference periods covered by this analysis are Previous year, Beginning of year, Beginning of the quarter and Beginning of the month. The measures (stressed asset class) covered by this analysis are Watchlisted Assets, Delinquent Assets, Non-Performing Assets, NPA Sub-Standard Assets, NPA Doubtful Assets and NPA Loss Assets.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Stressed Assets – Change Analysis: A multidimensional tabular report, displaying change and reasons for the changes in exposure to a selected stressed asset class (measure), between a selected reference period and current date. The report displays the Opening Balance, New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance. • Stressed Assets - Change Analysis (graphical report): A bridge chart that analyzes the change and reasons for the change in exposure to selected stressed asset class (measure), between a selected reference period and current date, for a selected combination of dimensions. The report displays the Opening Balance, New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Customer Type • Natural Currency

Table 18-7   (Cont.) Stressed Assets – Change Analysis Parameters

Parameters	Description
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

18.7 Allowance for Loans and Lease Losses – Change Analysis

This section describes the parameters of the Allowance for Loans and Lease Losses - Change Analysis.

Table 18-8   Allowance for Loans and Lease Losses - Change Analysis Parameters

Parameters	Description
Analysis Name	Allowance for Loans and Lease Losses - Change Analysis
Report Level Filters	• **Tabular Report**: Reference Period • **Graphical Reports**: Reference period and all the dimensions covered by this analysis.
Analysis Description	This analysis provides an understanding of the changes and reasons for changes in the ALLL, between a selected reference period and the current date. The reference periods covered by this analysis are Previous Year, Beginning of Year, Beginning of the Quarter and Beginning of the Month.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Allowance for Loans and Lease Losses - Change Analysis: A multidimensional tabular report displaying the changes and reasons for changes in the ALLL between a selected reference period and current date. The report displays the Opening Balance of ALL, Net Charge off during the Period, Reserves before Provisions, Provisions during the current period, and Other Changes during the current period and Current Balance of ALLL. • Allowance for Loan and Lease Losses – Change: A bridge chart that analyzes the change and reasons for the changes in the ALLL, between a selected reference period and current date, for the selected combination of dimensions. The report displays the Opening Balance of ALLL, Net Charge off during the Period, Reserves before Provisions, Provisions made during the period, Other Changes and Current Balance of ALLL.

Table 18-8   (Cont.) Allowance for Loans and Lease Losses - Change Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • Customer Type • Credit Status • Impaired Asset Class • Delinquency Bands • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

19

Wholesale Credit Risk Dashboard - Top Exposures

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 19-1   Parameters in the Page – Top Exposures

Parameters	Descripion
Parameter	**Description**
Dashboard Name	Wholesale Credit Risk
Subject Area	Wholesale Credit Risk
Page Name	Top Exposures
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
uicontrol	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

19.1 Top Exposures

This section describes the parameters of the Top Exposures Analysis.

Table 19-2   Top Exposures Analysis Parameters

Parameters	Description
Analysis Name	Top Exposures
Report Level Filters	• **Tabular Report**: Dimensions and measures covered in this analysis, and Top x (provide the relevant value). • **Graphical Report**: Dimensions covered by this analysis, measures mentioned above for sorting the top exposures, and Top x (provide the relevant value).

Table 19-2   (Cont.) Top Exposures Analysis Parameters

Parameters	Description
Analysis Description	This analysis provides a multidimensional analysis of the Top x borrowers of the bank. You can analyze the Top x by various measures such as GCE, EOP Balance, Delinquent Exposures, NPA exposures, and Watchlisted exposures.
	Additionally, the report analyzes the top exposures in the portfolio against their probability of default, name concentration, and incremental exposure assumed on the borrower in the last one year.
	The report enables you to analyze the credit quality and single name concentration of the banks top exposures and helps analyze how the organization has dealt with increasing the exposures to the top borrowers during the last one year.

Table 19-2　(Cont.) Top Exposures Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and graphical reports, consisting of the following: • **Top Exposures**: A tabular report, where for the selected combination of dimensions, and choice of measure, the Top x borrowers of the bank are displayed along with the details of the borrower's Industry, Line of Business, Product Type, Product, Organization Structure, Legal entity, Rating, GCE, GCE Proportion, EOP Balance, EOP Proportion and PD percentage. • **Top Exposures**: A horizontal bar graph, where for the selected combination of dimensions, and choice of measure, the Top x borrowers of the bank are displayed along with the details of the borrower's GCE and EOP Balance. To view the drill down report, click on the graph and then click the **Top Exposure Detail**. The following drill-down reports are displayed with the following columns: • **Summary of Total exposure** – The fields in this report are Obligor, Obligor ID, PD %, Rating, Credit Score, Watchlist Status, Credit Status, Onboarding Date, Days Past Due, Gross Credit Exposure, Gross Credit Exposure Proportion %, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Total EOP Balance Proportion %, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Allowance for Loan and Lease Loss/ Total EOP Balance, Expected Loss, Utilization Percent and Security Value. • **Account Level Detailed Summary** – The fields in this report are Account Number, Product Name, Gross Credit Exposure, Top EOP Balance, Undrawn Amount, Overdue, Days Past Due and Credit Status. Watchlist Status, Allowance for Loan and Lease Losses, Security Value and Onboarding Date. • **Gross Credit Exposure & EOP of Top Exposures**: A combination chart, where for the selected combination of dimensions, and choice of measure. The total GCE of Top x, GCE of Top x/ Total GCE, Total EOP Balance of Top x and EOP Balance of Top x by Total EOP Balance is displayed. • **Top Exposure Proportion**: A speedometer chart, where for the selected combination of dimensions, it shows the proportion (top/total) of the selected measure for Top x borrowers of the bank. • **Top Exposures - Composition by PD, Concentration and Growth:**A bubble chart, where for the selected combination of dimensions, and choice of measure, the Top x exposures of the bank are analyzed for their

Table 19-2   (Cont.) Top Exposures Analysis Parameters

Parameters	Description
	probability of default, increase in exposure to the borrower during the last one year and single name concentration.
Dimensions	• Product Type • Product • Industry • Line of Business • Organization Structure • Legal Entity • Natural Currency • Rating
Drill-down details	The following drill-down reports are displayed with the following columns for **Top Exposures Reports,** Summary of Total Exposure, and Account Level Detailed Summary. The **Summary of Total Exposure** has the following options; Obligor, Obligor ID, PD %, Rating, Credit Score, Watchlist Status, Credit Status, Onboarding Date, Days Past Due, Gross Credit Exposure, Gross Credit Exposure Proportion %, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Total EOP Balance Proportion %, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Allowance for Loan and Lease Loss/ Total EOP Balance, Expected Loss, Utilization Percent and Security Value. The **Account Level Detailed Summary** exposure has the following options: Account Number, Product Name, Gross Credit Exposure, Top EOP Balance, Undrawn Amount, Overdue, Days Past Due, Credit Status, Watchlist Status, Allowance for Loan and Lease Losses, Security Value and Onboarding Date.
Drill-down Path	Not Applicable

20
Wholesale Credit Risk Dashboard - Rating Migration and Transition

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 20-1   Parameters in the Page – Rating Migration and Transition

Parameters	Description
Dashboard Name	Wholesale Credit Risk
Subject Area	Wholesale Credit Risk
Page Name	Rating Migration and Transition
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

20.1 Rating Migration and Transition

This section describes the parameters of the Rating Migration Analysis.

Table 20-2   External Rating Migration and Transition Analysis Parameters

Parameters	Description
Analysis Name	External Rating Migration and Transition

Table 20-2   (Cont.) External Rating Migration and Transition Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: Period of migration, Rating Source and dimension are covered by this analysis. Additionally, you can analyze the rating migration matrix, rating migration- upgrades and downgrades, and rating migration – change analysis by measures. Also, you can analyze the rating – migration change analysis report by credit rating. • **Graphical Reports**: Period of migration, Rating Source and dimension are covered by this analysis. Additionally, you can analyze the rating migration matrix, rating migration- upgrades and downgrades, and rating migration – change analysis by measures as listed below. The rating migration matrix, rating migration- upgrades and downgrades graphical report can be analyzed by credit rating Also, you can analyze the rating – migration change analysis report by credit rating.
Analysis Description	This analysis presents the External rating migration in the wholesale credit portfolio during a selected period, using a rating migration matrix. To analyze this report you can choose the External rating migration and transition tab. You can analyze this report by choosing any external rating source. The period covered in this analysis are Trailing 12 months, Year to date and Quarter to date. The measures covered in this analysis are Gross Credit Exposure, Total EOP balance, No of Obligors and % of Gross Credit Exposure, % of Total EOP balance and % of No of Obligors. When you choose % of Gross Credit Exposure or % of Total EOP balance or % of No of Obligors as a measure the following tabular and graphical report will get displayed: rating migration – matrix % and rating migration analysis – upgrades and downgrades %. The percentage calculation is based on open balance. The analysis also provides drill down capabilities to access details of obligors whose external ratings have changed during the period of analysis. You can further drill down to account level details of the respective Obligors.

Table 20-2   (Cont.) External Rating Migration and Transition Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following:

- Migration Ratios: This is a tabular report which displays various migration ratios such as Credit migration ratio, Exposure weighted migration ratio, Upgrade ratio – No. of Obligors, Downgrade ratio – No. of Obligors, Upgrade ratio – Exposure, Downgrade ratio – Exposure for a selected period, rating source and combination of dimensions.
- Rating Migration Matrix: A combination of tabular and graphical report which displays the migrations of obligors through different external credit ratings during a chosen period. The measure to be displayed in the migration matrix can be chosen from the filter.

The tabular report displays the details of migration of the obligor from one external credit rating to another by choosing a measure during the selected period, for a selected combination of dimensions.

To access the details of obligors who have migrated between two credit rating, you can drill down by clicking on a specific cell in the migration matrix during the given period and click on 'rating migration detail' to view the tabular report with Obligor details. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/Obligor.

The graphical report is a cluster column chart which displays the migrations of obligors during a chosen period for a chosen credit rating. It displays how the obligors in a portfolio, having a certain credit rating at the beginning of the period have migrated to same/different other credit ratings during a given period You can drill down to account level Obligor details tabular report by clicking on any column in the graph and then clicking on **Obligor details**. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor ID/Obligor.

- Rating Migration Analysis – Upgrades and Downgrades: A combination of tabular and graphical report which analyses rating upgrades, downgrades and rating unchanged for a given portfolio. Measure to be displayed can be selected from the filter. The tabular report displays the Total upgrades, Total downgrades and Total unchanged along with the migration ratio for all credit rating, for a chosen portfolio

To access the details of obligors who have upgraded or downgraded for a chosen measure, you can drill down by clicking on a specific cell in the Migration Analysis report and then click the Rating Migration Details to view the tabular report with Obligor Details. You can further drill-down to

Table 20-2   (Cont.) External Rating Migration and Transition Analysis Parameters

Parameters	Description
	account level details of the Obligor by clicking on Obligor ID or Obligor by clicking on Account Details.
	The graphical report is a cluster column chart which displays how the obligors in a portfolio have fared in their credit ratings. For each rating it displays the extent of downgrades, upgrades and unchanged. The scatter plot in the chart displays the migration ratio for the chosen rating. You can drill down to account level Obligor details by clicking on any column in the graph and click on rating migration detail. The tabular report with Obligor details will be displayed. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor.
	• Rating Migration - Change Analysis: A combination of tabular and graphical report which analyses the changes in number of borrowers, EOP balances and GCE for each credit rating.
	The tabular report displays the Open balance, Incremental value, Value Migrated in, Value Migrated out, new business, current balance and run off for the chosen credit rating. The measure to be displayed can be chosen from the filter.
	The tabular report has drill-down capabilities, where you can click on Value Migrated In or value migrated out or New business cell to access the details of the Obligor in the form of tabular report. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/Obligor.
	Click on Value Migrated in, Value Migrated out cell and click on migrated in upgrade downgrade and drill-down to a graphical report as a cluster column chart which displays the change analysis migrated in upgrades and migrated in downgrades value for a chosen credit code.
	The graphical report is a bridge chart which analyses the reasons for change in exposure or number of borrowers to a chosen credit rating. The report displays the Open balance, Incremental value, Value Migrated in, Value Migrated out, new business, run off, others and total for the selected period and combination of dimensions.
Dimensions	• Product type • Product • Legal Entity • Line of Business • Organization Structure • Industry • Customer type • Natural Currency

Table 20-2   (Cont.) External Rating Migration and Transition Analysis Parameters

Parameters	Description
Drill-down details	In the Rating migration matrix (tabular report) click on any cell in the Migration Matrix click on rating migration detail to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed -Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Present rating-external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor/ Obligor ID and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the Rating migration matrix (graphical report) click on any column, click on rating migration detail to drill-down to the details of Obligors as mentioned above in the form of a tabular report. Click on the Obligor/Obligor ID and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the Rating migration Analysis- Upgrades and downgrades (Tabular Report), click on any cell in the matrix, click on rating migration details to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous rating - external, Present rating - external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the Rating migration Analysis- Upgrades and downgrades (graphical Report), click on any column, click on obligor details to drill-down to the details of Obligors as mentioned above in the form of a tabular report. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.

Table 20-2   (Cont.) External Rating Migration and Transition Analysis Parameters

Parameters	Description
	In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on obligor details to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous rating - external, Present rating - external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out, click on migrated in upgrade downgrade details tab to drill down to a graphical report which displays the change analysis migrated in upgrade and downgrade value in the form of cluster column chart for a particular chosen credit code.

Table 20-2   (Cont.) External Rating Migration and Transition Analysis Parameters

Parameters	Description
Drill-down Path	In the Rating migration matrix (tabular report) click on any cell in the Migration Matrix click on rating migration detail to drill-down to the details of Obligors Click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor.
	In the Rating migration matrix (graphical report) click on any column, click on rating migration detail to drill-down to the details of Obligors. Click on the Obligor ID/Obligor, click on the account details to further drill down to the account level details of the respective Obligor.
	In the Rating migration Analysis- Upgrades and downgrades (Tabular Report), click on any cell in the matrix, click on rating migration details to drill-down to the details of Obligors. Click on the Obligor click on the account details to further drill down to the account level details of the respective Obligor.
	In the Rating migration Analysis- Upgrades and downgrades (graphical Report), click on any column, click on obligor details to drill-down to the details of Obligors. Click on the Obligor click on the account details to further drill down to the account details of the respective Obligor.
	In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on obligor details to drill-down to the details of Obligors. Click on the Obligor and click on the account details to further drill down to the account details of the respective Obligor.
	In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out, click on migrated in upgrade downgrade details tab to drill down to a graphical report - change analysis migrated in upgrade and downgrade.

Table 20-3   BASEL Rating Migration Analysis Parameters

Analysis Name	BASEL Rating Migration Analysis
Report Level Filters	• **Tabular Report**: Period of migration, Rating Source and dimension are covered by this analysis. Additionally, you can analyze the rating migration matrix, rating migration- upgrades and downgrades, and rating migration – change analysis by measures as listed below. Also, you can analyze the rating – migration change analysis report by credit code. • **Graphical Reports**: Period of migration, Rating Source and dimension are covered by this analysis. Additionally, you can analyze the rating migration matrix, rating migration- upgrades and downgrades, and rating migration – change analysis by measures as listed below. The rating migration matrix, rating migration-upgrades and downgrades graphical report can be analyzed by rating Also, you can analyze the rating – migration change analysis report by credit code.
Analysis Description	This analysis presents the BASEL rating migration and transition in the wholesale credit portfolio during a selected period, using a rating migration matrix. To view and analyze this report you can choose the External rating migration and transition tab, and choose the option as BASEL from the rating source. The period covered in this analysis are Trailing 12 months, Year to date and Quarter to date. The measures covered in this analysis are Gross Credit Exposure, Total EOP balance, No of Obligors and % of Gross Credit Exposure, % of Total EOP balance and % of No of Obligors. When you choose % of Gross Credit Exposure or % of Total EOP balance or % of No of Obligors as a measure the following tabular and graphical report will get displayed: BASEL rating migration – matrix % and BASEL rating migration analysis – upgrades and downgrades %. The percentage calculation is based on open balance. The analysis also provides drill down capabilities to access details of obligors whose BASEL ratings have changed during the period of analysis. You can further drill down to account level details of the respective Obligors.

Table 20-3   (Cont.) BASEL Rating Migration Analysis Parameters

Analysis Name	BASEL Rating Migration Analysis
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following:
	• BASEL Migration Ratios: This is a tabular report which displays various ratios of the Obligor under BASEL as a rating source, such as Credit migration ratio, Exposure weighted migration ratio, Upgrade ratio – No. of Obligors, Downgrade ratio – No. of Obligors, Upgrade ratio – Exposure, Downgrade ratio – Exposure for a selected period, and combination of dimensions.
	• BASEL Rating Migration Matrix: A combination of tabular and graphical report which displays the migrations of an obligor through BASEL rating by a chosen measure from the above list.
	The tabular report displays the details of migration of the obligor from one BASEL rating to another by choosing a measure during the selected period, for a selected combination of dimensions.
	To access the details of obligors who have migrated between two BASEL rating, you can drill down by clicking on a specific cell in the migration matrix during the given period and click on rating migration detail to view the tabular report with Obligor details You can further drill-down to account level details of the Obligor by clicking on Obligor ID/Obligor.
	The graphical report is a cluster column chart which analyses the chosen BASEL rating of the obligors who have migrated to other bands for the chosen measure as listed above. It displays how the obligors have migrated from the beginning of the period to the end of period for a selected portfolio (based on chosen combination of dimensions). You can drill down to account level Obligor details by clicking on any column in the graph and click on Obligor details. The tabular report with Obligor details will be displayed. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor ID/Obligor.
	• BASEL Rating Migration Analysis – Upgrades and Downgrades: A combination of tabular and graphical report which analyses the movement of the obligor from one BASEL rating to another in the form of upgrades and downgrades and the rating which has remain unchanged for a chosen measure and period. The tabular report displays the Total upgrades, Total downgrades and Total unchanged along with the migration ratio.
	To access the details of obligors who have upgraded or downgraded for a chosen measure, you can drill down by clicking on a specific cell in the migration matrix and click on rating migration

Table 20-3   (Cont.) BASEL Rating Migration Analysis Parameters

Analysis Name	BASEL Rating Migration Analysis
	details to view the tabular report with Obligor details. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/ Obligor. The graphical report is a cluster column chart which analyses for the chosen BASEL rating of the obligors who have migrated to other ratings in the form of upgrades and downgrades as well as the ratings which has remain unchanged for a chosen measure as listed above. The scatter plot in the chart displays the migration ratio for the chosen rating. You can drill down to account level Obligor details by clicking on any column in the graph and click on rating migration detail. The tabular report with Obligor details will be displayed. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor. • BASEL Rating Migration - Change Analysis: A combination of tabular and graphical report which analyses the reasons for change in gross credit exposure or numbers of obligors or total EOP balance of the Obligor, for a chosen range of BASEL credit code. The tabular report displays the Open balance, Incremental value, Value Migrated in, Value Migrated out, new business, current balance and run off and others for the chosen BASEL credit code, for a chosen measure. The tabular report has drill-down capabilities, where you can click on Value Migrated In or value migrated out or New business cell to access the rating migration detail of the Obligor in the form of tabular report. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/ Obligor. Click on Value Migrated in, Value Migrated out cell and click on migrated in upgrade downgrade and drill-down to a graphical report as a cluster column chart which displays the change analysis migrated in upgrades and migrated in downgrades value for a chosen BASEL credit code. The graphical report is a bridge chart which analyses the reasons for change in the chosen measure for a chosen BASEL credit code. The report displays the Open balance, Incremental value, Value Migrated in, Value Migrated out, new business, run off, others and total for the selected period and combination of dimensions.

Table 20-3   (Cont.) BASEL Rating Migration Analysis Parameters

Analysis Name	BASEL Rating Migration Analysis
Dimensions	- Product type - Product - Legal Entity - Line of Business - Organization Structure - Industry - Customer type - Natural Currency

Table 20-3   (Cont.) BASEL Rating Migration Analysis Parameters

Analysis Name	BASEL Rating Migration Analysis
Drill-down details	In the BASEL rating migration matrix (tabular report) click on any cell in the Migration Matrix click on rating migration detail to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed -Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Present rating-external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor/ Obligor ID and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the BASEL rating migration matrix (graphical report) click on any column, click on rating migration detail to drill-down to the details of Obligors as mentioned above in the form of a tabular report. Click on the Obligor/Obligor ID and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the BASEL rating migration Analysis- Upgrades and downgrades (Tabular Report), click on any cell in the matrix, click on rating migration details to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous rating - external, Present rating - external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the BASEL rating migration Analysis- Upgrades and downgrades (graphical Report), click on any column, click on obligor details to drill-down to the details of Obligors as mentioned above in the form of a tabular report. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.

Table 20-3 (Cont.) BASEL Rating Migration Analysis Parameters

Analysis Name	BASEL Rating Migration Analysis
	In the BASEL rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on obligor details to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous rating -external, Present rating - external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the BASEL rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out, click on migrated in upgrade downgrade details tab to drill down to a graphical report which displays the change analysis migrated in upgrade and downgrade value in the form of cluster column chart for a particular chosen credit code.

Table 20-3   (Cont.) BASEL Rating Migration Analysis Parameters

Analysis Name	BASEL Rating Migration Analysis
Drill-down Path	In the BASEL Rating migration matrix (tabular report) click on any cell in the Migration Matrix click on rating migration detail to drill-down to the details of Obligors Click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor.
	In the BASEL Rating migration matrix (graphical report) click on any column, click on rating migration detail to drill-down to the details of Obligors. Click on the Obligor ID/Obligor, click on the account details to further drill down to the account level details of the respective Obligor.
	In the BASEL Rating migration Analysis- Upgrades and downgrades (Tabular Report), click on any cell in the matrix, click on rating migration details to drill-down to the details of Obligors. Click on the Obligor click on the account details to further drill down to the account level details of the respective Obligor.
	In the BASEL Rating migration Analysis- Upgrades and downgrades (graphical Report), click on any column, click on obligor details to drill-down to the details of Obligors. Click on the Obligor click on the account details to further drill down to the account details of the respective Obligor.
	In the BASEL Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on obligor details to drill-down to the details of Obligors. Click on the Obligor and click on the account details to further drill down to the account details of the respective Obligor.
	In the BASEL Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out, click on migrated in upgrade downgrade details tab to drill down to a graphical report - change analysis migrated in upgrade and downgrade.

> ⓘ **Note**
>
> The previous rating filter is not passing to the Basel Rating Migration Matrix table's drill-down report available in the External Rating Migration & Transition tab of the Rating Migration and Transition tab in the Wholesale Credit Risk dashboard and hence, the drill-down report is not displayed.

Table 20-4   Internal Rating Migration Analysis Parameters

Analysis Name	Internal Rating Migration Analysis
Report Level Filters	• **Tabular Report**: Period of migration, Rating Source and dimension are covered by this analysis. Additionally, you can analyze the rating migration matrix, rating migration- upgrades and downgrades, and rating migration – change analysis by measures as listed below. Also, you can analyze the rating – migration change analysis report by credit code. • **Graphical Reports**: Period of migration, Rating Source and dimension are covered by this analysis. Additionally, you can analyze the rating migration matrix, rating migration- upgrades and downgrades, and rating migration – change analysis by measures as listed below. The rating migration matrix, rating migration- upgrades and downgrades graphical report can be analyzed by rating Also, you can analyze the rating – migration change analysis report by credit code.
Analysis Description	This analysis presents the Internal rating migration and transition in the wholesale credit portfolio during a selected period, using a rating migration matrix. To view and analyze this report you can choose the Internal rating migration tab The period covered in this analysis are Trailing 12 months, Year to date and Quarter to date. The measures covered in this analysis are Gross Credit Exposure, Total EOP balance, No of Obligors and % of Gross Credit Exposure, % of Total EOP balance and % of No of Obligors. When you choose % of Gross Credit Exposure or % of Total EOP balance or % of No of Obligors as a measure the following tabular and graphical report will get displayed: rating migration – matrix % and rating migration analysis – upgrades and downgrades %. The percentage calculation is based on open balance. The analysis also provides drill down capabilities to access details of obligors whose Internal ratings have changed during the period of analysis. You can further drill down to account level details of the respective Obligors.

Table 20-4　(Cont.) Internal Rating Migration Analysis Parameters

Analysis Name	Internal Rating Migration Analysis
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Migration Ratios: This is a tabular report which displays various ratios of the Obligor such as Credit migration ratio, Exposure weighted migration ratio, Upgrade ratio – No. of Obligors, Downgrade ratio – No. of Obligors, Upgrade ratio – Exposure, Downgrade ratio – Exposure for a selected period, rating source and combination of dimensions. • Rating Migration Matrix: A combination of tabular and graphical report which displays the migrations of an obligor through different internal credit rating by a chosen measure from the above list. The The tabular report displays the details of migration of the obligor from one internal credit rating to another by choosing a measure during the selected period, for a selected combination of dimensions. To access the details of obligors who have migrated between two credit rating, you can drill down by clicking on a specific cell in the migration matrix during the given period and click on rating migration detail to view the tabular report with Obligor details. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/Obligor. The graphical report is a cluster column chart which analyses the chosen credit rating of the obligors who have migrated to other bands for the chosen measure as listed above. It displays how the obligors have migrated from the beginning of the period to the end of period for a selected portfolio (based on chosen combination of dimensions). You can drill down to account level Obligor details tabular report by clicking on any column in the graph and then clicking on Obligor details. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor ID/Obligor. • Rating Migration Analysis – Upgrades and Downgrades: A combination of tabular and graphical report which analyses the movement of the obligor from one internal credit rating to another in the form of upgrades and downgrades and the rating which has remain unchanged for a chosen measure, rating source and period. The tabular report displays the Total upgrades, Total downgrades and Total unchanged along with the migration ratio. To access the details of obligors who have upgraded or downgraded for a chosen measure, you can drill down by clicking on a specific cell in the migration matrix and click on rating migration details to view the tabular report with Obligor

Table 20-4   (Cont.) Internal Rating Migration Analysis Parameters

Analysis Name	Internal Rating Migration Analysis
	details. You can further drill-down to account level details of the Obligor by clicking on Obligor.
	The graphical report is a cluster column chart which analyses for the chosen rating band of the obligors who have migrated to other ratings in the form of upgrades and downgrades as well as the ratings which has remain unchanged for a chosen measure as listed above. You can drill down to account level Obligor details by clicking on any column in the graph and click on rating migration detail. The tabular report with Obligor details will be displayed. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor.
	• Rating Migration - Change Analysis: A combination of tabular and graphical report which analyses the reasons for change in gross credit exposure or numbers of obligors or total EOP balance of the Obligor, for a chosen range of credit code.
	The tabular report displays the Open balance, Incremental value, Value Migrated in, Value Migrated out, new business, current balance and run off and others for the chosen credit code, for a chosen measure.
	The tabular report has drill-down capabilities, where you can click on Value Migrated In or value migrated out or New business cell to access the rating migration detail of the Obligor in the form of tabular report. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/Obligor.
	Click on Value Migrated in, Value Migrated out cell and click on migrated in upgrade downgrade and drill-down to a graphical report as a cluster column chart which displays the change analysis migrated in upgrades and migrated in downgrades value for a chosen credit code.
	The graphical report is a bridge chart which analyses the reasons for change in the chosen measure for a chosen credit code. The report displays the Open balance, Incremental value, Value Migrated in, Value Migrated out, new business, run off, others and total for the selected period and combination of dimensions.
Dimensions	• Product type • Product • Legal Entity • Line of Business • Organization Structure • Industry • Customer type • Natural Currency

Table 20-4   (Cont.) Internal Rating Migration Analysis Parameters

Analysis Name	Internal Rating Migration Analysis
Drill-down details	In the Rating migration matrix (tabular report) click on any cell in the Migration Matrix click on rating migration detail to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed -Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Present rating-external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor/ Obligor ID and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the Rating migration matrix (graphical report) click on any column, click on rating migration detail to drill-down to the details of Obligors as mentioned above in the form of a tabular report. Click on the Obligor/Obligor ID and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the Rating migration Analysis- Upgrades and downgrades (Tabular Report), click on any cell in the matrix, click on rating migration details to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous rating - external, Present rating - external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.
	In the Rating migration Analysis- Upgrades and downgrades (graphical Report), click on any column, click on obligor details to drill-down to the details of Obligors as mentioned above in the form of a tabular report. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension.

Table 20-4   (Cont.) Internal Rating Migration Analysis Parameters

Analysis Name	Internal Rating Migration Analysis
	In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on obligor details to drill-down to the details of Obligors in the form of a tabular report. The following details are displayed: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous rating - external, Present rating - external, Date of migration – external, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. Click on the Obligor and click on the account details to further drill down to view the details mentioned above along with account number as additional dimension. In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out, click on migrated in upgrade downgrade details tab to drill down to a graphical report which displays the change analysis migrated in upgrade and downgrade value in the form of cluster column chart for a particular chosen credit code.

Table 20-4   (Cont.) Internal Rating Migration Analysis Parameters

Analysis Name	Internal Rating Migration Analysis
Drill-down Path	In the Rating migration matrix (tabular report) click on any cell in the Migration Matrix click on rating migration detail to drill-down to the details of Obligors Click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor.
	In the Rating migration matrix (graphical report) click on any column, click on rating migration detail to drill-down to the details of Obligors. Click on the Obligor ID/Obligor, click on the account details to further drill down to the account level details of the respective Obligor.
	In the Rating migration Analysis- Upgrades and downgrades (Tabular Report), click on any cell in the matrix, click on rating migration details to drill-down to the details of Obligors. Click on the Obligor click on the account details to further drill down to the account level details of the respective Obligor.
	In the Rating migration Analysis- Upgrades and downgrades (graphical Report), click on any column, click on obligor details to drill-down to the details of Obligors. Click on the Obligor click on the account details to further drill down to the account details of the respective Obligor.
	In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on obligor details to drill-down to the details of Obligors. Click on the Obligor and click on the account details to further drill down to the account details of the respective Obligor.
	In the Rating migration – Change analysis (tabular report) click on any cell in migrated in, migrated out, click on migrated in upgrade downgrade details tab to drill down to a graphical report - change analysis migrated in upgrade and downgrade.

20.2 Rating Transition Probability

This section describes the parameters of the Rating Transition Probability Analysis.

Table 20-5   Rating Transition Probability Analysis Parameters

Parameters	Descripion
Analysis Name	Rating Transition Probability
Report Level Filters	• **Tabular Report**: Period in Months. • **Graphical Reports**: Ratings
Analysis Description	The analysis presents the rating transition probability during a specified future period.

Table 20-5   (Cont.) Rating Transition Probability Analysis Parameters

Parameters	Descripion
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following: • Rating Transition Probability: A tabular report that displays the rating transition probabilities for all rating combinations during the selected future period. • Rating Transition Probability: A scatter plot graph that displays the rating transition probabilities of the selected rating to other ratings, during the selected future period.
Dimensions	• Not Applicable
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

21

Wholesale Credit Risk Dashboard - New Business

The following table displays the Page Level Filters which are applicable to all the reports in this page.

Table 21-1   Page Level Filters

Parameters	Description
Dashboard Name	Wholesale Credit Risk
Subject Area	Wholesale Credit Risk
Page Name	New Business
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

21.1 New Business - Summary

This section describes the parameters of the New Business - Summary Analysis.

Table 21-2   New Business Summary Analysis Parameters

Parameters	Description
Analysis Name	New Business Summary
Report Level Filters	• **Tabular Report**: The time period covered by this analysis such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing. • **Graphical Report**: All the dimensions covered by this analysis and time period mentioned above.

Table 21-2   (Cont.) New Business Summary Analysis Parameters

Parameters	Description
Analysis Description	This analysis presents the changes in the gross credit exposure during the selected reference period (such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing), along with details of incremental business (GCE) from existing Customers and new Customers, which caused the changes in the GCE.
	Additionally, it analyzes the percentage composition of incremental business from new and existing Customers, percentage proportion of incremental GCE (new & existing Customers) by product types, products, line of business and other such dimensions. The analysis helps identify pockets that have disproportionally contributed to the incremental business during the specified period of analysis.

Table 21-2 (Cont.) New Business Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:
	• New Business Summary: A multidimensional Tabular Report displaying all the measures such as Opening GCE, Net Incremental GCE from Existing Business, Net Incremental GCE from New Business, Current GCE, percentage of Incremental GCE from Existing Business, percentage of Incremental GCE from New Business, Composition of Incremental GCE from New Business, Composition of Incremental GCE (Total), Incremental GCE from New Business/Current GCE, Incremental GCE from Existing Business/Current GCE, Total Incremental GCE/Current GCE for all listed dimensions and the selected reference period.
	• Incremental Business (GCE) – Analysis: A combination chart displaying the New Incremental GCE from Existing Business, Net Incremental GCE from New Business, and Total Incremental GCE. You can choose one of the following measures from the dropdown filter to analyze the graph: All Measures, Net Incremental GCE from Existing Business, and Net Incremental GCE from New Business and Total Incremental GCE.
	• Current GCE Composition: A stacked column chart displaying the Current GCE Composition across Incremental GCE - Existing Business, and Incremental GCE - New Business during the selected reference period, across a selected combination of dimensions. You can choose one of the following measures from the dropdown filter to analyze the graph: All Measures, Incremental GCE New Business and Incremental GCE Existing Business.
	• Incremental Business (GCE) – Composition: A radar chart displaying the composition of Net Incremental GCE - Existing Business, Net Incremental GCE - New Business, and Total Incremental GCE, for the new business garnered during the selected reference period, for a selected combination of dimensions. You can choose one of the following measures from the dropdown filter to analyze the graph: All Measures, Net Incremental GCE from New Business, and Net Incremental GCE from Existing Business and Total Incremental GCE.

Table 21-2   (Cont.) New Business Summary Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Customer Type • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

21.2 Top Incremental Business – New and Existing Customers

This section describes the parameters of the Top Incremental Business - New and Existing Customers.

Table 21-3   Top Incremental Business – New and Existing Customers Analysis Parameters

Parameters	Description
Analysis Name	Top Incremental Business – New & existing Customers
Report Level Filters	• **Tabular Report**: All the dimensions covered by this analysis, Time Period, and Display Top x (10, 25, 50, 100, 250, 500). • **Graphical Report**: All the dimensions covered by this analysis, Time Period and Display Top x (10, 25, 50, 100, 250, 500).
Analysis Description	The analysis provides details of the Top x incremental business from existing as well as new borrowers during the selected period. Additionally, the report analyzes the top incremental business during the selected period in terms of their probability of default and name concentration.

Table 21-3   (Cont.) Top Incremental Business – New and Existing Customers Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: • Top Incremental Business - New and Existing **Customers**: A tabular report, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new customers are displayed. The percentage change in GCE and PD% is also displayed for the existing as well as new customers. • Top Incremental Business - Existing **Customers** - Quality and Concentration: A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing Customers are analyzed for their credit quality and concentration. • Top Incremental Business - New **Customers** - Quality and Concentration: A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from new Customers are analyzed for their credit quality and concentration. • Incremental Business: A horizontal bar chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new Customers are displayed in the decreasing order of incremental GCE.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Customer Type • Natural Currency
Drill-down details	Not Applicable
Drill-down path	Not Applicable

21.3 New Business - Trend

This section describes the parameters of the New Business - Trend Analysis.

Table 21-4   New Business Trend Analysis Parameters

Parameters	Description
Analysis Name	New Business Trend

Table 21-4   (Cont.) New Business Trend Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and periodicity of the trend. • **Graphical Reports**: All dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis gives a multidimensional view of the past trend of Incremental Business GCE over the last 8 years or 8 quarters or 8 months. The tabular report highlights the Incremental Business GCE and percentage composition of Incremental Business GCE across 8 years or 8 quarters or 8 months. The measures covered in this analysis are Incremental Business GCE - New Business Customers, Incremental Business GCE - Existing Customers and Total Incremental Business GCE.
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, comprising the following: • New Business Trend: A multidimensional tabular report displaying the trend of the selected new business measure (Incremental GCE - New Customers, Incremental GCE Existing Customers, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months. • Incremental Business – Trend: A line chart displaying the trend of all the new business measures (Incremental GCE - New Customers, Incremental GCE Existing Customers, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. You can choose one of the following measures from the dropdown filter to analyze the graph: All measures, New Incremental Business GCE, Existing Incremental Business GCE, and Total Incremental Business GCE. • Incremental Business – Trend of Proportions: A stacked column chart displaying the Incremental business - Trend of Proportions, for a selected new business measure over 8 years or 8 quarters or 8 months, for the selected combination of dimensions.

Table 21-4   (Cont.) New Business Trend Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating - applicable for Incremental Business GCE – New Customers measure in the New Business Trend report • LTV - applicable for Incremental Business GCE – New Customers measure in the New Business Trend report • Customer Type • PD Band - applicable for Incremental Business GCE – New Customers measure in the New Business Trend report • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

22

Wholesale Credit Risk Dashboard - Concentration

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 22-1   Parameters in the Page – Concentration

Parameters	Description
Dashboard Name	Wholesale Credit Risk
Subject Area	Wholesale Credit Risk
Page Name	Concentration
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

22.1 Concentration Analysis

This section describes the parameters of the Concentration Analysis.

Table 22-2   Concentration Analysis Parameters

Parameters	Description
Analysis Name	Concentration Analysis
Report Level Filters	• **Tabular Report**: Not applicable. • **Graphical Reports**: All the dimensions covered by this analysis, include Previous Year (Y/N), measures and Display Top x (10, 25, 50, 100, 250).
Analysis Description	This analysis provides a comprehensive and multidimensional view of the credit concentrations across the bank. This analysis enables spotting of credit exposure, delinquency, and default concentrations in the credit portfolio of the bank, across multiple combinations of dimensions.

Table 22-2　(Cont.) Concentration Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following: • Concentration Analysis: A multidimensional tabular report displaying the concentration by Number of accounts, EOP Balance Total, Gross Credit Exposure, Delinquent Exposure, NPA Exposure Concentration, across all listed dimensions. The report displays the Current Balance and percentage of total (percentage proportion). The graphical report consists of the combination chart which displays the selected measure as a cluster column and the line chart displays the % composition of the selected measure based on the combination of the chosen dimension. • GCE Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for GCE concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio. • Delinquent Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for delinquent exposure, concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio. • NPA Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for NPA Exposure concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
Dimensions	• Legal Entity • Line of Business • Product Type • Obligor Rating • Product • Organization Structure • Asset Classification • Collateral Type • Maturity Profile • Issuer Type • Industry • LTV • Customer Type • PD Band • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

22.2 Concentration Trend

This section describes the parameters of the Concentration Trend Analysis.

Table 22-3   Concentration Trend Analysis Parameters

Parameters	Description
Analysis Name	Concentration Trend
Report Level Filters	• **Tabular Report**: Measures and periodicity of trend covered by this analysis. • **Graphical Report**: All the dimensions, measures and periodicity of trend covered by this analysis.
Analysis Description	This analysis presents the trend of concentration for the last 8 years or 8 quarters. The measures covered by this analysis are: Number of Accounts, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance - Non-Fund Based, EOP Balance – Total, Delinquent Exposure, Allowance for Loans and Lease Losses and NPA.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Concentration – Trend (tabular report): A multidimensional tabular report displaying the concentration trend of a selected measure over 8 years or 8 quarters. • Concentration – Trend (graphical report): A line chart displaying the concentration trend of a selected measure over 8 years or 8 quarters, for a selected combination of dimensions.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Industry • Obligor Rating • LTV • Customer Type • Exposure Band • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

22.3 Top Concentration

This section describes the parameters of the Top Concentration Analysis.

Table 22-4   Top Concentration Analysis Parameters

Parameters	Description
Analysis Name	Top Concentration
Report Level Filters	Graphical Reports: Display Top x.
Analysis Description	This analysis displays the top GCE, Delinquent, and NPA concentrations across five default combination of dimensions - Product type, Line of Business, Organization Structure, Industry, and Natural Currency. The analysis covers top 10, 25, 50, 100 and 250 portfolio concentrations.
Reports Covered	This analysis is presented through graphical reports as under: • Top GCE Concentration: A bubble chart, where each bubble representing a portfolio combination based on five dimensions covered by this analysis is analyzed for GCE concentration, YoY percentage change in the EOP Balance of the portfolio, and WAPD of the portfolio. • Top Delinquent Concentration: A bubble chart, where each bubble representing a portfolio combination based on five dimensions covered by this analysis is analyzed for Delinquent concentration, YoY percentage change in the EOP Balance of the portfolio, and WAPD of the portfolio. • Top NPA Concentration: A bubble chart, where each bubble representing a portfolio combination based on five dimensions covered by this analysis is analyzed for NPA concentration, YoY percentage change in the EOP Balance of the portfolio, and WAPD of the portfolio.
Dimensions	• Line of Business • Product Type • Organization Structure • Industry • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

23

Wholesale Credit Risk Dashboard - Group Exposure

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 23-1   Parameters in the Page – Group Exposure

Parameters	Description
Dashboard Name	Wholesale Credit Risk
Subject Area	Wholesale Credit Risk
Page Name	Group Exposure
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

23.1 Group Exposure Summary

This section describes the parameters of the Group Exposure Analysis.

Table 23-2   Group Exposure – Summary Analysis Parameters

Parameters	Description
Analysis Name	Group Exposure
Report Level Filters	**Tabular Report**: Measures, and display Top X **Graphical Reports**: Measures and Display Top X
Analysis Description	This analysis presents the details of the organization's credit exposure to group of connected entities. The measures covered in this analysis are: Gross Credit Exposure, EOP balance- Fund based, EOP balance- Non- Fund based, EOP balance Total, Indirect Exposure, Gross Relationship Exposure, Delinquent Exposure and NPA Exposure.

Table 23-2   (Cont.) Group Exposure – Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following:
	• Group Exposure Summary: A multidimensional tabular report displays the list of groups to which the organization has credit exposure to, along with the details of Parent name, Parent rating PD, Gross Credit Exposure, EOP Balance, Indirect Exposure, Gross Relationship Exposure, Delinquent Exposure and NPA exposure, for the group. You can filter the data based on above mentioned measures and view the first top 10 entries in the report.
	The tabular report can be drill down to summary of the total exposure of the Obligor as well as to the obligor level detailed summary tabular reports. You can further drill down to account level details of the Obligor in the form of tabular report by clicking on Obligor ID from the obligor level detailed summary.
	• Top Group Exposures – Credit quality & Concentration: This report analyses the top Group exposures based on the selected measures and Top x. The report consists of a bubble chart where each bubble representing a Group is analyzed for Group exposures concentration (concentration of the selected measure), YoY percentage change of the chosen measure of the group and PD of the Group. You can choose one of the following measures from the dropdown filter to analyze the graph: EOP Balance and Gross Credit Exposure. Filter and view the data by selecting from one of the following measures: EOP Balance, and Gross Credit Exposure.
	• Top Group Exposures: A bar chart that highlights the list (name) of Top x Group exposures in the descending order, based on the selected measure and Top x.
Dimensions	Not Applicable

Table 23-2 (Cont.) Group Exposure – Summary Analysis Parameters

Parameters	Description
Drill-down details	The Group Exposure – Summary tabular report provides drill-down capabilities. Click on the Parent ID and click on Group Exposure detail to view the drill-down reports- Summary of Total Exposure and Obligor Level Detailed Summary.
	• Summary of Group Exposure tabular report displays the following obligor details: Parent ID, Parent name, parent PD, Parent Rating, Gross Credit Exposure, EOP Balance – Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Indirect Exposure, Gross Relationship Exposure, Delinquent exposure and NPA exposure.
	• **Obligor level detailed summary**: This drill down report displays the following details of the Obligor: Obligor ID, Obligor name, Legal Entity, Line of Business, Organization Structure, Industry, Product Type, Product, PD %, Rating, Credit Score, Credit status, Watchlist status, LTV, Onboarding date, Customer type, Days past due, Gross Credit exposure, Gross Credit exposure proportion %, EOP Balance Fund based, EOP Balance Non- Fund based, EOP Balance Total, EOP Balance Total proportion %, ALLL, ALLL/Total EOP balance, Undrawn amount, Indirect Exposure, Gross Relationship Exposure, Overdues, Expected loss, Security value, Utilization percent.
	To further drill down to account details of the Obligor, click on the Obligor ID from Obligor level detailed summary and click on account level details which displays the Account level detailed summary (tabular report) with the following details: Product name, Account number, Gross Credit exposure, EOP Balance Fund based, EOP Balance Non-Fund based, EOP Balance Total, Undrawn amount, Overdues, Days past due, Watchlist status, Credit status, ALLL, Security value, Onboarding date and LTV.
	The Group Exposures graphical report also provides drill-down capabilities. In the horizontal bar graph click on any column click on Group exposure details to view the following drill-down reports: Summary of Total Exposure and Account level detailed summary.
	• Summary of Group Exposure tabular report displays the following obligor details: Parent ID, Parent name, parent PD, Parent Rating, Gross Credit Exposure, EOP Balance – Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Indirect Exposure, Gross Relationship Exposure, Delinquent exposure and NPA exposure.
	• **Obligor level detailed summary**: This drill down report displays the following details of

Table 23-2   (Cont.) Group Exposure – Summary Analysis Parameters

Parameters	Description
	the Obligor: Obligor ID, Obligor name, Legal Entity, Line of Business, Organization Structure, Industry, Product Type, Product, PD %, Rating, Credit Score, Credit status, Watchlist status, LTV, Onboarding date, Customer type, Days past due, Gross Credit exposure, Gross Credit exposure proportion %, EOP Balance Fund based, EOP Balance Non- Fund based, EOP Balance Total, EOP Balance Total proportion %, ALLL, ALLL/Total EOP balance, Undrawn amount, Indirect Exposure, Gross Relationship Exposure, Overdues, Expected loss, Security value, Utilization percent.
	To further drill down to account details of the Obligor, click on the Obligor ID from Obligor level detailed summary and click on account level details which displays the Account level detailed summary (tabular report) with the following details: Product name, Account number, Gross Credit exposure, EOP Balance Fund based, EOP Balance Non-Fund based, EOP Balance Total, Undrawn amount, Overdues, Days past due, Watchlist status, Credit status, ALLL, Security value, Onboarding date and LTV.
Drill-down path	• In the tabular report – Group Exposures click on Parent ID click on group exposure details to view the following drill-down tabular reports: Summary of Total Exposure and Account Level Detailed Summary. • In the graphical report – Top Group Exposure click on any column click on group exposure details to view the following drill-down reports: Summary of Total Exposure and Account Level Detailed Summary.

24

Credit Risk – Trading Book (Derivatives) – Single Counterparty Credit Exposures

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 24-1   Parameters in the Page – Single Counterparty Credit Exposures

Parameters	Descriptions
Dashboard Name	Credit Risk – Trading Book
Subject Area	Credit Risk – Trading Book
Page Name	Single Counterparty Credit Exposures
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Page-Level Display Parameters	Not Applicable

24.1 Single Counterparty Credit Exposures

This section describes the parameters of the Single Counterparty Credit Exposures Analysis.

Table 24-2   Single Counterparty Credit Exposures - Analysis Parameters

Parameters	Description
Analysis Name	Single Counterparty Credit Exposures
Report Level Filters	• **Tabular Report**: Measures (Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) for sorting the single counterparty exposures and Display Top x (Top 10, 25, 50, 100, 250 and 500). • **Graphical Reports**: All Dimensions covered by the analysis, Measures (Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure & Maximum Exposure) covered by the analysis and Display Top x (Top 10, 25, 50, 100, 250 and 500).
Analysis Description	The analysis helps understand the organization's exposure in the trading book to single counter parties. This analysis has drill down capabilities to analyze the exposures at the netting set level for each single counterparty and further analyze exposures to each contract within the netting set.

Table 24-2   (Cont.) Single Counterparty Credit Exposures - Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • Top Single Counterparty Credit Exposures: A Tabular Report which lists the top x (report level filter) Single Counterparty Credit Exposures of the organization based on selected measure (report level filter), along with the complete details of the obligor such as Obligor name, Obligor ID, Legal Entity, Industry type, Industry, Counterparty rating and Counterparty PD %. The report also provides the details of the Obligors exposure such as the Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure. This report has drill down capabilities to the netting set level and further to the contract level details. • Top CCE – Asset Quality and Concentration: A bubble chart that displays the top x (report level filter) single counterparty credit exposures of the organization based on the selected measure (report level filter), selected combination of dimensions and Display – Top x, where each bubble representing an obligor/ single counterparty is analyzed for concentration of the selected measure, percentage change in the selected measure during the last 30 days and the PD of the obligor/single counterparty.
Dimensions	• Legal Entity • Industry Type • Industry • Counterparty Rating • Counterparty PD %

Table 24-2   (Cont.) Single Counterparty Credit Exposures - Analysis Parameters

Parameters	Description
Drill-Down details	The Top Single Counterparty Credit Exposures tabular report has drill- down capabilities. The tabular report is presented at the Obligor level of the single counterparty which can be drill down to the netted contracts and non-netted contracts of the single counterparty exposures. The tabular report can be further drill-down to contract level details of the obligor from the netted contracts at the netting set level. Click on the single counterparty's Obligor ID, to drill-down to the Netting Set level which displays the Netting set level details (for netted contracts) and Contract Level details (For non-netted contracts) under **Exposure at netting set (for netted contracts) & Contract level (for non-netted contracts) for selected counterparty.** The following tabular reports are being displayed: • **Netting set level details (for netted contracts):** This drill-down report displays the netting set level details for all the netting agreements/netting sets of the single counterparty along with details of the Obligor such as Obligor name, Obligor ID, Netting ID, Netting Agreement Description, Exposure At Default, Gross Credit Exposure, Notional Amount, Collateral Pledged, Collateral Received, Margin, Credit Valuation Adjustment, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure, at the netting set level. • Contract Level details (For non-netted contracts): This drill –down report displays the netting set level details for all the non- netting agreements/netting sets of the single counterparty along with details of the Obligor such as Obligor name, Obligor ID, Netting ID, Netting Agreement Description column without a description, Contract ID, Contract type, Exposure At Default, Gross Credit Exposure, Market Value, Notional Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure, at the netting set level. You can further drill down to view the contract level details of the Obligors with the netting set agreement byclicking on the netting ID from Netting set level details (for netted contracts) tabular report. • **Contract level details of all contracts within chosen Netting Set**: This drill down report displays the following contract details for each netting set ID of single counterparty: Obligor Name, Obligor ID, Netting ID, Netting Agreement Description, Contract ID, Contract Type, Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount,

Table 24-2   (Cont.) Single Counterparty Credit Exposures - Analysis Parameters

Parameters	Description
	Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.
Drill-down Path	In the Top - Single Counterparty Credit Exposures (tabular report), click on the Obligor ID to view the first drill-down report Exposure at netting set (for netted contracts) & Contract level (for non-netted contracts) for selected Counterparty which displays the Netting Set Level Details (for netted contracts) and Contract Level Details (For non-netted contracts) as tabular reports.
	In the Netting Set Level Details (for netted contracts) drill-down report click on the Netting ID to view the further drill-down report as Contract level details of all contracts within chosen Netting Set.

25

Credit Risk – Trading Book (Derivatives) - Group Exposure

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 25-1   Parameters in the Page – Group Exposure

Dashboard Name	Credit Risk – Trading Book
Subject Area	Credit Risk – Trading Book
Page Name	Group Exposure
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Page-Level Display Parameters	Not Applicable

25.1 Group of Connected Counterparties Credit Exposures (GCCE)

This section describes the parameters of the Group of Connected Counterparties Credit Exposures (GCCE) Analysis.

Table 25-2   Group of Connected Counterparties Credit Exposures (GCCE) Analysis Parameters

Parameters	Description
Analysis Name	Group of Connected Counterparties Credit Exposures (GCCE)
Report Level Filters	• **Tabular Report**: Measures (Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) for sorting the group of connected counterparties and Display Top x (Top 10, 25, 50, 100, 250 and 500). • **Graphical Reports**: Measures (Exposure at Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) and Display Top x (Top 10, 25, 50, 100, 250 and 500).

Table 25-2   (Cont.) Group of Connected Counterparties Credit Exposures (GCCE) Analysis Parameters

Parameters	Description
Analysis Description	This analysis presents the details of the organization's credit exposure in the trading book to group of connected counterparties.
	This analysis has drill down capabilities to analyze the list of the single counterparty exposures linked to each parent, and further analyzes the exposures at the netting set level for each single counterparty and further to each contract within the netting set level.
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following:
	• Top Group of Connected Counterparty Exposures: A tabular report which lists the top x (report level filter) group of connected counterparty exposures of the organization based on selected measure (report level filter) and Display top x, along with the complete details of the Group such as Parent Name, Parent ID, Counterparty PD %, Parent Rating.
	The report also gives the details of the Parent/ Group exposure such as the Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.
	This report has drill down capabilities from parent level to subsidiary (Obligor) level details of the counterparty credit exposures. The tabular report can be further drill-down to the netting set level for each subsidiary (Obligor) which displays the Netting Set Level Details (for netted contracts) & Contract level details (for non-netted contracts) for the selected Counterparty.
	Netting Set Level (for netted contracts) tabular report can be further drill-down to Contract level details of all contracts within chosen Netting Set by clicking on the netting ID.
	• Top GCCE – Asset Quality and Concentration: A bubble chart that displays the top x (report level filter) Group of counterparty credit exposures of the organization based on selected measure (report level filter) and Display – Top x, where each bubble representing a group/parent counterparty (Group of connected counterparties) is analyzed for concentration of the selected measure, percentage change in the selected measure during the last 30 days and the PD of the Parent counterparty.
Dimensions	Not applicable

Table 25-2   (Cont.) Group of Connected Counterparties Credit Exposures (GCCE) Analysis Parameters

Parameters	Description
Drill-Down details	The Top Group Counterparty Credit Exposures tabular report has drill- down capabilities. The tabular report is presented at the Group or parent level displayed as Top Group of Connected Counterparty Exposures which can be drill down to the subsidiary (Obligor) level within that group being displayed as Single Counterparty credit exposures – forming part of the selected group, along with the name of the group which displays the following details: Obligor Name, Obligor ID, Industry type, Industry, Counterparty rating, Counterparty PD %, Exposure At Default, Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure, and Maximum Exposure.
	The Single Counterparty credit exposures – forming part of the selected group tabular report can be drill-down to the netting set level which displays the netted contracts and non-netted contracts of the group counterparty exposures displayed as **Exposure at netting set (for netted contracts) & Contract level (for non-netted contracts) for selected Counterparty**.
	Click on the Obligor ID from Single Counterparty credit exposures – forming part of the selected group tabular report to drill-down to the following reports:
	• **Netting Set Level Details (for netted contracts)**: This drill down report displays the Netting Set Level Details (for netted contracts) with the following details like Obligor ID, Obligor Name, Industry Type, Industry, Counterparty Rating, Counterparty PD %, Exposure at Default, Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure, and Maximum Exposure.
	• Contract Level Details (For non-netted contracts): This drill –down report displays the netting set level details for all the non- netted agreements/netting sets of the single counterparty within the group with details of the Obligor such as Obligor name, Obligor ID, Netting ID, Netting Agreement Description column without a description, Contract ID, Contract type, Exposure At Default, Gross Credit Exposure, Market Value, Notional Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.
	You can further drill down to view the contract level details of the Obligors with the netting set agreement byclicking on the netting ID from Netting

Table 25-2   (Cont.) Group of Connected Counterparties Credit Exposures (GCCE) Analysis Parameters

Parameters	Description
	Set Agreement – Single Counterparty Credit Exposures tabular report. • **Contract level details of all contracts within chosen Netting Set**: This drill down report displays the following contract details for each netting set ID of single counterparty within the group: Obligor Name, Obligor ID, Netting ID, Netting Agreement Description, Contract ID, Contract Type, Exposure At Default, Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure, and Maximum Exposure.
Drill-down Path	In the Top Group of Connected Counterparty Credit Exposures tabular report, click on Parent ID to view the first drill-down report Single Counterparty Credit exposures – Forming Part of the Selected Group which displays the counterparty Credit Exposures of the obligor linked to Parent along with the group name. In the Single Counterparty Credit exposures – Forming Part of the Selected Group tabular report, click on the Obligor ID to further drill-down to Exposure at netting set (for netted contracts) & Contract level (for non-netted contracts) for selected Counterparty which displays the Netting Set Level Details (for netted contracts) and Contract Level Details (For non-netted contracts) as tabular reports. In the Netting Set Level Details (for netted contracts) drill-down report click on the Netting ID to further view the drill-down report as Contract level details of all contracts within chosen Netting Set.

26

Credit Risk - Trading Book (Derivatives) - Portfolio Summary – Obligor Type

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 26-1   Parameters in the Page – Portfolio Summary – Obligor Type

Parameters	Description
Dashboard Name	Credit Risk- Trading Book
Subject Area	Credit Risk- Trading Book
Page Name	Portfolio Summary – Obligor Type
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Page-Level Display Parameters	Not Applicable

26.1 Portfolio Summary- Obligor Type

This section describes the parameters of the Portfolio Summary- Obligor Type Analysis.

Table 26-2   Portfolio Summary- Obligor Type Analysis Parameters

Parameters	Description
Analysis Name	Portfolio Summary- Obligor Type
Report Level Filters	• **Tabular Report**: Obligor Type displaying details of Corporations, Non – Deposit taking systemically taking important Non-deposit taking systemically important Non-banking financial companies, Retail and Sovereign. • **Graphical Report**: All the dimensions covered by this analysis and Obligor Type.
Analysis Description	The analysis presents the organizations exposures to a selected obligor type as mentioned above. This analysis has drill down capabilities to analyze the single counterparty exposures under each obligor type, exposures at the netting set level for each single counterparty and exposure to each contract within each netting set of a single counterparty.

Table 26-2   (Cont.) Portfolio Summary- Obligor Type Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following:

• Portfolio Summary – Obligor Type: A multidimensional tabular report which displays the counterparty exposures at portfolio level with following details such as Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure, for the selected obligor type.

This report has drill down capabilities from portfolio level to single counterparty level. The tabular report can be further drill-down to the netting set level for each subsidiary (Obligor) which displays the Netting Set Level Details (for netted contracts) & Contract level details (for non-netted contracts) for the selected Counterparty.

Netting Set Level (for netted contracts) tabular report can be further drill-down to Contract level details of all contracts within chosen Netting Set by clicking on the netting ID.

• Key Metrics Summary: A clustered column chart that displays the measures for a selected obligor type and selected combination of dimensions based on selected measures Filter and view the data by selecting from one of the following measures: All Measures, Exposure At Default, Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.

• Key Metrics Composition: A radar chart that displays all the composition of all key measures (Exposure at Default, Gross Credit Exposure, Notional Amount, Market value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) for the selected combination of dimensions and obligor type. Filter and view the data by selecting from one of the following measures: All Measures, Exposure At Default. Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.

• Asset Quality and Concentration: A bubble chart that displays the Single Counterparty exposures of the organization based on selected measure (Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure - these measures will be report level filters for this report) and Obligor Type, where

Table 26-2   (Cont.) Portfolio Summary- Obligor Type Analysis Parameters

Parameters	Description
	each bubble representing a single counterparty is analyzed for concentration of the selected measure, percentage change in the selected measure - during the last 30 days and the PD of the Single counterparty. Filter and view the data by selecting from one of the following measures: Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.
Dimensions	• Legal Entity • Counterparty rating

Table 26-2   (Cont.) Portfolio Summary- Obligor Type Analysis Parameters

Parameters	Description
Drill-Down details	The Portfolio Summary – Obligor type tabular report has drill- down capabilities. The tabular report is presented at the portfolio level displayed as Portfolio Summary – Obligor type which can be drill down to the single counterparty level details within that portfolio along with the portfolio name.
	On clicking the Legal Entity In the Portfolio Summary – Obligor Type report, you can drill down to the list of single counterparty exposures represented by the row/portfolio (based on the combination of dimension representing each row), the following report is displayed:
	• **Single Counterparty Credit exposures – Forming Part of the Selected Portfolio –** This drill-down report presents the following details such as Obligor ID, Obligor Name, Counterparty Rating, Counterparty PD%, Exposure At Default, Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.
	To further drill-down, click on the Obligor ID in the Single Counterparty Credit exposures – Forming Part of the Selected Portfolio to view the **Exposure at netting set (for netted contracts) & Contract level (for non-netted contracts) for selected Counterparty** tabular report which displays the Obligor level details with the netted contracts and Contract Level Details (For non-netted contracts):
	• **Netting Set Level Details (for netted contracts)**– This drill-down report displays the netting set level details for all the netting agreements/netting sets of the single counterparty within the portfolio along with details of the Obligor such as Obligor Name, Obligor ID, Netting ID, Netting Agreement Description, Exposure At Default, Gross Credit Exposure, Notional Amount, Collateral pledged, Collateral received, Margin, Credit value adjustment, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure, and Maximum Exposure.
	• **Contract Level Details (For non-netted contracts)** – This drill –down report displays the netting set level details for all the non-netting agreements/netting sets of the single counterparty within the portfolio with details of the Obligor such as Obligor Name, Obligor ID, Netting ID, Netting Agreement Description, Contract ID, Contract type, Exposure At Default, Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure, and Maximum Exposure.

Table 26-2   (Cont.) Portfolio Summary- Obligor Type Analysis Parameters

Parameters	Description
	To further drill-down click on the Netting ID from the Exposure at netting set (for netted contracts) & Contract level (for non-netted contracts) for selected Counterparty tabular report to view the contract level details (within the netting set) for the chosen counterparty credit exposure, the following report will be displayed:
	• **Contract level details of all contracts within chosen Netting Set-** This drill down report displays the following contract details for each netting set ID of single counterparty within the portfolio: Obligor Name, Obligor ID, Netting ID, Netting Agreement Description, Contract ID, Contract type, Exposure At Default, Gross Credit Exposure, Notional Amount, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure, and Maximum Exposure.
Drill-down Path	In the Portfolio Summary – Obligor type report click the Legal Entity to view the Single Counterparty Credit exposures – Forming Part of the Selected Portfolio as a tabular report.
	In the Single Counterparty Credit exposures – Forming Part of the Selected Portfolio tabular report, click on the Obligor ID to view the **Exposure at netting set (for netted contracts) & Contract level (for non-netted contracts) for selected Counterparty** which displays the Netting Set Level Details (for netted contracts) and Contract Level Details (For non-netted contracts) as tabular reports.
	In the Netting Set Level Details (for netted contracts) drill-down report click on the Netting ID to further view the drill-down report as Contract level details of all contracts within chosen Netting Set.

27
Retail Credit Risk Dashboard - Credit Portfolio Overview

The following table lists the Page Level Filters which apply to all the analysis on this page.

Table 27-1   Parameters in the Page – Credit Portfolio Overview

Parameters	Description
Dashboard Name	Retail Credit Risk
Subject Area	Retail Credit Risk
Page Name	Credit Portfolio Overview
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

27.1 Credit Portfolio - Summary

This section describes the parameters of the Credit Portfolio - Summary Analysis.

Table 27-2   Credit Portfolio - Summary Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio - Summary
Report Level Filters	• **Tabular Report**: Not Applicable • **Graphical Report**: All the dimensions covered by this analysis.

Table 27-2   (Cont.) Credit Portfolio - Summary Analysis Parameters

Parameters	Description
Analysis Description	This analysis provides a multidimensional overview of the retail banking book, through a combination of key credit measures such as: • Number of Accounts • Gross Credit Exposure (GCE) • EOP Balance Total (EOP-Total) • Overdues • Undrawn Balance Commitments • Non-Performing Assets (NPA) • Non-Performing Assets/EOP Balance – Fund Based (NPA percentage) • Allowance for Loan and Lease Losses (ALLL) • Allowance for Loan and Lease Losses/EOP Balance – Fund Based • Security Value
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following: • **Credit Portfolio Summary**: A multidimensional tabular report displaying all the measures covered by the analysis for all the selected combination of dimensions. The tabular report can be further drill-down to Obligor level details • **Key Credit Metrics**: A combination chart where for a given date and selected dimension, the stacked column chart displays the EOP Balance – Total, Undrawn Balance Commitments, and the line charts displays the NPA percentage and ALLL percentage. The graphical report also provides a detailed drill-down tabular report to Obligor level details. • **Key Credit Metrics**: Composition: A radar chart displaying the composition or percentage proportion of all the key credit measures (except ratios) by a selected measure. You can filter data by selecting one of the following measures: All Measures, EOP Balance – Fund Based, EOP Balance – Non Fund Based, EOP Balance Total, Gross Credit Exposure, Undrawn Balance Commitments, and Non-Performing Assets, Allowance for Loan and Lease Losses, Security Value and Overdues. You can filter data by selecting one of the following measures: All Measures, EOP Balance – Fund Based, EOP Balance – Non Fund Based, EOP Balance Total, Gross Credit Exposure, Undrawn Balance Commitments, Non-Performing Assets, Allowance for Loan and Lease Losses, Security Value and Overdues.

Table 27-2   (Cont.) Credit Portfolio - Summary Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Collateral type • Customer Type • LTV • Natural Currency • Maturity Profile • Age on book Band • Sourcing Channel • Customer Age Bands • Exposure Band • Co-Signer Status • External Credit Score Bands • Lien Position
Drill-down details	The Credit portfolio summary tabular report can be drill-down to Obligor level details. Click on the natural currency to view the Obligor level details such as the Obligor Name, Obligor ID, Line of Business, Product type, Product, Natural Currency, Gross Credit Exposure, EOP Balance – Fund based, EOP Balance – Total, Undrawn balance commitments, Overdues, Credit Status, Watchlist Status, External credit score, Allowance for Loan and lease loss, Allowance for Loan and Lease Losses/EOP Balance – Fund Based, Account status, Interest type and Security value. TheKey Credit Metrics graphical report also provides the drill-down tabular report to Obligor level details. Click on any column in the graph and click on key credit metric detail, the following details will be displayed: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit status, Watchlist status, Days Past due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value and Utilization Percent.
Drill-down Path	In the Credit Portfolio - Summary (tabular report), click on Natural Currency to view the Drill-down Report with Obligor level details. In the Key credit metric graph click on any stacked column, click on key credit metric detail to view the obligor level details for the respective key credit metric.

27.2 Credit Portfolio – Inflows and Outflows – Fund Based Exposures

This section describes the parameters of the Credit Portfolio – Inflows and Outflows – Fund Based Exposures.

Table 27-3   Credit Portfolio – Inflows and Outflows – Fund Based Exposures Parameters

Parameters	Descriptions
Analysis Name	Credit Portfolio – Inflows and Outflows – Fund Based Exposures
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and reference period. • **Graphical Reports**: All the measures, dimensions and reference periods covered by this analysis.
Analysis Description	This analysis provides a multidimensional view of the change in the selected measure through inflows and outflows during a selected period. The reports in the analysis display the Opening Balance, Inflows, Outflows, Current Balance, Variance Amount (between the opening and closing balance), and Variance In Percentage. The periods covered in this analysis are Last Reporting Date, Beginning of the Quarter, Beginning of the Month, Beginning of the Year and Previous Year. The measures covered in this analysis are EOP Balance – Total and Gross Credit Exposure.
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, including the following: • **Credit Portfolio – Inflows and Outflows – Fund Based Exposures**: A multidimensional tabular report displaying the change in the selected measure through inflows and outflows during the selected period. • **Key Credit Metrics - Inflows and Outflows – Fund Based Exposures**: A combination chart where the clustered column displays the change in the selected measure through inflows, outflows, opening balance, current balance and the scatter plot displays the variance percentage during the selected period.

Table 27-3   (Cont.) Credit Portfolio – Inflows and Outflows – Fund Based Exposures Parameters

Parameters	Descriptions
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Customer Type • Natural Currency • Exposure Bands
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

28

Retail Credit Risk Dashboard - Credit Quality

The following table displays the Page Level Filters which apply to all the analysis in this page.

Table 28-1   Parameters in the Page – Credit Quality

Parameters	Description
Dashboard Name	Retail Credit Risk
Subject Area	Retail Credit Risk
Page Name	Credit Quality
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

28.1 Stressed Assets Classification Summary

This section describes the parameters of the Stressed Assets Classification Summary.

Table 28-2   Stressed Assets Classification Parameters

Parameters	Description
Analysis Name	Stressed Assets Classification Summary
Report Level Filters	• **Tabular Report**: Metric (Number of Accounts, Actual values, Number Proportion, Proportion of actual values) • **Graphical Reports**: All dimensions covered by the analysis and Metric (Number of Accounts, Actual values, Number Proportion, Proportion of actual values)
Analysis Description	This analysis gives a multidimensional view of credit quality of the portfolio by displaying how the credit exposure is spread across various stressed asset classes such as Watchlisted Exposures, Delinquent Exposure - Up to 30 days DPD, Delinquent Exposure 31-60 days DPD, Delinquent Exposure - More than 60 days DPD, Total Delinquent exposures, NPA – Sub-standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposures, Total NPAs, YTD Gross Charge Off, YTD Foreclosures and YTD Recoveries for WO Accounts.

Table 28-2 (Cont.) Stressed Assets Classification Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: • **Stressed Assets Classification Summary**: A multidimensional tabular report displaying the spread of credit exposure (Number of Accounts, Actual values, Number Proportion, Proportion of actual values) across various types of asset classes. The tabular report also provides drill-down facility where you can click on any cell (measures) on any row for the portfolio and drill-down to Obligor level detailsclasses such as: Watchlisted Exposures, Delinquent Exposure - Up to 30 days DPD, Delinquent Exposure 31-60 days DPD, Delinquent Exposure - More than 60 days DPD, Total Delinquent Exposure, NPA - Substandard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposures and Total NPAs. The report provides details of the following measures: YTD Gross Charge Off, YTD Foreclosures and YTD Recoveries for WO Accounts. This report also has drill down capabilities to assess the account level details such as the Obligor Name, Obligor ID, Org Structure, Line of Business, Product type, Product, Natural Currency, Gross Credit Exposure, EOP Balance – Fund based, EOP Balance – Non-fund based, EOP Balance – Total, Undrawn balance commitments, Utilization Percent, Overdues, DPD, Allowance for Loan and lease loss, YTD Gross Charge off, YTD Foreclosures, YTD recoveries for WO accounts, Watchlist status, Credit status, Credit score, Asset classification. • **Stressed Assets - Key Classification**: A clustered column chart that provides a multidimensional view of the credit quality of the portfolio and its spread across key stressed asset classes such as Watchlisted exposures, Total Delinquent exposures, and Total Non-Performing Assets, for the selected combinations of dimensions. The graphical report can be drill down to the obligor level details. Click on any column in the graph and then click on Stressed Assets Classification Detail to view the detailed drill-down report. • **Delinquent Exposures Classification**: A clustered column chart that provides an in-depth analysis of the Delinquent Exposure and it is spread across delinquency bands such as Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, and Delinquent Exposure – more than 60 Days

Table 28-2   (Cont.) Stressed Assets Classification Parameters

Parameters	Description
	DPD, for the selected combinations of dimensions.
	The graphical report can be drill down to the obligor level details. Click on any column in the graph and then click on Delinquent Exposures Classifications The detailed report is displayed with the following metrics:
	Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist status, Days Past Due, Gross Credit Exposure, EOP Balance - Fund Based,
	EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount
	Overdue, Allowance for Loan and Lease Losses, Expected Loss
	Security Value, Utilization Percent, Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, Delinquent Exposure – more than 60 Days DPD, and Total Delinquent Exposure to view the detailed drill-down report.
	• **NPA Exposures Classification**: A clustered column chart that provides an in-depth analysis of the Non-Performing Assets and it's spread across various NPA subclasses such as NPA – Sub-Standard Exposure, NPA-Doubtful Exposure, and NPA Loss Exposures, for the selected combinations of dimensions.
	The graphical report can be drill down to the obligor level details. Click on any column in the graph and then click on NPA Exposures Classification Detail. The detailed report is displayed with the following metrics: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist status, Days Past Due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, Delinquent Exposure – more than 60 Days DPD and Total Delinquent Exposure to view the detailed drill-down report.
	• **Foreclosures and Charge Offs - Summary**: A clustered column chart that provides an in-depth analysis of the Foreclosures and Charge Offs summary and it is spread through measures such as YTD Gross Charge Off, YTD Foreclosures, and YTD Recoveries for WO Accounts, for the selected combinations of dimensions.
	The graphical report can be drill down to the obligor level details. Click on any column in the graph and then click on Foreclosures and Charge Offs Detail

Table 28-2   (Cont.) Stressed Assets Classification Parameters

Parameters	Description
	The detailed report is displayed with the following metrics: Obligor
	Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist status, Days Past Due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, Delinquent Exposure – more than 60 Days DPD, and Total Delinquent Exposure to view the detailed drill-down report.
	• **Stressed Assets Composition**: A radar chart displaying the composition or percentage proportion of all the key stressed asset classes, YTD foreclosures, YTD write offs and YTD recovery from Written off accounts, for the selected combination of dimensions. You can select any one of the measures from the dropdown filter: All measures, Watchlisted Exposures, Delinquent Exposure - Up to 30 days DPD, Delinquent Exposure 31-60 days DPD, Delinquent Exposure - More than 60 days DPD, Total Delinquent Exposure, NPA - Substandard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposures and Total NPAs. Filter the data using any one of the measures: All Measures, Watchlisted Exposures, Delinquent Exposure – upto 30 days DPD, Delinquent Exposure – 31 to 60 days DPD, Delinquent Exposure – More than 60 days DPD, Total Delinquent Exposure, NPA -Sub–Standard Exposure, NPA -Doubtful Exposure, NPA – Loss Exposure, Total Non-Performing Assets, YTD Gross Charge Off, YTD Foreclosures, YTD Recoveries and YTD for WO Accounts.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Customer Type • Natural Currency • Sourcing Channel • External Credit Score Band

Table 28-2   (Cont.) Stressed Assets Classification Parameters

Parameters	Description
Drill-down details	The Stressed Assets Classification Summary (tabular report) can be drill-down to Obligor level details. Click on any measure cell in table to drill-down to the list of Watchlisted, Delinquent and non-performing accounts (based on the combination of dimension representing each row). The drill-down tabular report presents the following Obligor level details: Obligor Name, Obligor ID, Org Structure, Line of Business, Product type, Product, Natural Currency, Gross Credit Exposure, EOP Balance – Fund based, EOP Balance – Non-fund based, EOP Balance – Total, Undrawn balance commitments, Utilization Percent, Overdues, DPD, Allowance for Loan and lease loss, YTD Gross Charge off, YTD Foreclosures, YTD recoveries for WO accounts, Watchlist status, Credit status, Credit score, Asset classification.
	The Stressed asset key classification graphical report can be drill-down to a tabular report displaying the Obligor level details. Click on any column and click on stressed asset classification detail to drill down to obligor level details with the following measures: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist status, Days Past Due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent and Watchlisted Exposures.
	The Delinquent exposures classification graphical report can be drill-down to a tabular report displaying the Obligor level details. Click on any column and click on delinquent exposure classification detail to drill down to obligor level details with the following measures: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist status, Days Past Due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, Delinquent Exposure – more than 60 Days DPD and Total Delinquent Exposures.
	The NPA exposures classification graphical report can be drill-down to a tabular report displaying the Obligor level details. Click on any column and click on NPA exposure classification detail to drill down to obligor level details with the following measures: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist status, Days Past Due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue,

Table 28-2   (Cont.) Stressed Assets Classification Parameters

Parameters	Description
	Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, NPA – Sub-Standard Exposure, NPA –Doubtful exposure, NPA – Loss Exposures and Total Non- Performing Assets.
	The Foreclosures and Charge-Offs Summary graphical report can be drill-down to a tabular report displaying the Obligor level details. Click on any column and click on Foreclosures and Charge-Offs classification detail to drill down to obligor level details with the following measures: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist status, Days Past Due, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value, Utilization Percent, Gross charge off, Net Charge off and Foreclosures.
Drill-down Path	In the Stressed Assets Classification Summary (tabular report), click the following cells (measures) to view the drill-down reports: Watchlisted Exposures, Delinquent Exposure - Up to 30 days DPD, Delinquent Exposure - 31 to 60 days DPD, Delinquent Exposure – More than 60 days DPD, Total Delinquent Exposure, NPA Sub-standard Exposure, NPA-Doubtful Exposure, NPA-Loss Exposure and Total Non-Performing Assets.
	In the Stressed asset key classification graph click on any column and click on stressed asset classification detail to drill down to obligor level details.
	In the Delinquent exposures classification graph click on any column and click on delinquent exposure classification detail to drill down to obligor level details.
	In the NPA exposures classification graph click on any column and click on NPA exposures classification detail to drill down to obligor level details.
	In the Foreclosure and charge offs - summary graph click on any column and click on Foreclosure and charge offs - summary detail to drill down to obligor level details.

28.2 Credit Quality - Summary

This section describes the parameters of the Credit Quality - Summary Analysis.

Table 28-3   Credit Quality - Summary Analysis Parameters

Parameters	Description
Analysis Name	Credit Quality – Summary
Report Level Filters	• **Tabular Report**: Not Applicable • **All Graphical Reports**: All the dimensions covered by this analysis.
Analysis Description	This analysis gives a multidimensional view of the credit quality of the retail banking book. The measures covered by this report are: Number of Accounts, GCE, Total EOP Balance, Undrawn Balance, YTD Avg Utilization, Overdues, YTD Provisions, YTD Gross Charge Off, YTD Recoveries, YTD Net Charge Off, Allowance for Loans and Lease Losses, YTD Foreclosures and Security Value.

Table 28-3   (Cont.) Credit Quality - Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and graphical report, including the following:

- **Credit Quality Summary**: A multidimensional tabular report displaying the credit quality of the retail banking book through measures such as Number of accounts, GCE, Total EOP Balance, Undrawn Balance, YTD Avg Utilization, Overdues, YTD provisions, YTD Gross Charge Off, YTD recoveries, YTD Net Charge Off, Allowance for Loans and Lease Losses, YTD Foreclosures, and Security Value, for all the listed dimensions. Filter the below graphical reports based on the dimension and metric options available.

- **Number of Accounts – Portfolio Summary:** A Horizontal Bar chart displaying the number of accounts in the portfolio, for chosen combination of dimensions.

- **Loan Loss Reserves Key Metrics**: A Clustered column chart summarizing Allowance for Loan and Lease Losses (ALLL) and the how the provisions and charge offs have had an impact on the ALLL of the portfolio, based on chosen combination of dimensions.

- **Exposure Utilization Summary**: A Clustered column chart displaying the limit utilization of the portfolio, based on chosen combination of dimensions.

- **Exposure Mitigation Summary**: A Clustered column chart displaying mitigation by way of security value and ALLL available vis a vis the existing exposure.

- **Key Credit Quality Metrics- Composition**: A radar chart displaying the composition or percentage proportion of all the key credit quality measures (except ratio) for a chosen retail banking portfolio. You can choose any one of the measures from the drop-down filter:

All measures, Allowance for loans & lease losses, YTD provisions, YTD Gross Charge Off, YTD recoveries, YTD Net charge Off. You can filter the data based on any one of the following measures: All Measures, Allowance for Loans and Lease Losses, YTD Provisions, YTD Gross Charge Off, YTD Recoveries and YTD Net Charge Off.

- **Overdues/ Foreclosures Summary**: A column chart displaying the YTD Overdues or YTD Foreclosures for a chosen retail banking portfolio. You can choose the following measure from the drop down filter: Foreclosures, Overdues. You can filter the data using any one of the following measures: Overdues and Foreclosures.

Table 28-3   (Cont.) Credit Quality - Summary Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Customer Type • Natural Currency • Age on book Band • Watchlist Status • Credit Status • Sourcing Channel • LTV Band • Collateral Type • Customer Age Band • Exposure Band • External Credit Score Band • Delinquency Bands
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

28.3 Credit Portfolio and Asset Quality – Trend

This section describes the parameters of Credit Portfolio and Asset Quality – Trend Analysis.

Table 28-4   Credit Portfolio and Asset Quality – Trend Analysis Parameters

Parameters	Description
Analysis Name	Credit Portfolio and Asset Quality – Trend
Report Level Filters	• **Tabular Report**: All measures covered by this analysis and periodicity of the trend. • **Graphical Report**: All dimensions covered by this analysis and time period.

Table 28-4   (Cont.) Credit Portfolio and Asset Quality – Trend Analysis Parameters

Parameters	Description
Analysis Description	This analysis gives a multidimensional view of the past trend for a selected measure over the last eight years, quarters or months. Along with the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period.
	The measures covered by this analysis are: Number of Accounts, EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Watchlisted Exposures, Delinquent Exposure - Up to 30 days DPD, Delinquent Exposure - 31 to 60 days DPD, Delinquent Exposure - More than 60 days DPD, Total Delinquent Exposures, NPA - Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure, Total Non-Performing Assets, Allowance for Loans & Lease Losses, Provisions, Net Charge Off, Gross Charge Off, Recoveries, Foreclosed and Overdues.

Table 28-4   (Cont.) Credit Portfolio and Asset Quality – Trend Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, comprising the following:

- **Credit Portfolio and Asset Quality – Trend**: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters or 8 months.

- **Credit Portfolio and Asset Quality - Trend of Variance**: A multidimensional tabular report displaying the variance of a selected measure over 8 years or 8 quarters or 8 months.

- **Key Credit Metrics Trend**: A line chart displaying the trend of the selected measure over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter:

All Measures, EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Total Non-Performing Assets and Allowance for Loan and Lease Losses. Filter the data using any one of the following measures: All Measures, EOP Balance – Total, Gross Credit Exposure, Undrawn Balance

Total Non-Performing Assets and Allowance for Loan and Lease Losses.

- **Key Credit Metrics Variance Trend:** A line chart displaying the variance of selected measure over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Total Non-Performing Assets and Allowance for Loan and Lease Losses. Filter the data using any one of the following measures: All Measures, EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Total Non-Performing Assets and Allowance for Loan and Lease Losses.

- **Stressed Assets Classification Trend:** A line chart displaying the trend of selected measure over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter:

All Measures, Watchlisted Exposures, Delinquent Exposures – Up to 30 days DPD, Delinquent Exposures – 31 to 60 days DPD, Delinquent Exposures – more than 60 days DPD, Total Delinquent Exposures, NPA-Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure and Total Non-Performing Assets. Filter the data using any one of the following measures: All Measures, Watchlisted Exposures, Delinquent

Table 28-4   (Cont.) Credit Portfolio and Asset Quality – Trend Analysis Parameters

Parameters	Description
	Exposures – Up to 30 days DPD, Delinquent Exposures – 31 to 60 days DPD, Delinquent Exposures – more than 60 days DPD, Total Delinquent Exposures, NPA-Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure and Total Non-Performing Assets.

- **Stressed Assets Classification Variance Trend:** A line chart displaying the variance of the selected measure over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, Watchlisted Exposures, Delinquent Exposures – Up to 30 days DPD, Delinquent Exposures – 31 to 60 days DPD, Delinquent Exposures – more than 60 days DPD, Total Delinquent Exposures, NPA-Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure and Total Non-Performing Assets.

You can filter the data using one of the following measures: All Measures

Watchlisted Exposures, Delinquent Exposures – Up to 30 days DPD, Delinquent Exposures – 31 to 60 days DPD, Delinquent Exposures – more than 60 days DPD, Total Delinquent Exposures, NPA-Sub-Standard Exposure, NPA - Doubtful Exposure, NPA - Loss Exposure and Total Non-Performing Assets.

- **Loan Loss Reserves Trend:** A line chart displaying the trend of all the loan loss reserves of the selected measure over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, Allowance for Loans and Lease Losses, Provisions, Net Charge Off, Gross Charge Off, Recoveries from WO Accounts, Foreclosures and Overdues. You can filter the data using one of the following measures: All Measures, Allowance for Loans and Lease Losses, Provisions, Net Charge Off, Gross Charge Off, Recoveries from WO Accounts, Foreclosures and Overdues.

- **Loan Loss Reserves Variance Trend:** A line chart displaying the variance of all the loan loss reserves of the selected measure over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and period. You can choose the data using any one of the following measures as a dropdown filter: All Measures, Allowance for Loans and Lease Losses, Provisions, Net Charge Off, Recoveries from WO Accounts, Foreclosures

Table 28-4   (Cont.) Credit Portfolio and Asset Quality – Trend Analysis Parameters

Parameters	Description
	and Overdues. You can filter the data using one of the following measures: All Measures, Allowance for Loans and Lease Losses Provisions, Net Charge Off, Recoveries from WO Accounts, Foreclosures and Overdues.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Customer Type • Collateral Type • Asset Classification • Natural Currency • External Credit Score band • Occupation Status • LTV • Sourcing Channel • Customer Age band • Delinquency band • Lien position
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

28.4 Credit Quality Ratio - Summary

This section describes the parameters of the Credit Quality Ratio - Summary Analysis.

Table 28-5   Credit Quality Ratio - Summary Analysis Parameters

Parameters	Description
Analysis Name	Credit Quality Ratio – Summary
Report Level Filters	• **Tabular Report**: All the dimensions such as Legal Entity, Line of business, Product type, Product, Organization structure, Exposure bands, Collateral type, Customer type, Natural currency, External credit score band, Age on book band. • **Graphical Reports**: All the dimensions covered by this analysis.

Table 28-5   (Cont.) Credit Quality Ratio - Summary Analysis Parameters

Parameters	Description
Analysis Description	This analysis provides a multidimensional overview of the key credit quality ratios for the retail banking book, through measures such as: Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provision Ratio, ALLL- NCO Coverage Ratio, Charge Off Ratio, WAPD, Original Collateral Value/Book Value, Original Collateral Value/ Market Value, Utilization Percentage and WAES (Weighted Average External Credit Score).

Table 28-5   (Cont.) Credit Quality Ratio - Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, including the following:

- **Credit Quality Ratio – Summary**: A multidimensional tabular report displaying all credit quality ratios such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provisions Ratio, ALLL- NCO Coverage Ratio, Charge Off Ratio, WAPD, Original Collateral Value/Book Value, Original Collateral Value/ Market Value, Utilization percentage, WAES for a chosen portfolio (based on selected combination of dimensions).

- **Key Stressed Asset Ratios**: A column chart displaying the key stressed assets ratios such as Watchlist Ratio, Delinquent Ratio, and NPA Ratio, or all measures for a chosen portfolio (based on selected combination of dimensions). You can choose the data using any one of the following measures as a dropdown filter: All measures, Watchlist Ratio, Delinquent Ratio, and NPA Ratio.

Key Credit Loss Reserve Ratios: A column chart displaying the Key Credit Loss Reserve ratios such as ALLL Ratio, Current Provision Ratio, and Charge off Ratio, or all measures for the selected combination of dimensions. You can choose the data using any one of the following measures as a dropdown filter: All measures, ALLL Ratio, Current Provision Ratio, and Charge off Ratio.

- **Key Coverage Ratios:** A column chart displaying the key coverage ratios such as ALLL-NPA Coverage Ratio and ALLL-NCO Coverage Ratio, or all measures for the selected combination of dimensions. You can choose the data using any one of the following measures as a dropdown filter: All measures, ALLL-NPA Coverage Ratio and ALLL-NCO Coverage Ratio.

Mitigant Value Analysis: A combination chart displaying the mitigant value analysis through measures such as Original Collateral Value, Market Value and Book Value or all measures through cluster columns and the ratios such as Original Collateral Value/Book value and Original Collateral Value/Market Value through scatter plot, for selected portfolio (based on selected combination of dimensions). You can choose the data using any one of the following measures as a dropdown filter: All measures, Original Collateral Value, Market Value and Book Value.

- **Key Credit Quality Metrics:** A combination chart displaying the WAPD and Utilization % as cluster columns or all measures and WAES as scatter plot for a selected retail banking

Table 28-5   (Cont.) Credit Quality Ratio - Summary Analysis Parameters

Parameters	Description
	portfolio (based on selected combination of dimensions). You can choose the data using any one of the following measures as a dropdown filter: All measures, WAPD and Utilization %.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Customer Type • Natural Currency • Exposure Band • Collateral Type • External Credit Score Band • Age on Book Band
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

28.5 Credit Quality Ratio – Trend

This section describes the parameters of the Credit Quality Ratio - Trend Analysis.

Table 28-6   Credit Quality Ratio - Trend Analysis Parameters

Parameters	Description
Analysis Name	Credit Quality Ratio – Trend
Report Level Filters	• **Tabular Report**: All the measures covered by this analysis and periodicity of the trend. • **Graphical Report**: Key Credit Quality ratios - Trend: All dimensions covered by this analysis and periodicity of the trend. • **Graphical Report**: Credit Quality ratios - detailed trend: All dimensions covered by this analysis, periodicity of the trend and measure for detailed trend report.
Analysis Description	This analysis provides a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. The measures covered in this analysis are: Delinquent Ratio, NPA Ratio, Watchlist Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provision Ratio, ALLL-NCO Coverage Ratio, Charge Off Ratio, WAPD, Utilization Percentage and WAECS.

Table 28-6   (Cont.) Credit Quality Ratio - Trend Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: • Credit Quality Ratios - Trend: A multidimensional tabular report displaying the trend of a selected credit quality ratio over 8 years or 8 quarters, or 8 months. Key credit Quality Ratio – Trend: A line chart displaying the trend of measures like Delinquent ratio, NPA ratio, Watchlist ratio, ALLL ratio, Current Provision ratio, ALLL-NPA Coverage ratio, WAPD, Charge-off ratio and Utilization % over 8 years or 8 quarters, or 8 months. You can choose one of the measures from the dropdown filter: All measures, Delinquent Ratio, NPA Ratio, Watchlist Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provision Ratio, ALLL-NCO Coverage Ratio, Charge Off Ratio, WAPD, Utilization Percentage, WAECS. • **Key Credit Quality Ratios - Detailed Trend**: A line chart displaying the detailed trend of the actuals of the selected measure (ratio) with each line representing a portfolio (sub dimension), for 8 years or 8 quarters or 8 months and for the selected combination of dimensions. You can choose one of the measures from the dropdown filter: Delinquent Ratio, NPA Ratio, Watchlist Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provision Ratio, ALLL-NCO Coverage Ratio, Charge Off Ratio, WAPD, Utilization Percentage, WAECS.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • External credit score band • Customer Type • Natural Currency • Exposure Band • Customer age band • LTV band • Lien position • Credit Status
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

28.6 Stressed Assets – Change Analysis

This section describes the parameters of the Stressed Assets – Change Analysis.

Table 28-7   Stressed Assets – Change Analysis Parameters

Parameters	Description
Analysis Name	Stressed Assets – Change Analysis
Report Level Filters	• **Tabular Report**: All the measures and Reference Period. • **Graphical Reports**: All the dimensions, measures (stressed asset class) covered by the analysis and Reference Period.
Analysis Description	This analysis provides an understanding of the changes and reasons for changes in the credit exposure to a selected stressed asset class (measure), between a selected reference period and current date. The reference periods covered by this analysis are: • Previous Year • Beginning of Year • Beginning of the Quarter • Beginning of the Month The measures (stressed asset class) covered by this analysis are: • Non-Performing Assets • Delinquent Exposures • Watchlisted Exposures • NPA - Sub-Standard Assets • NPA - Doubtful Assets • NPA - Loss Assets
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following: • **Stressed Assets – Change Analysis**: A multidimensional tabular report, displaying change and reasons for the changes in exposure to a selected stressed asset class (measure), between a selected reference period and current date. The report displays the Opening Balance, New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance. • Stressed Assets - Change Analysis (graphical report): A bridge chart that analyzes the change and reasons for the change in exposure to selected stressed asset class (measure), between a selected reference period and current date, for a selected combination of dimensions. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off and Current Balance.

Table 28-7   (Cont.) Stressed Assets – Change Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Customer Type • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

28.7 Allowance for Loans and Lease Losses - Change Analysis

This section describes the parameters of the Allowance for Loans and Lease Losses - Change Analysis.

Table 28-8   Allowance for Loans and Lease Losses - Change Analysis Parameters

Parameters	Description
Analysis Name	Allowance for Loans and Lease Losses - Change Analysis
Report Level Filters	• **Tabular Report**: Reference Period • **Graphical Reports**: Reference period and all the dimensions covered by this analysis
Analysis Description	This analysis provides an understanding of the changes and reasons for changes in the ALLL, between a selected reference period and the current date. The reference periods covered by this analysis are as follows: Previous Year, Beginning of Year, Beginning of the Quarter and Beginning of the Month.

Table 28-8   (Cont.) Allowance for Loans and Lease Losses - Change Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following:
	• Allowance **for Loans and Lease Losses - Change Analysis:** A multidimensional tabular report displaying the changes and reasons for changes in the ALLL between a selected reference period and current date. The report displays the Opening Balance of ALLL, Net Charge Off during the Period, Reserves before Provisions, Provision during the current period, Other changes during the current period, Current Balance.
	• **Allowance for Loan and Lease Losses – Change**: A bridge chart that analyzes the change and reasons for the changes in the ALLL, between a selected reference period and current date, for the selected combination of dimensions. The report displays the Opening Balance of ALLL, Net Charge Off during the Period, Reserves before Provisions, Provision during the current period, Other changes during the current period, Current Balance.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Customer Type • Natural Currency
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

29

Retail Credit Risk Dashboard - Rating Migration and Transition

The following table displays the page level filters which apply to all the analysis on this page.

Table 29-1   Parameters in the Page – Rating Migration and Transition

Parameters	Description
Dashboard Name	Retail Credit Risk
Subject Area	Retail Credit Risk
Page Name	Rating Migration and Transition
Page-Level Filters	• As-of-Date
	• Run
	• Run Execution ID
	• Amount Unit
Report-Level Filters	• Book Classification
	• Credit Exposure Classification
	• Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

29.1 Migration Analysis

This section describes the parameters of the Migration Analysis.

Table 29-2   Migration Analysis Parameters

Parameters	Description
Analysis Name	Migration Analysis

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
Report Level Filters	• **Tabular Report**: Migration by - credit score, delinquent bands and utilization bands, Period and Dimensions. When you choose credit score as a metric you can analyze the tabular reports through various filters such as: measures as listed below and credit score migration – change analysis. When you choose delinquent bands and utilization bands as a metric, you can analyze the graphical reports through measures as listed below. • **Graphical Reports**: Migration by - credit score, delinquent bands and utilization bands, Period and Dimensions. When you choose credit score as a metric you can analyze the graphical reports through various filters such as measures as listed below, credit score for credit score migration– matrix graph, credit score for credit score migration analysis- upgrades and downgrades, and credit score – migration - change analysis. When you choose delinquent bands and utilization bands as a metric, you can analyze the graphical reports through various filters such as measures as listed below, delinquency/utilization bands for migration matrix, delinquency/utilization bands for migration analysis – upgrades and downgrades, delinquency/utilization bands for migration – change analysis.

Table 29-2 (Cont.) Migration Analysis Parameters

Parameters	Description
Analysis Description	This analysis presents an in-depth view of migrations of credit score bands, utilization bands and delinquency bands in the retail banking portfolio. The migration analysis can be performed for specific portfolios based on chosen combination of dimensions and period covered by this analysis.
	The analysis provides drill down capabilities for both tabular and graphical reports, to access the details of accounts that have migrated during a given period. The migrations covered in this analysis are credit score migrations, delinquency band migrations and utilization band migrations. The credit score migration provides drill-down capabilities to obligor level details and then account level details, however the delinquent and utilization band migration provides drill-down capabilities directly to the account level details of the obligor.
	The period covered in this analysis are Trailing 12 months, Year to date, Quarter to date and month to date.
	When you choose credit score as a metric, you can analyze the report by the following measures: Gross Credit exposure, Total EOP balance and Number of accounts, % of Gross Credit Exposure, % of EOP balance and % of Number of Obligors.
	When you choose delinquent band/utilization band as a metric, you can analyse the report by the following measures: Gross Credit exposure, Total EOP balance and Number of accounts.

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
Reports Covered	This analysis is a combination of tabular and graphical reports. when you choose credit score as a metric the following reports are covered: • Migration Ratios: This is a tabular report which displays various ratios of the Obligor such as Credit migration ratio, Exposure weighted migration ratio, Upgrade ratio – No. of Obligors, Downgrade ratio – No. of Obligors, Upgrade ratio – Exposure, Downgrade ratio – Exposure for a selected period, and combination of dimensions. • Migration Matrix: A combination of tabular and graphical report which displays the migrations of an obligor through different credit scores by a chosen measure from the above list. The tabular report displays the details of migration of the obligor from one credit score to another by choosing a measure during the selected period, for a selected combination of dimensions. To access the details of obligors who have migrated between two credit scores, you can drill down by clicking on a specific cell in the migration matrix during the given period and click on details of migration to view the tabular report with Obligor details for the chosen previous external credit score. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/ Obligor. The graphical report is a cluster column chart which analyses the chosen credit score band of the obligors who have migrated to other bands for the chosen measure as listed above. It displays how the obligors have migrated from the beginning of the period to the end of period for a selected portfolio (based on chosen combination of dimensions). You can drill down to account level Obligor details by clicking on any column in the graph and click on rating migration detail. The tabular report with Obligor details will be displayed for the chosen previous external credit score. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor ID/Obligor. • Migration Analysis – Upgrades and Downgrades: A combination of tabular and graphical report which analyses the movement of the obligor from one credit score to another in the form of upgrades and downgrades and the credit score which has remain unchanged for a chosen measure and period. The tabular report displays the Total upgrades, Total downgrades and Total unchanged along with the migration ratio. To access the details of obligors who have upgraded or downgraded for a chosen measure,

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
	you can drill down by clicking on a specific cell in the migration matrix and click on rating migration details to view the tabular report with Obligor details. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/ Obligor. The graphical report is a cluster column chart which analyses for the chosen credit score band of the obligors who have migrated to other credit score in the form of upgrades and downgrades as well as the credit score which has remain unchanged for a chosen measure as listed above. You can drill down to account level Obligor details by clicking on any column in the graph and click on rating migration detail. The tabular report with Obligor details will be displayed. You can further drill-down to account details of the Obligor as a tabular report by clicking on the Obligor ID/Obligor. • Migration - Change Analysis: A combination of tabular and graphical report which analyses the reasons for change in gross credit exposure or numbers of obligors or total EOP balance of the Obligor, for a chosen range of credit score. The tabular report displays the Opening balance, Incremental value, Value Migrated in, Value Migrated out, new business, current balance and run off for the chosen credit score band, for a chosen measure and period. The tabular report has drill-down capabilities, where you can click on Value Migrated In or value migrated out or New business cell to access the rating migration detail of the Obligor in the form of tabular report. You can further drill-down to account level details of the Obligor by clicking on Obligor ID/ Obligor. Click on Value Migrated in, Value Migrated out cell and click on migrated in upgrade downgrade and drill-down to a graphical report as a cluster column chart which displays the migrated in upgrades and migrated in downgrades value for a chosen credit score band. The graphical report is a bridge chart which analyses the reasons for change in the chosen measure for a chosen credit score band. The report displays the Opening balance, Incremental value, Value Migrated in, Value Migrated out, new business, run off and total for the selected period and combination of dimensions. When you choose delinquent bands or utilization bands as a metric the following reports are covered: • Migration Matrix: A combination of tabular and graphical report which displays the migrations of an obligor through different delinquent/

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
	utilization bands by a chosen measure from the above list.
	The tabular report displays the details of migration of the obligor from one chosen delinquent/ utilization band to another by choosing a measure during the selected period, for a selected combination of dimensions.
	To access the details of obligors who have migrated between two delinquent/utilization bands, you can drill down by clicking on a specific cell in the migration matrix tabular report during the given period to view the tabular report with account level Obligor details.
	The graphical report is a cluster column chart which analyses the chosen delinquent/utilization band of the obligors who have migrated to other bands for the chosen measure as listed above. It displays how the obligors have migrated from the beginning of the period to the end of period for a selected portfolio (based on chosen combination of dimensions). You can drill down to account level Obligor details by clicking on any column in the graph.
	• Migration Analysis – Upgrades and Downgrades: A combination of tabular and graphical report which analyses the movement of the obligor from one delinquent/utilization band to another in the form of upgrades and downgrades and the bands which has remain unchanged for a chosen measure and period. The tabular report displays the Total upgrades, Total downgrades and Total unchanged.
	The graphical report is a cluster column chart which analyses for the chosen delinquent/utilization band of the obligors who have migrated to other bands in the form of upgrades and downgrades as well as the bands which has remain unchanged for a chosen measure as listed above.
	• Migration - Change Analysis: A combination of tabular and graphical report which analyses the reasons for change in the measures listed above, of the Obligor.
	The tabular report displays the Total Opening balance, Incremental value, Value Migrated in, Value Migrated out, Others and current balance for a chosen measure and period.
	The graphical report is a bridge chart which analyses the reasons for change in the chosen measure for a chosen delinquent/utilization. The report displays the Total Opening balance, Incremental value, Value Migrated in, Value Migrated out, Others and total for the selected period and combination of dimensions.

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
Dimensions	• Product type • Product • Legal Entity • Line of Business • Organization Structure • Customer type • Natural Currency

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
Drill-down details	**Credit score as a chosen metric:** Click on any cell in the Migration Matrix to access the details of Obligors comprising the cell/migration. The drill down report displays the following obligor level details for the chosen previous external rating: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Current external credit score, Date of migration – internal, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. You can further drill-down to the account level details by clicking on the respective Obligor ID to view the details mentioned above along with account number as additional dimension. Click on any column in the credit score migration-matrix, click on rating migration details to drill-down to obligor details. The drill down report displays the obligor details for the chosen previous external credit score such as Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Current external credit score, Date of migration – internal, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. You can further drill-down to the account level details by clicking on the respective Obligor ID/Obligor to view the details mentioned above along with account number as additional dimension. Click on any cell in the Migration analysis – Upgrades and Downgrades tabular report and click on rating migration detail to view the drill down report which displays the Obligor details such as Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous external credit score, Current external credit score, Date of migration – internal, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. You can further drill-down

Table 29-2　(Cont.) Migration Analysis Parameters

Parameters	Description
	to the account level details by clicking on the respective Obligor ID/Obligor to view the details mentioned above along with account number as additional dimension.
	Click on any column in the Migration analysis – Upgrades and Downgrades graphical report, click on rating migration details to drill-down to obligor details. The drill down report displays the obligor details such as Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Current external credit score, Date of migration – internal, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. You can further drill-down to the account level details by clicking on the respective Obligor ID/Obligor to view the details mentioned above along with account number as additional dimension.
	Click on the migrated in, migrated out and new business cell in migration –change analysis tabular report and click on rating migration detail. You can drill down to obligor details with following details: Obligor ID, Obligor, legal entity, Line of business, Org structure, Product type, Product, Industry, Natural Currency, PD %, LGD %, Credit score, Watchlist status, Onboarding date, Days Past due, Credit status, Behavior type, LTV, Previous external credit score, Current external credit score, Date of migration – internal, Exposure at default, Gross credit exposure, GCE Proportion %, Group exposure, Total EOP balance, Total EOP balance % proportion, Undrawn amount, overdue, Allowance for loans and lease losses, Expected loss and Security value. You can further drill-down to the account level details by clicking on the respective Obligor ID/Obligor to view the details mentioned above along with account number as additional dimension.
	Click on the migrated in, migrated out cell in migration –change analysis tabular report, click on migrated in upgrade downgrade details to drill down to a graphical report which displays the migrated in upgrades and migrated in downgrades value in the form of cluster column chart for a particular chosen credit score.
	Delinquent band or Utilization band as a chosen metric: Click on any cell in the Migration Matrix tabular report to access the account level details of obligor comprising the cell/migration. The drill down report displays the details such as Obligor, account

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
	number, legal entity, Line of business, Org structure, Customer type, Gross credit exposure, EOP balance- Fund based, EOP balance- Non-Fund based, Total EOP balance, Utilization %, Allowance for loans and lease losses, PD %, Expected loss, LTV and Security value.
	Click on any column in the Migration Matrix graphical report to drill down to account level Obligor details such as Obligor, account number, legal entity, Line of business, Org structure, Customer type, Gross credit exposure, EOP balance- Fund based, EOP balance- Non-Fund based, Total EOP balance, Utilization %, Allowance for loans and lease losses, PD %, Expected loss, LTV and Security value.

Table 29-2   (Cont.) Migration Analysis Parameters

Parameters	Description
Drill-down Path	**Credit score as a chosen metric:** In the Migration matrix (tabular report) click on any cell in the Migration Matrix click on rating migration detail to access the details of Obligors. Click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor. In the Migration matrix (graphical report) click on any column, click on rating migration detail to access the details of Obligors. Click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor In the Migration Analysis- Upgrades and downgrades (Tabular Report), click on any cell in the matrix, click on rating migration details to view the Obligor level details. In the Obligor details report click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor. In the Migration Analysis- Upgrades and downgrades (graphical Report), click on any column, click on rating migration details to view the Obligor level details. In the Obligor details report click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor. In the Migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on rating migration details to view the Obligor details report. In the Obligor details report click on the Obligor ID/Obligor click on the account details to further drill down to the account level details of the respective Obligor. In the Migration – Change analysis (tabular report) click on any cell in migrated in, migrated out or new business column, click on migrated in upgrade downgrade details tab to drill down to a graphical report which displays the migrated in upgrades and migrated in downgrades value in the form of cluster column chart for a particular chosen credit score. **Delinquent band or Utilization band as a chosen metric:** In the Migration matrix (tabular report) click on any cell to view the account level details for the chosen range. In the Migration Matrix graphical report click on any column to drill down to account level Obligor details.

> ⓘ **Note**
>
> The previous rating filter is not passing to the Credit Score Migration Matrix table's drill-down report available in the Rating Migration & Transition tab of the Retail Credit Risk dashboard and hence, the drill-down report is not displayed.

29.2 Transition Probability

This section describes the parameters of the Transition Probability Analysis.

Table 29-3   Transition Probability Analysis Parameters

Parameters	Description
Analysis Name	Transition Probability
Report Level Filters	• **Tabular Report**: Migration metric and period in months • **Graphical Reports**: Delinquency Bands
Analysis Description	The analysis presents the migration by credit score and delinquency band probability during a specified future period.
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, filtering data by Delinquent Bands and Credit Scores for a future period. This analysis consists of the following: • Transition Probability Matrix - ECS Bands: A tabular report that displays the transition probabilities for all delinquency band and credit score combinations during the selected future period. • Transition Probability (Delinquency Bands): A scatter plot graph that displays the transition probabilities of accounts in a ECS band to other ECS bands during the selected future period.
Dimensions	Not Applicable
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

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Retail Credit Risk Dashboard - Concentration

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 30-1   Parameters in the Page – Concentration

Parameters	Description
Dashboard Name	**Retail Credit Risk**
Subject Area	Retail Credit Risk
Page Name	Concentration
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

30.1 Concentration Analysis

This section describes the parameters of the Concentration Analysis.

Table 30-2   Concentration Analysis Parameters

Parameters	Description
Analysis Name	Concentration Analysis
Report Level Filters	• **Tabular Report**: Not Applicable. • **Graphical Report 1**: All the dimensions covered by this analysis, measures and Include Previous year (Y or N) • **Graphical Report 2**: Display Top X (10, 25, 50, 100, 250).
Analysis Description	This analysis provides a comprehensive and multidimensional view of the credit concentrations in the retail banking portfolio. This analysis enables spotting of credit exposure, delinquency, and default concentrations in the retail credit portfolio of the bank, across multiple combinations of dimensions.

Table 30-2   (Cont.) Concentration Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of Tabular and Graphical Reports, consisting of the following: • Concentration Analysis (tabular report): A multidimensional tabular report displaying the concentration by Number of Accounts, Number of Accounts Percentage, Gross Credit Exposure, Gross Credit Exposure Percentage, EOP Balance Total, EOP Balance – Total Percentage, Delinquent Exposure, Delinquent Exposure Percentage, NPA Exposure, NPA Exposure Percentage, Security Value and Security Value Percentage. • Concentration analysis (graphical report): A combination chart where the concentration is displayed by selecting a measure (GCE, EOP balance, Delinquent exposure, NPA exposure) and combination of dimensions. The column displays the selected measure and the line chart as a composition of the selected measure. You can also compare the previous year result in the graph by choosing Include previous year option as (Y or N). • GCE Concentration: A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for GCE Concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio. • Delinquent Concentration: A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for delinquent exposure, concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio. • NPA Concentration: A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for NPA Exposure concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio. • Concentration – Other Key Measures: A radar chart displaying the selected measure as (Number of Accounts, Security Value, and EOP Balance - Total) Concentration for a chosen portfolio (by selected combination of dimensions). You can filter the data using one of the following options: All Measures, No of Accounts, Security Value, EOP Balance and Total. You can filter the data using one of the following options: All Measures, No of Accounts, Security Value and EOP Balance – Total.

Table 30-2   (Cont.) Concentration Analysis Parameters

Parameters	Description
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Collateral Type • LTV • Customer Type • Natural Currency • External Credit Score Band • Insurance Coverage Band • Exposure Band • Legal Entity • Maturity Profile
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

30.2 Concentration Analysis - Trend

This section describes the parameters of the Concentration Trend Analysis.

Table 30-3   Concentration Trend Analysis Parameters

Parameters	Description
Analysis Name	Concentration Trend
Report Level Filters	• Tabular Report: Measures and periodicity of trend covered by this analysis. • Graphical Report: All the dimensions and measures and periodicity of trend covered by this analysis.
Analysis Description	This analysis presents the trend of concentration for the last 8 years or 8 quarters. The measures covered by this analysis are Number of Accounts, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance - Non-Fund Based, EOP Balance – Total, Delinquent Exposure, Allowance for Loans and Lease Losses, NPA, Security Value, YTD Provisions and YTD NCO.
Reports Covered	This analysis is a combination of Tabular and Graphical Reports, consisting of the following: • Concentration Analysis – Trend: A multidimensional Tabular Report displaying the concentration trend of a selected measure over 8 years or 8 quarters. • Concentration – Trend: A line chart displaying the concentration trend of a selected measure over 8 years or 8 quarters, for a selected combination of dimensions and selected period.

Table 30-3   (Cont.) Concentration Trend Analysis Parameters

Parameters	Description
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • LTV • Customer Type • Natural Currency • Exposure Bands • External Credit Score Band
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

31
Retail Credit Risk Dashboard - New Business

The following table displays the Page Level Filters which are applicable to all the reports in this page.

Table 31-1   Parameters in the Page – New Business

Parameters	Description
Dashboard Name	Retail Credit Risk
Subject Area	Retail Credit Risk
Page Name	New Business
Page-Level Filters	• As-of-Date • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

31.1 New and Existing Business - Summary

This section describes the parameters of the New and Existing Business - Summary Analysis.

Table 31-2   New and Existing Business Summary Analysis Parameters

Parameters	Description
Analysis Name	New and Existing Business Summary
Report Level Filters	• **Tabular Report**: Measure (New Business, Existing Business) and period of new business covered by this analysis such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD). • **Graphical Report**: Dimension covered by the analysis and period of new business such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD)

Table 31-2   (Cont.) New and Existing Business Summary Analysis Parameters

Parameters	Description
Analysis Description	This analysis provides the details of new business originated for the retail credit portfolio during the selected reference period (such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) covering measures such as: Number of Accounts, Number of Accounts % Proportion, % of Total (Existing + New Accounts), Gross Credit Exposure, Gross Credit Exposure % Proportion, % of Total GCE (Existing + New Accounts), EOP Balance Total, EOP Balance % Proportion, % of Total EOP (Existing + New Accounts), Security Value, Security Value % Proportion and % of Total Security (Existing + New Accounts).
	The report also gives similar metrics for existing business (excluding new business originated during the reference period).
	The report also provide drill down details in both tabular and graphical report up to obligor level.

Table 31-2   (Cont.) New and Existing Business Summary Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:

- New and Existing Business Summary: A multidimensional tabular report displaying all the above listed measures for new business originated during the chosen reference period and existing business (excluding new business originated during the reference period) comprising the retail banking portfolio. The tabular report provides drill-down facility to Obligor level details. Click on natural currency to view the tabular report with obligor details.

- New Business – Key Credit Metrics: A combination chart in which the clustered columns display the key credit metrics for new business originated during the selected reference period, based on selected combination of dimensions and period. The measures displayed are - GCE, EOP balance, Security value and the scatter plot displays the percentage of new business to the total business. The graphical report provides drill-down capabilities, To view the drill-down report, click the column chart and then click New Business – Key Credit Metrics Details to view the obligor level details. The report displays with the following measures: Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist Status, Days Past Due, Onboarding Date, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value and Utilization Percent.

- New Business – Key Metrics Composition: A radar chart displaying the composition of key credit metrics for new business originated during the selected reference period, across selected combination of dimensions and period. The measures covered are Number of accounts, EOP balance, and GCE and security value.

- New Business –Credit Quality and Concentration: A scatter plot graph displaying GCE proportion of new business to total business and WAPD for each portfolio combination, based on the chosen combination of dimensions and period.

- Existing Business – Key Credit Metrics: A combination chart which displays the key credit metrics for existing Business (other new business originated during the selected reference period), across selected combination of dimensions and period. The clustered

Table 31-2   (Cont.) New and Existing Business Summary Analysis Parameters

Parameters	Description
	columns display the measures - GCE, EOP balance, Security value and the scatter plot as % of new business to the total business.
	• Existing Business – Key Metrics Composition: A radar chart displaying the composition of key credit metrics for existing Business (other new business originated during the selected reference period), across selected combination of dimensions and period.
Dimensions	• Legal Entity • Line of Business • Product Type • Product • Organization Structure • Natural Currency • External Credit Score Band • Co-signor Status • LTV • Occupation Status • Sourcing Channel • Collateral Type • Customer Age Band • Credit Status • Income Band • Maturity Profile
Drill-down details	The tabular report New & Existing business-summary tabular report has drill-down capabilities. Click Natural Currency in each row to drill-down to access the details of existing or new obligors (as the case may be) represented by the row/portfolio (based on the combination of dimension representing each row). The drill-down tabular report displays the following details: Obligor, Obligor ID, PD%, rating, credit score, credit status, Watchlist status, Days past due, Onboarding date, Gross credit exposure, EOP balance – fund based, EOP balance Non-Fund based, Total EOP balance, Undrawn amount.
	The graphical report New business – key credit metrics has drill-down capabilities. Click the column chart and then click New Business – Key Credit Metrics Details to view the Obligor level details as a tabular report. The report displays the following measures; Obligor, Obligor ID, PD %, Rating, Credit Score, Credit Status, Watchlist Status, Days Past Due, Onboarding Date, Gross Credit Exposure, EOP Balance - Fund Based, EOP Balance – Non Fund Based, Total EOP Balance, Undrawn Amount, Overdue, Allowance for Loan and Lease Losses, Expected Loss, Security Value and Utilization Percent.

Table 31-2   (Cont.) New and Existing Business Summary Analysis Parameters

Parameters	Description
Drill-down Path	In the New and Existing Business Summary (Tabular Report), click Natural Currency to view the drill-down Report. In the New Business – key credit metrics (graphical report) click the column chart and then click New Business – Key Credit Metrics Details to view the drill-down report.

31.2 New Business - Trend

This section describes the parameters of the New Business - Trend Analysis.

Table 31-3   New Business Trend Analysis Parameters

Parameters	Description
Analysis Name	New Business Trend
Report Level Filters	• **Tabular Report**: All the measures covered by the analysis and periodicity of the trend. • **Graphical Reports**: New Business - Trend and New Business & New business -Trend of Variance: All the dimensions and time period covered by this analysis. • **Graphical Report**: New Business - detailed trend and New Business - Trend of Proportions: All the dimensions, time period and measures covered by this analysis.
Analysis Description	This analysis gives a multidimensional view of the past trend of the new business trend for over the last 8 years or 8 quarters or 8 months. The tabular report highlights the actual, percentage composition and variance of the key new business measures across 8 years or 8 quarters or 8 months, for new business The measures covered in this analysis are: Number of Accounts, EOP Balance, Gross Credit Exposure and Net Charge Off.

Table 31-3   (Cont.) New Business Trend Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, comprising the following:
	• New Business Trend (Tabular Report): A multidimensional Tabular Report displaying the trend of the selected measure over 8 years or 8 quarters or 8 months. The trend of actuals, proportions and variance between periods is displayed in the tabular report.
	• New Business – Trend (Graphical Report): A combination chart where the Number of accounts is displayed as cluster column and GCE, EOP balance and and NCO for new business as a line chart over 8 years or 8 quarters or 8 months, for the selected combination of dimensions and period.
	• New Business – Trend of Variance: A line chart where the trend of variance for the new business is displayed by Number of accounts GCE, EOP balance and NCO for over 8 years or 8 quarters or 8 months, for the selected combination of dimensions and period.
	• New Business – **Detailed Trend:** A line chart displaying the detailed trend of GCE, EOP Balance, Number of accounts and Net Charge off for new business, over 8 years or 8 quarters or 8 months. Based on the selected dimension, the trend report will display one trend line for each sub-dimension (portfolio).
	• New Business **– Trend of Proportions:** A stacked column chart displaying the composition of new business across chosen dimension values (products, line of business etc.), over 8 years or 8 quarters or 8 months. The measures covered are GCE, EOP Balance, and Number of accounts and Net Charge Off.
Dimensions	• Line of Business
	• Product Type
	• Product
	• Organization Structure
	• Natural Currency
	• External Credit Score Band
	• Delinquency Band
	• Income Band
	• Credit Status
	• Watchlist Status
	• LTV
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

31.3 New Business – Ability to Pay - Summary

This section describes the parameters of the New Business – Ability to Pay Summary Analysis.

Table 31-4   New Business Ability to Pay Summary Analysis Parameters

Parameters	Description
Analysis Name	New Business Ability to Pay Summary
Report Level Filters	• **Tabular Report**: Reference Period • **Graphical Reports**: All the dimensions and period covered by this analysis.
Analysis Description	This analysis provides an in-depth analysis of the spread of new business by their ability to service the loans.
Reports Covered	This analysis is presented through a combination of Tabular and Graphical reports, comprising the following: • New Business Ability to Pay Summary: A multidimensional Tabular Report displaying spread of new business by their ability to pay ratios. The new business is presented by using measures such as Number of accounts, GCE and EOP balance. • New Business – Ability to Pay and Liquidity Analysis: A Combination Chart which displays the spread of New Business GCE, EOP Balance and no of new accounts (originated during a chosen reference period) across different bands of a chosen ability to pay metric. The measures such as GCE and EOP balance is show as clustered columns and number of accounts are shown as scatter plot. • New Business – Ability to Pay Composition: A Radar Chart that displays the percentage spread of new Business GCE, EOP balance and Number of new accounts (originated during a chosen reference period), across chosen ability to pay metric.
Dimensions	• Product Type • Products • EMI/CI Band • EMI/Residual Income Band • EMI/Net Worth Band • EMI/Household Income Band • Loan/Value of Primary Security Band • Debt/Income Band • LTV
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

32

Retail Credit Risk Dashboard - Collections

The following table displays the Page Level Filters which are applicable to all the reports in this page.

Table 32-1   Parameters in the Page – Collections

Parameters	Description
Dashboard Name	Retail Credit Risk
Subject Area	Retail Credit Risk
Page Name	Collections
Page-Level Filters	• As of Month • Run • Run Execution ID • Amount Unit
Report-Level Filters	• Book Classification • Credit Exposure Classification • Balance Sheet Classification
Page-Level Display Parameters	Not Applicable

32.1 Collections

This section describes the parameters of the Collections Analysis.

Table 32-2   Collections Analysis Parameters

Parameters	Description
Analysis Name	Collections
Report Level Filters	• **Tabular Report**: Line of business, Product type, Product, Organization structure and delinquency bands. • **Graphical Report**: All the dimensions and measures (Delinquent Exposures, overdue, number of delinquent accounts and average DPD) covered by this analysis.
Analysis Description	This analysis presents the details of monthly collections in Delinquent Accounts.

Table 32-2 (Cont.) Collections Analysis Parameters

Parameters	Description
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: • Collections: A multidimensional tabular Chart displaying details of collections made in delinquent accounts during a selected period. The report additionally displays the following measures as Delinquent exposures, Number of accounts delinquencies, overdues, average DPD, amount collected, Number of accounts collected, Principal recoveries, Interest recoveries, collection effective rate and average time to collections. • Collections Overview: A cluster column chart that displays the amount collected and scatter plot as the number of accounts collected during a selected period, across selected combination of dimensions. • Collections Detailed Summary: A stacked column chart that displays the principal and interest break up of amount collected during the selected period, across selected combination of dimensions. • Collections Performance Summary: A combination chart that displays the cluster columns as average time to collections and scatter plot as collections effective rate for the collections made during the chosen period, across selected combination of dimensions.
Dimensions	• Line of Business • Product Type • Product • Organization Structure • Delinquency Bands
Drill-down details	Not Applicable
Drill-down Path	Not Applicable

33
Performance Related Configurations

Follow the below steps for setting performance related configurations for OFS CRA:

1. Parameter Settings OracleDB Configuration File
   OFSAAI provides enabling of Parallelism and setting of DOP for every DML Sessions invoked by the applications. These parameters are listed in the OracleDB Configuration file (OracleDB.conf) located in the DB layer of the OFSAAI Installation. Navigate to the path $FIC_HOME/ficdb/conf, to access the file. Modify the values for the below parameters

   ```
   CNF_PARALLEL_QUERY=ENABLE

   CNF_PARALLEL_DML=ENABLE

   CNF_DEGREE_OF_PARALLELISM=2

   CNF_PARALLEL_DEGREE_POLICY=MANUAL
   ```

   > ⓘ **Note**
   >
   > The CNF_DEGREE_OF_PARALLELISM value can be 40% of the available parallel threads per CPU on the database server.

2. Parameter Settings for SETUP_MASTER Table

   a. In the SETUP_MASTER table in the atomic schema, update the below mentioned component codes:
   ```
   PARAMNAME PARAMVALUE

   DT_PARALLEL_ENABLE Y

   DT_PARALLEL_DOP 2
   ```

   > ⓘ **Note**
   >
   > The Component Value Set against the Component Code DT_PARALLEL_DOP should be same as the CNF_DEGREE_OF_PARALLELISM parameter value set in the OracleDB configuration file as mentioned in step 1 Parameter Settings for OracleDB Configuration File.

   b. Enable the gather stats by setting the Component Code "GATHER_TABLE_STATS" as "Y" in the setup_master table.

   c. Update the Atomic Schema name for the Component Code "GATHER_STAT_OWNER" in the setup_master table.

   > ⓘ **Note**
   >
   > You can turn-off the configuration, by disabling the gather stats by setting the component code "GATHER_TABLE_STATS" as "N" in setup_master table.

3. Parameter Settings for Configuration Table

   a. In the configuration table in Config Schema, update the below mentioned component code:

   ```
   PARAMNAME PARAMVALUE

   QRY_OPT_USE_ROWID Y
   ```

4. Partition the table FCT_CREDITRISK_ACCOUNT_SUMMARY based on the n_run_skey.

A

Appendix A: User Configuration and Settings

This section includes information about the user configurations and settings.

A.1 Standard Reclassifications

The regulatory guidelines specify classifications and computations based on certain generic product, party and Line Of Business (LOB) types. Each bank, internally, will have its own product, party and LOB types, which differ from bank to bank. In order to ensure consistency in computations, the application supports three standard dimensions:

- Standard Product Type
- Standard Party Type
- Standard Line of Business

The bank specific product, party and LOB types, which are accepted as a download in the staging tables, are required to be reclassified to standard product, party and LOB types supported by OFS CRA, respectively.

A.1.1 Standard Product Type Reclassification

Banks should map their specific product types to the Standard Product Types as part of the rule CRA - Standard Product Type Reclassification. The application then reclassifies the bank product types to Standard Product Types and utilizes the Standard Product Types for further processing.

A.1.2 Standard Party Type Reclassification

Banks are required to map their specific party types to the Standard Party Types as part of the rule CRA - Standard Party Type Reclassification. The application then reclassifies the bank party types to Standard Party Types and utilizes the Standard Party Types for further processing. Party types include customer type, issuer type and guarantor type.

A.1.3 Standard Line of Business Reclassification

Banks are required to map their specific Line Of Business (LOB) to the Standard LOB as part of the rule CRA - Standard Line of Business Reclassification. The application then reclassifies the bank LOB to Standard LOB and utilizes the Standard LOB for further processing. LOB types include Retail Banking, Private Banking, and Corporate Finance and so on.

B

Glossary

Amortized Cost

Total exposure- principal repayments.

Allowance for Loans and Lease Losses (ALLL)

The allowance for loan and lease losses, originally referred to as the reserve for bad debts, is a valuation reserve established and maintained by charges against a bank's operating income. It is an estimate of uncollected amounts used to reduce the book value of loans and leases to the amount a bank can expect to collect. The ALLL is an accounting estimate of probable but unconfirmed asset impairment that has occurred in the loan portfolio as of the financial statement date. All confirmed losses must be charged off.

ALLL Ratio

ALLL Proportion is calculated as ALLL/EOP balance – Fund based.

ALLL-NPA Coverage Ratio

This ratio is calculated as ALLL/Total NPA exposures, it shows how much of ALLL is covered by the NPA exposures.

ALLL- NCO Coverage Ratio

This ratio is calculated as ALLL/Net Charge Off, it shows how much of ALLL is covered by the Net Charge off.

Asset Classification

According to the farm credit administration, assets are classified as Acceptable, Other Assets Especially Mentioned, Substandard, Doubtful, and Loss.

EOP Balance (Total)

EOP is the balance outstanding amount due from the account/exposure As-of-Date. It can also be termed as principal outstanding or net outstanding. It is inclusive of charges and fees.

EOP Balance - Fund Based

EOP is the balance outstanding amount due from all accounts representing on-balance sheet exposures as on a given date. It can also be termed as principal outstanding or net outstanding. It is inclusive of charges and fees.

EOP Balance Non-Fund Based

EOP is the balance outstanding amount due from all accounts representing off-balance sheet exposures as on a given date. Expected Loss Expected loss is the sum of the values of all possible losses, each multiplied by the probability of that loss occurring. It can be calculated as EOP balance Total* WAPD*WALGD.

Credit Score

A credit score is a numerical expression based on a level analysis of a person's credit files, to represent the creditworthiness of an individual. A credit score is primarily based on a credit report, information typically sourced from credit rating agencies.

Watchlist Status

Status of all exposures which are classified/marked as Watchlist by the bank for reasons pertaining to the borrower's loan performance, business environment, or such other reasons.

Carrying Cost

The carrying cost of exposure is the sum of the outstanding amount, interest (accrued or otherwise), and charges, if any, associated with the exposure.

Charge Off Ratio

Charge off ratio is calculated as Net Charge off/ EOP balance – Fund based.

Credit Exposure Classification

The credit exposure classification is divided into Loan exposure, Investment exposure and derivative exposure.

Commercial Provisions

Commercial provisions represent the total provisions made between the reference date and current date for the accounts which are mapped to Wholesale.

Consumer Provisions

Consumer Provisions represent the total provisions made between the reference date and current date for the accounts which are mapped to retail.

Watchlist Exposures

EOP Balance of all exposures which are classified/marked as Watchlist by the bank for reasons pertaining to the borrower's loan performance, business environment, or such other reasons.

Doubtful Assets/Exposures

Doubtful Assets have all the weaknesses of assets classified as substandard when the weaknesses make collection or liquidation in full, based on available current information, highly questionable, or improbable. It is a class of Non-Performing Assets (NPA).

Gross Credit Exposure (GCE)

GCE is the summation of the balance outstanding, accrued interest, and the complete unutilized portion of the exposure (without any credit conversion factors). The balance outstanding is the principal outstanding of the exposure, plus any charges or fees associated with the exposure.

Gross Relationship Exposure (GRE)

This would be the aggregation of GCE, DSE, indirect exposures, and related exposures.

Indirect Exposure

This would be the value of the guarantees that are provided by a customer, to an entity that is not part of the same legal organization structure as the customer.

Legal Entity Identifier

Legal Entity Identifier is a unique identifier of an entity (both individual and artificial judicial entity). The attribute is similar to the PAN (Permanent Account Number) or a Social Security Number in the case of an individual.

Loss Given Default (LGD)

Loss Given Default is the magnitude of likely loss on the exposure and is expressed as a percentage of the exposure. Loss Given Default is facility specific as such losses are generally understood to be influenced by key transaction characteristics such as the presence of collateral and the degree of subordination.

Loss Asset

Assets classified as loss are considered uncollected and of little value. Therefore, their continuance as bankable assets is not warranted. Amounts classified as a loss should be promptly charged off. This classification does not mean that there is no recovery or salvage value, but rather that it is not practical or desirable to defer writing off these assets, even though some value may be recovered in the future.

Loan-To-Value (LTV) Ratio

The Loan-to-Value (LTV) Ratio expresses the amount of a first mortgage lien as a percentage of the total appraised value of the real property. It is the ratio of the loan to the value of security offered for the loan.

Non-Performing Assets (NPAs)

NPA is a loan or lease that is not meeting its stated principal and interest payments for a specified period. Banks usually classify as nonperforming assets any loans which are more than 90 days overdue. More generally, an asset that is not producing income. The Non-Performing Assets are further classified into substandard assets, doubtful assets, and loss assets.

NPA - Doubtful Assets

Doubtful assets have all the weaknesses of assets classified as substandard when the weaknesses make collection or liquidation in full, based on available current information, highly questionable, or improbable. It is a class of Non-Performing Assets (NPA).

NPA - Loss Asset

Assets classified as loss are considered uncollected and of little value. Therefore, their continuance as bankable assets is not warranted. Amounts classified as a loss should be promptly charged off. This classification does not mean that there is no recovery or salvage value, but rather that it is not practical or desirable to defer writing off these assets, even though some value may be recovered in the future.

NPA Ratio

NPA Ratio is calculated as Total NPA exposures/ EOP balance – Fund based.

OBIEE

Oracle Business Intelligence Enterprise Edition

PD

The Probability of Default represents the likelihood of the borrower defaulting on the loan obligations.

PD Band PD band refers to the lower and the upper range of the PD.

Security Value

Security Value is the asset that is pledged by the borrower as a security on the value of the loan.

NPA-Substandard Assets

Substandard Assets are inadequately protected by the current sound worth and paying capacity of the obligor or the collateral pledged if any. Assets so rated have well-defined weaknesses that may trouble the liquidation of the debt and present the distinct possibility that the institution will sustain some loss if deficiencies are not corrected. It is a class of Non-Performing Assets (NPA).

Weighted Average Probability of Default (WAPD)

The WAPD is to be calculated by multiplying the PD of exposure with the sum of (outstanding amount and accrued interest) and dividing the product by the sum of the (outstanding amount and accrued interest). WAPD = PD * (Sum of (outstanding amount+ accrued interest)) / (Sum of (outstanding amount + accrued interest)).

Undrawn Exposure or Undrawn Balance Commitments

The part of the Gross Credit Exposure that is approved for the borrower but is yet to be disbursed by the bank and availed/drawn by the borrower. This can comprise of both on the balance sheet/fund based and off-balance sheet/non-fund based exposures.

Balance Previous Year

The Balance of any selected measure as of the same day of the previous fiscal year.

Balance Beginning of the Year

The Closing balance of any selected measure as of the end of the previous fiscal year or the opening balance of any selected measure as of the beginning of the current fiscal year.

Balance Last Reporting Date

The balance of any selected measure as of the date of which the subject report was last generated and reported.

Book Classification

The Book Classification is divided into Banking Book or Trading Book. The Banking Book comprises of all financial instruments which are not traded actively and are to be held until maturity. The Trading Book comprises of all financial instruments that are bought and sold regularly.

Balance Sheet Classification

The Balance Sheet Classification is divided into fund based or non-fund based. The fund based facility is any credit facility which involves direct outflow of bank's fund to the borrower, for example – Loan, cash credit, Overdraft and so on. The non-fund based facility is a credit facility where there is no involvement of direct outflow of bank's fund to the borrower rather it is shouldered by the third party on behalf of the borrower, for example – bank guarantee, letter of credit and so on.

Watchlist Ratio

Watchlist Ratio is calculated as Watchlist exposures/Total EOP balance.

Delinquent Exposures

EOP Balance of all exposures which are classified/marked as delinquent by the bank for reasons pertaining to the borrower's loan performance, business environment, based on days past due. The delinquent exposures is divided into Delinquent - up to 30 Days Past Due, Delinquent 31-60 Days Past Due, Delinquent - more than 60 Days Past Due.

Delinquent Ratio

Delinquent ratio is calculated as Total Delinquent exposures/EOP balance – Fund based.

Provisions

Provisions is the amount that is set aside to cover the anticipated losses in the future.

Current Provisions Ratio

Current Provision Ratio is calculated as the Provisions/ EOP balance – Fund based.

Gross Charge Off

Gross Charge Off is the amount which are written off and unlikely to be collected because the borrower becomes substantially delinquent after a period of time.

Net Charge Off

Net Charge Off is the debt owed which is unlikely to be recovered. It can be calculated as Gross Charge Off – Recoveries.

Resolutions

Resolutions are the aggregate of EOP – Fund based Balances as of reference date, of all accounts which are Watchlist/Delinquent/NPA as of reference date but are not Watchlist/Delinquent/NPA or Charged off as of current date.

Year to Date

Year to date refers to the period from beginning of the year to the current (present) date.

Quarter to Date

Quarter to Date refers to the period from beginning of the quarter to the current (present) date.

Month to Date

Month to Date refers to the period from beginning of the month to the current (present) date.

12 months trailing

12 months trailing refers to the consecutive 12 month period immediately prior to the date of report, and does not necessarily represent fiscal year ending period.

Capital

Capital is the amount a bank or other financial institution has to have as required by its financial regulator.

Tier I Capital

As defined by the Basel Committee, Tier 1 Capital refers to a bank's equity capital and disclosed reserves. It is used to measure the bank's capital adequacy. Tier 1 capital primarily consists of the common stock and the retained earnings.

Tier II Capital

Tier II Capital refers to one of the components of a bank's required reserves. Tier II is designated as the second or supplementary layer of a bank's capital and is composed of items such as revaluation reserves, hybrid instruments, and subordinated term debt. It is considered less secure than Tier 1 capital—the other form of a bank's capital—because it's more difficult to liquidate.

Tier III Capital

Tier III Capital is tertiary capital, which many banks hold to support their market risk, commodities risk, and foreign currency risk, derived from trading activities. Tier III capital

includes a greater variety of debt than Tier I and Tier II capital but is of a much lower quality than either of the two.

Weighted Average Loss Given default (WALGD)

The WALGD is to be calculated by multiplying the LGD of exposure with the sum of (outstanding amount and accrued interest) and dividing the product by the sum of the (outstanding amount and accrued interest). WALGD = LGD * (Sum of (outstanding amount+ accrued interest)) / (Sum of (outstanding amount + accrued interest)).

Days Past Due

Days Past Due are the days after the due date and is application when the payment is not made by the party to the bank. This indicates by how many days a payment is overdue.

Overdue

Overdue refers to the amount which was due for payment but not paid yet.

Utilization %

Utilization % can be calculated as GCE/EOP balance - Total

Recoveries from Written Off Accounts

Recoveries from written Off Accounts is a payment received for a debt that was written off and considered uncollectible.

Credit Status

Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.

Exposure at Default

Exposure at Default (EAD) is the predicted amount of loss a bank may be exposed to when a debtor defaults on a loan.

Credit Migration Ratio

This ratio is calculated as Number of obligors downgraded/no of obligors upgraded.

Exposure Weighted Migration Ratio

This ratio is calculated as Exposure to obligors downgraded/Exposure to obligors upgraded.

Upgrade Ratio – No. of Obligors

This ratio is calculated as No of obligors upgraded/total number of obligors (opening).

Downgrade Ratio – No. of Obligors

This ratio is calculated as No of obligors downgraded/total number of obligors (opening).