Oracle® Banking Microservices Architecture

Oracle Banking Common Core User Guide

Release 14.7.0.0.0

ORACLE®

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Preface

Purpose

This guide is designed to help the user to quickly get acquainted with the Customer Standard Instructions maintenance process.

Audience

This guide is intended for the central administrator of the Bank who controls the system and application parameters and ensures smooth functionality and flexibility of the banking application.

Acronyms and Abbreviations

The list of the acronyms and abbreviations used in this guide are as follows:

Table 1   Acronyms and Abbreviations

Abbreviation	Description
System	Core Maintenance Module
NLP	Natural Language Processing
REST	Representational State Transfer

List of Topics

This guide is organized as follows:

Table 2   List of Topics

Topics	Description
Core Maintenance	This topic provides the information about core maintenance.
NLP Framework	This topic provides the information about NLP Framework.
Machine Learning Framework	This topic provides the information about machine learning framework.
File Upload	This topic provides the information about File Upload.
Rules Framework	This topic provides the information about Rules Framework.
Document Verification Framework	This topic provides the information about Document verification framework.
Error Codes and Messages	This topic provides the information about Error Codes and Messages.
Functional Activity Codes	This topic provides the information about Functional Activity Codes.

Symbols and Icons

The following symbols and icons are used in the screens.

Table 3   Symbols and Icons - Common

Symbol/Icon	Function
	Minimize
	Maximize
	Close
	Perform Search
	Open a list
	Add a new record
	Navigate to the first record
	Navigate to the last record
	Navigate to the previous record

Table 3   (Cont.) Symbols and Icons - Common

Symbol/Icon	Function
>	Navigate to the next record
(grid icon)	Grid view
(list icon)	List view
(refresh icon)	Refresh
+	Click this icon to add a new row.
-	Click this icon to delete an existing row.
(view icon)	Click to view the created record.
(edit icon)	Click to modify the fields.
(menu icon)	Click to unlock, delete, authorize or view the created record.

Table 4   Symbols and Icons - Audit Details

Symbol/Icon	Function
(user icon)	A user

Table 4   (Cont.) Symbols and Icons - Audit Details

Symbol/Icon	Function
	Date and time
	Unauthorized or Closed status
	Authorized or Open status

Table 5   Symbols and Icons - Widget

Symbol/Icon	Function
	Open status
	Unauthorized status
	Closed status
	Authorized status

Basic Actions

Table 6   Basic Actions

Action	Description
Approve	Used to approve the initiated report. This button is displayed, once the user click **Authorize**.
Audit	Used to view the maker details, checker details, and report status.
Authorize	Used to authorize the report created. A maker of the screen is not allowed to authorize the report. Only a checker can authorize a report, created by a maker.
Close	Used to close a record. This action is available only when a record is created.

Table 6   (Cont.) Basic Actions

Action	Description
Confirm	Used to confirm the performed action.
Cancel	Used to cancel the performed action.
Compare	Used to view the comparison through the field values of old record and the current record. This button is displayed in the widget, once the user click **Authorize**.
Collapse All	Used to hide the details in the sections. This button is displayed, once the user click **Compare**.
Expand All	Used to expand and view all the details in the sections. This button is displayed, once the user click **Compare**.
New	Used to add a new record. When the user click **New**, the system displays a new record enabling to specify the required data. ✎ **Note:** The fields which are marked with asterisk are mandatory.
OK	Used to confirm the details in the screen.
Save	Used to save the details entered or selected in the screen.
View	Used to view the report details in a particular modification stage. This button is displayed in the widget, once the user click **Authorize**.
View Difference only	Used to view a comparison through the field element values of old record and the current record, which has undergone changes. This button is displayed, once the user click **Compare**.
Unlock	Used to update the details of an existing record. System displays an existing record in editable mode.

Related Documentation

The related documents are as follows:

- *Oracle Banking Security Management System User Guide*
- *Oracle Banking Getting Started User Guide*

1
Core Maintenance

This topic helps you quickly get acquainted with the many functions routinely executed everyday.

- **Additional Field Maintenance**
  This topic describes the systematic instructions to configure and maintain the additional fields for the transaction screens.

- **Advice**
  This topic describes the information to configure the various BIP advices that are available for the process.

- **Amount Text Language**
  This topic describes the information to configure an amount text language.

- **BIC Directory**
  This topic describes the information to configure the BIC directory for a customer.

- **Branch EOD**
  This topics describes the information to configure Branch workflow

- **Country Code**
  This topic describes the information to configure the Country code.

- **Currency Definition**
  This topic describes the information to define the currency using Currency Definition maintenance.

- **Currency Exchange Rate**
  This topic describes the information to configure a Currency Exchange Rate.

- **Currency Holiday Master**
  This topic describes the information to configure a Currency Holiday.

- **Currency Pair Definition**
  This topic describes the information to define a Currency Pair.

- **Currency Rate Type**
  This topic describes the information to configure a Currency Rate.

- **Customer Access Group**
  This topic describes the information to configure the customer access group.

- **Customer Category**
  This topic describes the information to configure a Customer Category

- **ECA System**
  This topic describes the information to configure ECA system.

- **External Bank Parameters**
  This topic describes the information to configure bank level parameters.

- **External Branch Parameters**
  This topics describes the information to configure branch level parameters.

- **External Chart Account**
  This topic describes the information to configure an external chart.

- **External Customer**
  This topic describes the information to configure the external customer details.

- **External Customer Account**
  This topic helps to configure the external customer account details.

- **External Customer Account Structured Address**
  This topic describes the information to configure the external customer account structured address details.

- **External Virtual Account Structured Address**
  This topic describes the information to configure the external virtual account structured address details.

- **Forget Process**
  This topic describes the information to configure a customer detail who wants to be forgotten using forget process.

- **Host Code**
  This topic describes the information to configure the host code.

- **Language Code**
  This topic describes the information to configure a language code.

- **Local Holiday**
  This topic describes the information to configure a local holiday.

- **Media**
  This topic describes the information to configure the media.

- **Multi-Currency Account Linkage**
  This topic describes the information to link the sub-accounts to a core multi-currency account.

- **Process Code**
  This topic describes the information to set the process code to the individual stages according to the process.

- **System Dates**
  This topic describes the information to view the system date details.

- **Transaction Code**
  This topic describes the information to configure the transaction code.

- **Upload Source**
  This topic describes the information to upload a source code

- **Upload Source Preference**
  This topic describes the information to configure upload source preference.

- **Pricing Source System**
  This topic describes the information to configure the pricing source system.

- **Integrating Bureau Integration Service with Oracle Banking Routing Hub**
  This topic describes the information to integrate the Bureau Integration service with Oracle Banking Routing Hub.

- **Bureau Integration Service**
  This topic provides the overview about the Bureau Integration Service.

- **Credit Bureau Display**
  This topic describes the information about Credit Bureau display.

- **Lookup**
  This topic describes the information about the lookup feature in Bureau Integration service.

- **Criteria**
  This topic describes the information about the criteria to identify the Credit Bureau.

- **System Parameter**
  This topic describes the information about the system parameter configured in Bureau Integration service.

- **Integrating Decision Service with Oracle Banking Routing Hub**
  This topic describes the information to integrate the Decision service with Oracle Banking Routing Hub.

- **Decision Service**
  This topic describes the information about decision service.

- **Product Processor**
  This topic describes the information about the product processor.

- **Lookups**
  This topic describes the information about the lookups feature in Decision service.

- **System Parameter**
  This topic describes the information about the system parameter configured in Decision service.

- **Strategy Configuration**
  This topic describes the information about the strategy configuration.

- **Validation Model**
  This topic describes the information about the Validation model.

- **Borrowing Capacity**
  This topic describes the information about the total amount the applicant is eligible to borrow.

- **Questionnaire**
  This topic describes the information about the questionnaire used for credit analysis.

- **Qualitative Scoring Model**
  This topic describes the information about the Qualitative scoring model for the Decision service.

- **Scoring Feature**
  This topic describes the information about the scoring feature in Decision service.

- **Quantitative Scoring Model**
  This topic describes the information about the Quantitative scoring model for the Decision service.

- **Decision Grade Matrix**
  This topic describes the information about the decision grade matrix feature.

- **Pricing**
  This topic describes the information about the pricing feature in Decision service.

- **Execution Summary**
  This topic describes the information to view the decisions, credit score and pricing for the processed application.

1.1 Additional Field Maintenance

This topic describes the systematic instructions to configure and maintain the additional fields for the transaction screens.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home screen**, click **Core Maintenance**. Under **Core Maintenance**, click **Additional Field Maintenance**.

   The **Additional Field Maintenance** screen displays.

   Figure 1-1   Additional Field Maintenance
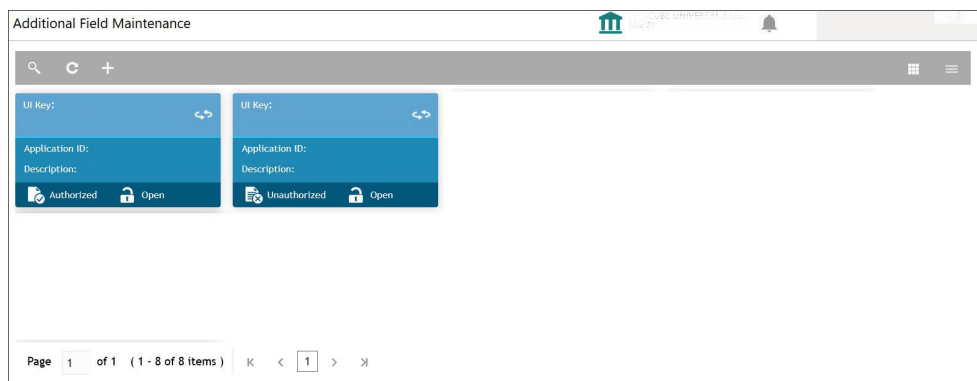
2. View the details from **Additional Fields Maintenance** screen

   For more information on fields, refer to the field description table.

   Table 1-1   Additional Field Maintenance - Field Description

Field	Description
UI Key	Displays the UI key of the additional field.
Application ID	Displays the related application ID of the additional field.
Description	Displays the description of the additional field.
Status	Displays the status of the record.

3. On **Additional Field Maintenance** screen, click **+** button.

   The **Additional Fields Maintenance** screen displays.

Figure 1-2   Additional Fields Maintenance

4. specify the fields on **Additional Fields Maintenance** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-2   Additional Fields Maintenance – Field Description

Field	Description
Component Name	Click **Search** icon to view and select the component name from the list of
Product Code	Click **Search** icon to view and select the product code from the list of
Product Name	Displays the product name for the specified product code.
Description	Displays the description as **Additional Fields**, and it can be modified.
Application ID	Displays the Application ID.
Construct Additional Fields MetaData	Specify the details under this section to configure metadata for each field.
Select	Check this box to select/unselect a row.
Field ID	Specify the field ID.
Field Label	Specify the field label.
Category	Specify the category.
Field Type	Select the field type from the drop-down values.
Edit	Click this icon to edit the fields in the row.
Mandatory	Check this box if the field needs to be configured as mandatory.
Construct Validation MetaData	Specify the details under this section for validations to be applied on configured fields.
Select	Check this box to select/unselect a row.
Validation Name	Specify the validation name.

Table 1-2 (Cont.) Additional Fields Maintenance – Field Description

Field	Description
Validation Template To Use	Select the template to be used for the validation.
Custom Error Message	Specify the error message that needs to be displayed for the lidti
Edit Arguments	Click this icon to edit the fields in the row.

5. Click **Save** to save the details.

   The user can view the confirmation advice details in the Additional Field Maintenance.

1.2 Advice

This topic describes the information to configure the various BIP advices that are available for the process.

This topic contains the following subtopics:

- Create Advice
  This topic describes the systematic instructions to configure advices.

- View Advice
  This topic describes the systematic instructions to view the list of configured advice.

1.2.1 Create Advice

This topic describes the systematic instructions to configure advices.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Advice**.

2. Under **Advice**, click **Create Advice**.

   The **Create Advice** screen displays.

Figure 1-3 Create Advice

3. Specify the fields on **Create Advice** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-3   Create Advice – Field Description

Field	Description
Advice Name	Specify the name of the advice.
Advice Description	Specify the information about the advice.
Micro Service Name	Specify the name of the micro service.
Swift Micro Service	Specify the information about the swift micro service.
Micro Service Endpoint	Specify the endpoint micro service.
Application Name	Specify the application name for which advice is generated.
Application Description	Specify the additional information about the application.
Media	Search and select the required media.
Branch	Search and select the required branch.
Currency	Search and select the required currency.
Report Locale	Specify the locale report details.
Report Absolute Path	Specify the report absolute path.
Format	Select a download file format for an advice from the drop-down list. The available options are: • **PDF** • **PPTX** • **HTML** • **XLS** • **RTF**
Swift Endpoint	Specify the swift endpoint.

4. Click **Save** to save the details.

The advice is successfully created and can be viewed using the View Advice screen.

1.2.2 View Advice

This topic describes the systematic instructions to view the list of configured advice.

The user can configure an advice for a process using the Create Advice screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Advice**.

2. Under **Advice**, click **View Advice**.

The **View Advice** screen displays.

Figure 1-4   View Advice

For more information on fields, refer to the field description table.

Table 1-4   View Advice – Field Description

Field	Description
Advice Name	Displays the name of the advice.
Advice Description	Displays information about the advice.
Micro Service Name	Displays the name of the micro service.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.3 Amount Text Language

This topic describes the information to configure an amount text language.

This topic contains the following subtopics:

• Create Amount Text Language
  This topic describes the systematic instructions to configure the amount text language.

• View Amount Text Language
  This topic describes the systematic instructions to view the list of configured amount text language.

1.3.1 Create Amount Text Language

This topic describes the systematic instructions to configure the amount text language.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Amount Text Language**.

2. Under **Amount Text Language**, click **Create Amount Text Language**.

   The **Create Amount Text Language** screen displays.

Figure 1-5   Create Amount Text Language

3. Specify the fields on **Create Amount Text Language** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-5   Create Amount Text Language – Field Description

Field	Description
Language Code	Search and select the required language code.
Currency Symbol	Specify the currency symbols.
Decimals As Fraction	Select a decimals as fraction value from the drop-down list.
Final Text	Specify the final text for the amount word currency list.
CCY	Search and select the CCY.
Post Decimal	Specify the post decimal details.
Pre Decimal	Specify the pre decimal details.
Text Before	Select an option for the before text.
Text Between	Specify the text that must appear between the amount word currency list.
Amount	Select the amount details.

Table 1-5   (Cont.) Create Amount Text Language – Field Description

Field	Description
One Flag	Select an option for the amount word text list.
Text	Specify the text for the amount word.

4. Click **+** icon to add a new row.

5. Click **Save** to save the details.

   The amount text language is successfully created and can be viewed using the View Amount Text Language screen.

1.3.2 View Amount Text Language

This topic describes the systematic instructions to view the list of configured amount text language.

The user can configure an amount text language using Create Amount Text Language screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Amount Text Language**.

2. Under **Amount Text Language**, click **View Amount Text Language**.

   The **View Amount Text Language** screen displays.

Figure 1-6   View Amount Text Language
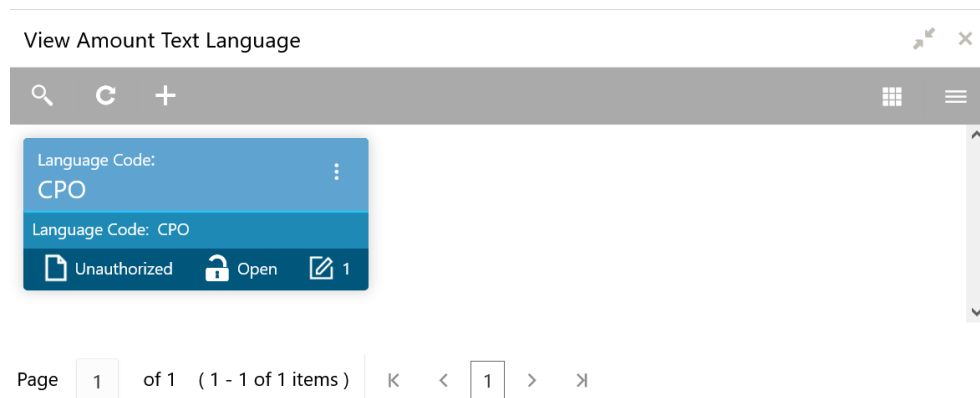
For more information on fields, refer to the field description table.

Table 1-6   View Amount Text Language – Field Description

Field	Description
Language Code	Displays the language code associated with the amount word.

Table 1-6   (Cont.) View Amount Text Language – Field Description

Field	Description
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.4 BIC Directory

This topic describes the information to configure the BIC directory for a customer.

As part of setting up basic information, the user must maintain Bank Identifier Codes (BIC).

This topic contains the following subtopics:

• Create BIC Directory
  This topic describes the systematic instructions to configure a BIC directory for a customer.

• View BIC Directory
  This topic describes the systematic instructions to view the list of configured BIC directory.

1.4.1 Create BIC Directory

This topic describes the systematic instructions to configure a BIC directory for a customer.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **BIC Directory**.

2. Under **BIC Directory**, click **Create BIC Directory**.

   The **Create BIC Directory** screen displays.

Figure 1-7   Create BIC Directory

3. Specify the fields on **Create BIC Directory** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-7   Create BIC Directory – Field Description

Field	Description
BIC Code	Specify the unique BIC Code by which the bank is identified by SWIFT.
Bank Name	Specify the name for the bank.
Customer Number	Click **Search** icon to view and select the required customer number.
Customer Name	Displays the customer name based on the selected **Customer Number**.
Bank Address 1-3	Displays the bank address 1-3 based on the selected **Customer Number**.
SWIFT Key	Specify the swift key details.
Telex Key	Specify the unique telex key for the BIC directory.
SWIFT Key Arrangement	Select the SWIFT key arrangement from the drop-down list. The available options are: • **Yes** • **No**

Table 1-7   (Cont.) Create BIC Directory – Field Description

Field	Description
Relationship	Select one of the following options: • **No**: If selected, indicates that the BIC Entity is not a customer of your bank • **Mail**: If selected, the BIC entity is not a recognized SWIFT entity but an address internal to your bank. In such cases, all correspondence directed to the particular BIC entity is sent as mail messages. • **Keys**: If selected, a SWIFT/Telex connectivity exists between your bank and the bank for which you are maintaining details. Subsequently, you must specify the SWIFT/Telex Key in the adjacent field.
Sub-type Code	Click **Search** icon to view and select the required sub-type code.
BEI Indicator	Displays BEI Indicator based on the selected **Sub-type Code**.
ADB Member	Select the ADB member from the drop-down list. The available options are: • **Not applicable** • **Yes** • **No**
MT103+ Preferred	By default, this is disabled. If selected, indicates the counter party whose BIC code details you are capturing capacitate to receive payment messages in the MT 103 format.
Blacklisted	By default, this is disabled. If selected, indicates the BIC entity is blacklisted.
CUG Member	By default, this is disabled. If selected, indicates the BIC entity is a closed user group member.
Remit Member	By default, this is disabled. If selected, indicates the customer is registered with MT 103 extended remittance information multiple user group.
Update During Upload	By default, this is disabled. If selected, updated the BIC directory during an upload.
Multi-Customer Credit Transfer	By default, this is disabled. If selected, indicates multiple credit transfer feature (MT102 support) exists between the bank and the BIC entity.
Generate 102+	By default, this is disabled. If selected, generates 102+ message.
Maximum Size in Bytes	Specify the maximum size.
Generate MT101	By default, this is disabled. If selected, indicates MT101 can be sent/received from this BIC. Select to generate MT101 message.
Number of Transactions Per Page	Specify the number of transactions to view per page. If not specified, the value is defaulted to 10.
Real Customer Number	Click **Search** icon to view and select the required real customer number.
Real Customer Name	Based on the Real Customer Number selected, the information is auto-populated.

4. Click **Save** to save the details.

The BIC directory is successfully created and can be viewed using the View BIC Directory screen.

1.4.2 View BIC Directory

This topic describes the systematic instructions to view the list of configured BIC directory.

The user can configure BIC directory using Create BIC Directory screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **BIC Directory**.

2. Under **BIC Directory**, click **View BIC Directory**.

The **View BIC Directory** screen displays.

Figure 1-8   View BIC Directory
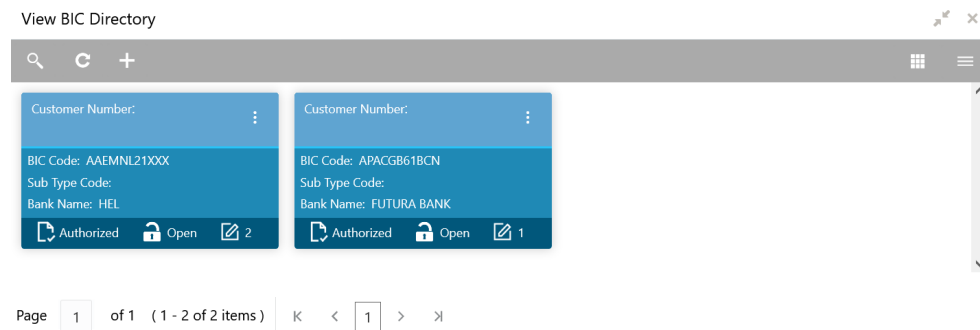
For more information on fields, refer to the field description table.

Table 1-8   View BIC Directory – Field Description

Field	Description
Customer Number	Displays the number of the customer.
Sub-type Code	Displays the sub-type code associated with the customer number.
BIC Code	Displays the defined BIC code for the associated customer.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.5 Branch EOD

This topics describes the information to configure Branch workflow

The user can invoke EOD to indicate that all the activities for the day are complete. Activities can be performed on the system only after the system date is changed to the next working day and authorized.

Most of the automated functions are part of the beginning of day operations. Thereafter, some of them must be executed when the system is in the EOTI stage.

This topic contains the following subtopics:

- Configure Branch EOD
  This topic describes the systematic instructions to create / configure the EOD work-flow with a branch.

- View Branch EOD
  This topic describes the systematic instructions to view the list of branch work-flow mappings.

- Invoke Branch EOD
  This topic describes the systematic instructions to invoke the branch EOD process as per the branch.

1.5.1 Configure Branch EOD
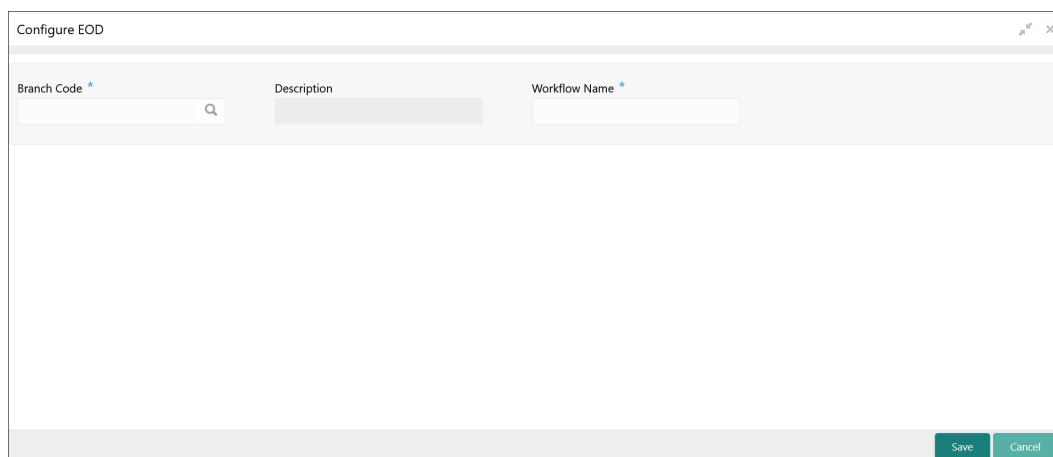
This topic describes the systematic instructions to create / configure the EOD work-flow with a branch.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Branch EOD**.

2. Under **Branch EOD**, click **Configure EOD**.

   The **Configure EOD** screen displays.

   Figure 1-9   Configure EOD

3. Specify the fields on **Configure EOD** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-9   Configure EOD – Field Description

Field	Description
Branch Code	Specify the branch code that is associated with the logged in user.
Description	Displays the description of the branch.
Workflow Name	Specify the work-flow name that is already created.

> **Note:**
>
> For more information on EOD Workflow creation and related terminologies, refer to *EOD Configuration User Guide* of the respective products.

1.5.2 View Branch EOD

This topic describes the systematic instructions to view the list of branch work-flow mappings.

The user can configure EOD using Configure EOD screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Branch EOD**.

2. Under **Branch EOD**, click **View EOD**.

   The **View EOD** screen displays.

Figure 1-10   View EOD
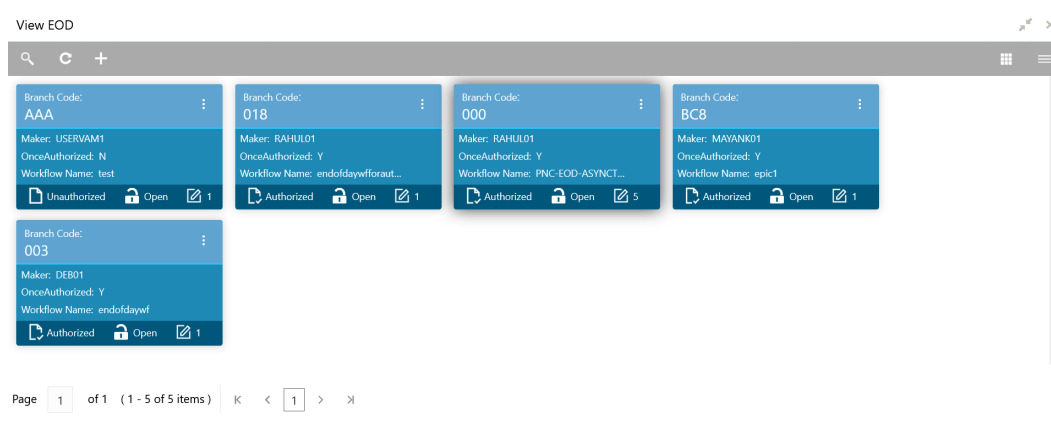
For more information on fields, refer to the field description table.

Table 1-10   View EOD – Field Description

Field	Description
Branch Code	Displays the branch code details.
Maker	Displays the name of the maker.
Workflow Name	Displays the name of the work-flow.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.5.3 Invoke Branch EOD

This topic describes the systematic instructions to invoke the branch EOD process as per the branch.

The work-flow mapping can be configured using Configure Branch EOD screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Branch EOD**.

2. Under **Branch EOD**, click **Invoke EOD**.

    The **Invoke EOD** screen displays.

Figure 1-11   Invoke EOD

3. specify the fields on **Invoke EOD** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-11   Invoke EOD – Field Description

Field	Description
Branch Code	Specify the branch code that is associated with the logged in user.
Description	Displays the description of the branch, based on the Branch code selected.
Current Branch Date	Displays the current branch date, based on the Branch code selected.

4. Click **Start** to invoke EOD for selected branch and click **Refresh** to view the current status of batch.

5. Click **Retry** to restart the EOD work-flow from the failed task.

> ✎ **Note:**
>
> The **Retry** button enables only if the failed task status is encountered.

6. Click **Reset** to clear the branch selected.

7. Click **Refresh** to view the current status of batch.

8. Mouse-hover on the task to view the relevant details such as Start time, End time, and Error if any.

1.6 Country Code

This topic describes the information to configure the Country code.

This topic contains the following subtopics:

- Create Country Code
  This topic describes the systematic instructions to configure a country code.
- View Country Code
  This topic describes the systematic instructions to view the list of configured country code.

1.6.1 Create Country Code

This topic describes the systematic instructions to configure a country code.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Country Code**.

2. Under **Country Code**, click **Create Country Code**.

   The **Create Country Code** screen displays.

Figure 1-12   Create Country Code

3. Specify the fields on **Create Country Code** screen.

> ✎ **Note:**
>
>   The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-12   Create Country Code – Field Description

Field	Description
Country Code	Specify the country code.
Country Name	Specify the name of the country.
Alternate Country Code	Specify the alternate country code.
Region Code	Specify the region code.
ISO Country Code	Specify the ISO country code.
ISO Code	Specify the ISO code.
Blacklist	By default, this is disabled. If selected, indicates the country is blacklisted.
EU Member	By default, this is disabled. If selected, indicates the country is recognized by Swift as a part of the Intra European countries.
Generate 205	By default, this is disabled. If selected, indicates the cover message 205COV or 205 need to be generated for transactions involving this country. If the user does not select this option, RTGS, 202 or 202COV message is generated.
IBAN Check Required	By default, this is disabled. If selected, indicates check required for an IBAN is mandatory.
BIC Clearing Code	By default, this is disabled. If selected, indicates the National ID in the BIC plus file is the clearing code. During upload of clearing codes from BIC plus file, the records belong to countries against which this box is selected.
Intra European	By default, this is disabled. If selected, indicates the country is an intra European country.

4. Click **Save** to save the details.

   The country code is successfully created and can be viewed using the View Country Code screen.

1.6.2 View Country Code

This topic describes the systematic instructions to view the list of configured country code.

The user can configure country code using Create Country Code screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Country Code**.

2. Under **Country Code**, click **View Country Code**.

   The **View Country Code** screen displays.

Figure 1-13　View Country Code
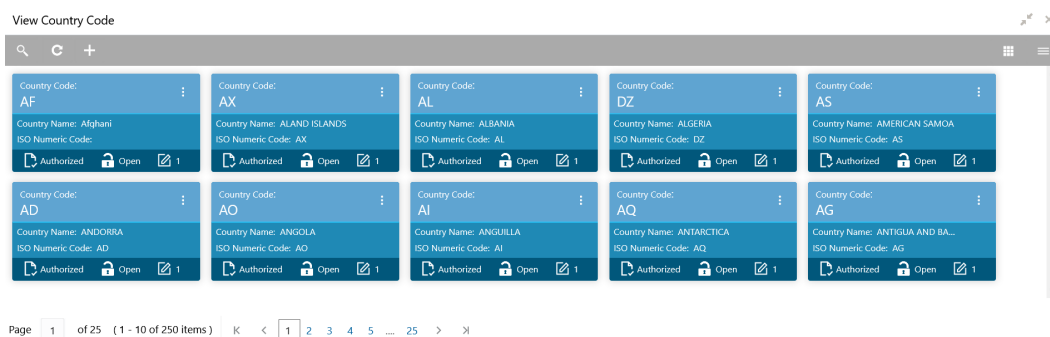
For more information on fields, refer to the field description table.

Table 1-13　View Country Code – Field Description

Field	Description
Country Code	Displays the code of the country.
ISO Numeric Code	Displays the ISO numeric code details of the country code.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.7 Currency Definition

This topic describes the information to define the currency using Currency Definition maintenance.

The user can define the attributes of the currencies in which the bank can deal. For each currency, you can define the attributes such as the SWIFT code for the currency, the country to which the currency belongs, the interest method, the spot days, the settlement days, and so on.

Currencies can be maintained only at the Head Office. The list of currencies is available to the branches based on the currencies defined for the country linked to the branch.

This topic contains the following subtopics:

• Create Currency Definition
  This topic describes the systematic instructions to define currency.

• View Currency Definition
  This topic describes the systematic instructions to view a list of the defined currency.

1.7.1 Create Currency Definition

This topic describes the systematic instructions to define currency.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Definition**.

2. Under **Currency Definition**, click **Create Currency Definition**.

   The **Create Currency Definition** screen displays.

   Figure 1-14   Create Currency Definition

3. Specify the fields on **Create Currency Definition** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-14   Create Currency Definition – Field Description

Field	Description
Currency Code	Specify the currency code.
Maintenance Country	Click **Search** and select the required maintenance country.
Currency Name	Specify the name of the currency.
Alternate Currency Code	Specify the code of the alternate currency.
Currency Type	Specify the currency type.
ISO Numerical Currency Code	Specify the International Standardization Organization numerical currency code.
Currency Country	Click **Search** icon to view and select the required currency country.
Currency Decimals	Specify the currency decimals.
Currency Interest Method	Select the currency interest method from the drop-down list.
Currency Spot Days	Specify the number of spot working days applicable for the currency.
Foreign Exchange Netting Days	Specify the number of days for the foreign exchange netting.
Settlement Message Days	Select the settlement message days.
Position GL	Click **Search** icon to view and select the required position GL.
Position Equivalent GL	Search and select the required position equivalent GL.
Currency Tolerance Limit	Specify the currency tolerance limit.
Index Base Currency	Click **Search** icon to view and select the required index base currency.
Commodity Code	By default, this is disabled. If selected, enables a commodity code.
Cut Off Days	Specify the cut off days for the payment transaction involving the currency.
Cut Off Hour	Specify the hour of the day for the cut off.
Cut Off Min	Specify the minute of the hour for the cut off.
CLS Currency	By default, this is disabled. If selected, allow customers of the bank to settle their FX deals via the CLS (Continuous Linked Settlements) Bank, you can identify the currency to be a CLS Currency. FX deals in the CLS currency is only eligible to be routed through the CLS bank.
Generate 103+	By default, this is disabled. If selected, generate outgoing MT 103 messages in the MT 103 + format.
Index Flag	By default, this is disabled. If selected, derives index rate of the currency.
Euro Conversion Required	By default, this is disabled. If selected, indicates the Euro conversion is required.

Table 1-14   (Cont.) Create Currency Definition – Field Description

Field	Description
New Cover Message Format Required	By default, this is disabled. If selected, indicates a new cover message format is required.
Validate Tag-50F	By default, this is disabled. If selected, indicates validations must be performed for the 50F details captured for the ordering customer during contract input.
Currency Round Rule	Select the currency round rule from the drop-down list.
Currency Round Unit	Specify the currency round unit.
Currency Format Mask	Select one of the currency format.
Currency Euro Type	Select one of the currency Euro type. The available options are: • **EURO Currency** • **In Currency** • **Out Currency** • **EUTO Closed**
Credit Auto Exchange Rate Limit	Specify the credit automatic exchange rate limit.
Debit Auto Exchange Rate Limit	Specify the debit automatic exchange rate limit.
Country Code	Click **Search** icon to view and select the required country code.
Country Name	Specify the name of the country.
Currency Code	Click **Search** icon to view and select the required currency code.

Cut Off Time: It refers to the time by which all transactions involving a currency should be generated. For a currency, the user can indicate the cut-off hour and minute. This time should be expressed in the local time of the bank.

The maintenance of a cut-off time for a currency has particular reference to outgoing funds transfers involving it.

For example, the value date of a funds transfer transaction (incoming payment) involving USD, is 3rd June 2018. The number of cut-off days specified for the currency is 2. This means that the payment must be received on or before 1st June 2018. If the payment is received on 1st June, it must be received before the cut-off time specified for USD.

If the USD cut-off time is 12:00 hrs, if the payment is received on 1st June 2018, it must be received before 12:00 hrs.

4. Click **Save** to save the details.

The Currency definition is successfully created and can be viewed using the View Currency Definition screen.

1.7.2 View Currency Definition

This topic describes the systematic instructions to view a list of the defined currency.

The user can configure currency definition using Create Currency Definition screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Definition**.

2. Under **Currency Definition**, click **View Currency Definition**.

The **View Currency Definition** screen displays.

Figure 1-15   View Currency Definition
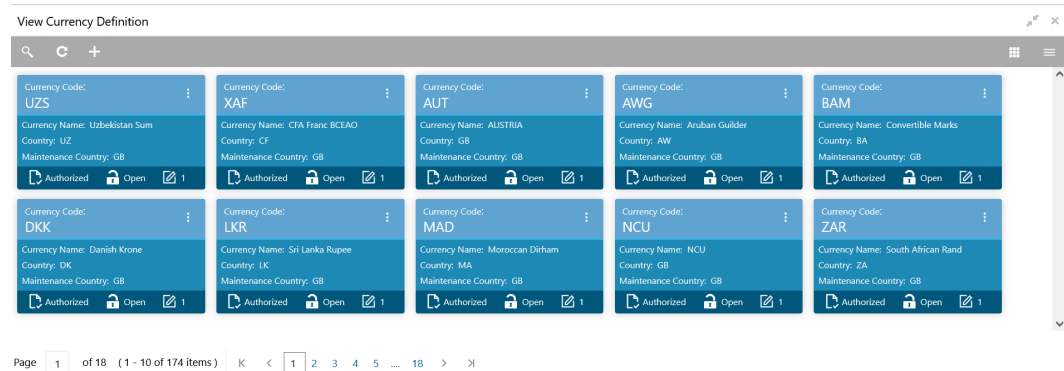
For more information on fields, refer to the field description table.

Table 1-15   View Currency Definition – Field Description

Field	Description
Currency Code	Displays the code of the currency.
Currency Name	Displays the name of the currency.
Alternate Currency Code	Displays the code of the alternate currency.
Country	Displays the country associated with the currency.
Maintenance Country	Displays the maintenance country.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.8 Currency Exchange Rate

This topic describes the information to configure a Currency Exchange Rate.

The user can maintain exchange rates for a currency pair, the rates at which the user buy and sell one currency for another. A bank determines its buy and sell rate for a currency pair by applying a spread (that is, its profit margin) to the mid-rate of the currency pair. Mid-rate is the basic rate at which a currency pair is exchanged.

The spread applied for a currency pair varies with the transaction type, while the mid-rate usually remains constant. Consequently, different rates are applicable to different transaction

types. For instance dollars in currency are purchased at a certain rate, while USD traveler's checks are bought at a different rate. The user can define a rate type which you would like to associate with a transaction type. For example: CASH, TRAVCHKS, and so on.

The user can define the mid-rate, buy, and sell spread applicable to each rate type; the buy and sell exchange rates are computed by the system. Buy rates and sell rates can either be maintained by individual branches or can be input by the HO and propagated to all the branches.

If the branch for which the rate is being uploaded or maintained is the head office branch, then the rate would be copied to all those branches that have the same country code as the head office branch.

If the branch for which the rate is being uploaded or maintained is not the head office branch, but it has the same country code as the head office branch, then the rate being uploaded or maintained would be specific to the branch and would not be copied to any other branch.

If the branch for which the rate is being uploaded or maintained is not the head office branch and also does not have the same country code as the head office branch, then the rate being maintained would be copied to all the branches that has the same country code linked as the branch for which the rate is being maintained or uploaded.

This topic contains the following subtopics:

- Create Currency Exchange Rate
  This topic describes the systematic instructions to configure a currency exchange rate.

- View Currency Exchange Rate
  This topic describes the systematic instructions to view the list of configured currency exchange rates.

1.8.1 Create Currency Exchange Rate

This topic describes the systematic instructions to configure a currency exchange rate.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Exchange Rate**.

2. Under **Currency Exchange Rate**, click **Create Currency Exchange Rate**.

   The **Create Currency Exchange Rate** screen displays.

Figure 1-16   Create Currency Exchange Rate

3. Specify the fields on **Create Currency Exchange Rate** screen.

> 📝 **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-16   Create Currency Exchange Rate – Field Description

Field	Description
Branch Code	Click **Search** icon to view and select the required branch code.
Currency 1	Click **Search** icon to view and select the required currency.
Currency 2	Displays the currency 2 based on selected **Currecny1**.
Currency Rule	Specify the currency rule details.
Rate Type	Select a rate type from the drop-down list.
Buy Rate	Displays the Buy Rate for the Currency Exchange. Buy Rate is calculated based on Spread Definition maintained in the Currency Pair Maintenance screen. The effective spread is calculated using any of the following two methods: a. **Percentage**: If the **Spread Definition** is selected as **Percentage**, then the buy rate is calculated as below: Buy Rate = Mid Rate-Buy Spread% Buy Spread% = Mid Rate*Buy Spread/100 For example, 50*5/100 is 2.5 which is Buy Spread. Now Buy Rate will be 50-2.5 which is 47.5. b. **Points** If you select **Spread Definition** as **Points** then the buy rate is calculated as below: Buy Rate = Mid Rate-Buy Spread For example, if Buy Spread is 5, then Buy Rate is 50-5 = 45

Table 1-16   (Cont.) Create Currency Exchange Rate – Field Description

Field	Description
Buy Spread	Specify the buy spread details.
Mid Rate	Specify the mid-rate details.
Sale Spread	Specify the sale spread details.
Sale Rate	Displays the Sale Rate for the Currency Exchange. Sale Rate is calculated based on Spread Definition maintained in the Currency Pair Maintenance screen. The effective spread is calculated using any of the following two methods: a. **Percentage** If the **Spread Definition** is selected as **Percentage**, then the sale rate is calculated as below: Sale Rate = Mid Rate+Sale Spread% Sale Spread% = Mid Rate*Sale Spread/100 For example, 50*5/100 is 2.5 which is Sale Spread. Now Sale Rate will be 50+2.5 which is 52.5. b. **Points** If you select **Spread Definition** as **Points** then the sale rate is calculated as below: Sale Rate = Mid Rate+Sale Spread For example, if Sale Spread is 5 then Sale Rate is 50+5 = 55.
Rate Date	Select a rate date from the drop-down calendar.

4. Click **Save** to save the details.

    The currency exchange rate is successfully created and can be viewed using the View Currency Exchange Rate screen.

1.8.2 View Currency Exchange Rate

This topic describes the systematic instructions to view the list of configured currency exchange rates.

The user can configure currency exchange rate using Create Currency Exchange Rate screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Exchange Rate**.

2. Under **Currency Exchange Rate**, click **View Currency Exchange Rate**.

    The **View Currency Exchange Rate** screen displays.

Figure 1-17   View Currency Exchange Rate
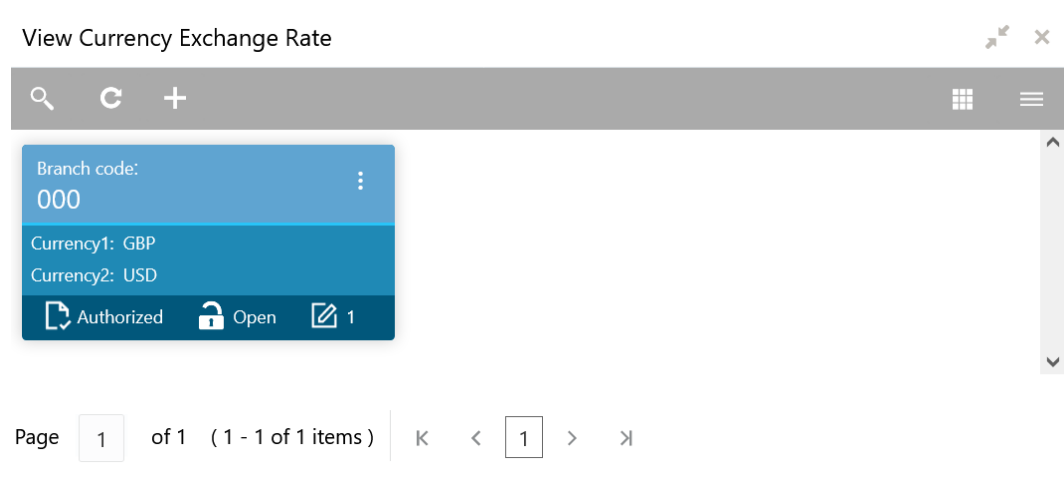
For more information on fields, refer to the field description table.

Table 1-17   View Currency Exchange Rate – Field Description

Field	Description
Branch Code	Displays the code of the branch.
Currency 1-2	Displays the currency associated with the branch code.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.9 Currency Holiday Master

This topic describes the information to configure a Currency Holiday.

The user can configure a yearly list of holidays, for the currencies, defined in the currency screen. The system uses the information maintained to check if any settlement involving a foreign currency (in the foreign Exchange, Money market, and Funds Transfer, Loans, and Deposit modules) falls on that currency holiday. If yes, the system displays a message stating and ask the user for an override.

For any schedule or contract maturing at a future date is five years. Hence, the user can input the future date, only if the calendar for that year is maintained. The currency holiday is maintained at the bank level by the Head Office.

This topic contains the following subtopics:

- Create Currency Holiday Master
  This topic describes the systematic instructions to configure a currency holiday.
- View Currency Holiday Master
  This topic describes the systematic instructions to view the list of configured currency holiday.

1.9.1 Create Currency Holiday Master

This topic describes the systematic instructions to configure a currency holiday.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Holiday Master**.

2. Under **Currency Holiday Master**, click **Create Currency Holiday Master**.

   The **Create Currency Holiday Master** screen displays.

Figure 1-18   Create Currency Holiday Master

3. Specify the fields on **Create Currency Holiday Master** screen.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-18   Create Currency Holiday Master – Field Description

Field	Description
Currency	Click **Search** icon to view and select the required currency.
Year	Specify the year details.
Weekly Holidays	By default, this is disabled. If selected, indicates the weekly holidays.

4. Select the dates using the calendar.

> ✎ **Note:**
>
> The selected dates displays in blue highlighted circle.

5. Click **Save** to save the details.

    The currency holiday master is successfully created and can be viewed using the View Currency Holiday Master screen.

1.9.2 View Currency Holiday Master

This topic describes the systematic instructions to view the list of configured currency holiday.

The user can configure currency holiday master using Create Currency Holiday Master screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Holiday Master**.

2. Under **Currency Holiday Master**, click **View Currency Holiday Master**.

    The **View Currency Holiday Master** screen displays.

Figure 1-19   View Currency Holiday Master
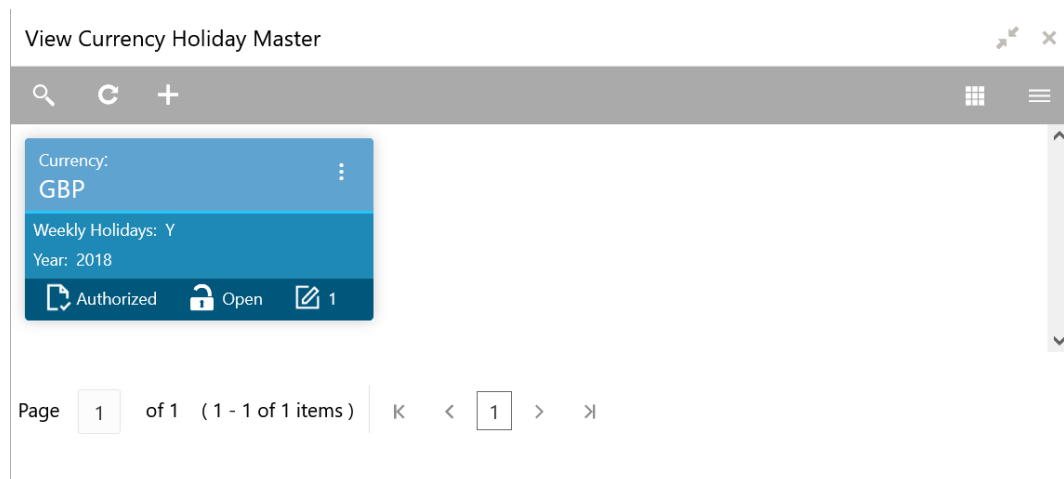
For more information on fields, refer to the field description table.

Table 1-19   View Currency Holiday Master – Field Description

Field	Description
Currency Rate Type	Displays the currency details.
Weekly Holidays	Displays the weekly holidays associated with the currency.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.10 Currency Pair Definition

This topic describes the information to define a Currency Pair.

In the foreign exchange markets, the exchange rates for some currency pairs such as the USD-GBP or USD-JPY are easily obtainable, since these are frequently traded. The exchange rates of other currencies such as the ZAR-INR (South African Rand - Indian Rupee), which is not traded very often, are determined through a third currency. The third currency is usually the US dollar since the US dollar is quoted in all trading centers.

The user can define the static attributes of currency pairs for which a regular market quote is readily available. For other pairs, which do not have a regular market quote, you need to specify the third currency through which the system should compute the exchange rate. The currency pair is maintained at the bank level by the Head Office branch.

This topic contains the following subtopics:

• Create Currency Pair Definition
  This topic describes the systematic instructions to define currency pair.

• View Currency Pair Definition
  This topic describes the systematic instructions to view the list of define a currency pair.

1.10.1 Create Currency Pair Definition

This topic describes the systematic instructions to define currency pair.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Pair Definition**.

2. Under **Currency Pair Definition**, click **Create Currency Pair Definition**.

   The **Create Currency Pair Definition** screen displays.

Figure 1-20   Create Currency Pair Definition

3. Specify the fields on **Create Currency Pair Definition** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-20   Create Currency Pair Definition – Field Description

Field	Description
Currency 1-2	Click **Search** icon to view and select the required currency. A currency pair (specified as currency 1 and currency 2, in the currency pair) represents the two currencies for which the user need to maintain exchange rates.
	To specify the pair, choose from the list provided against Currency 1. Select the pair for which you want to maintain parameters. The pair must be selected according to the quotation method followed by the market, which can be direct or indirect. Exchange rates can be defined for currency 1 against currency 2 or currency 2 against currency 1.
Maintenance Country	Click **Search** icon to view and select the required maintenance country.
Check through Currency	By default, this is disabled. If selected, it indicates a check through currency.
Through Currency	Click **Search** icon to view and select the required through currency for which the exchange rate between the currencies must be calculated.
Number of Units	Select one of the number of units. The available options are below: • **One** • **Hundred** • **Thousand**
Points Multiplier	Specify the points multiplier.

Table 1-20   (Cont.) Create Currency Pair Definition – Field Description

Field	Description
Quotation	Select one of the required quotation: • **Direct**: The exchange rate for the currency pair is quoted as follows: Buy rate = mid rate - buy spread Sell rate = mid rate + sell spread Ccy 1 = Rate x Ccy 2 • **Indirect**: The exchange rate for the currency pair is quoted as follows: Buy rate = mid rate + buy spread Sell rate = mid rate - sell spread Ccy 2 = Rate x Ccy 1
Spread Definition	Select the required spread definition. The effective spread can be calculated using any of the following two methods: • **Percentage**: Spread/100 x mid rate • **Points**: Spread x points multiplier The method of **Spread Definition** that user specify applies to two instances: • While maintaining exchange rates for the currency pair. • While maintaining customer spread for the currency pair.

4. Click **Save** to save the details.

   The currency pair definition is successfully created and can be viewed using the View Currency Pair Definition screen.

1.10.2 View Currency Pair Definition

This topic describes the systematic instructions to view the list of define a currency pair.

The user can configure currency pair definition using Create Currency Pair Definition screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Pair Definition**.

2. Under **Currency Pair Definition**, click **View Currency Pair Definition**.

   The **View Currency Pair Definition** screen displays.

Figure 1-21   View Currency Pair Definition
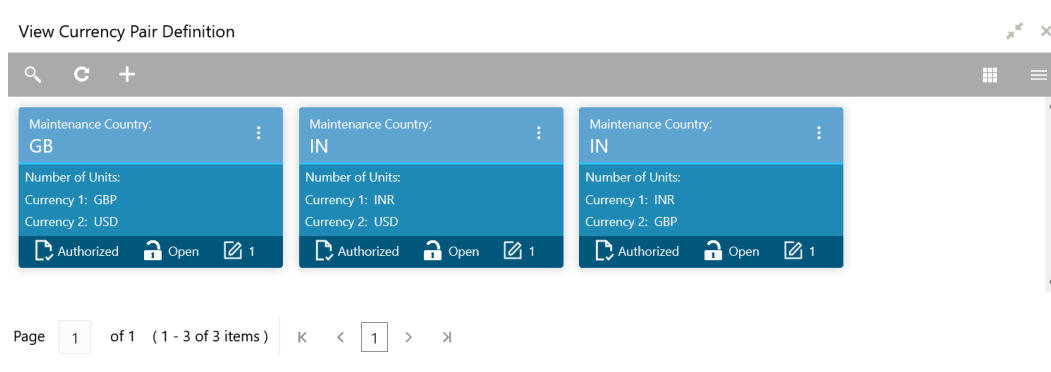
For more information on fields, refer to the field description table.

Table 1-21   View Currency Pair Definition – Field Description

Field	Description
Maintenance Country	Displays the maintenance country details.
Number of Units	Displays the number of units.
Currency 1-2	Displays the currency associated with the country.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.11 Currency Rate Type

This topic describes the information to configure a Currency Rate.

This topic contains the following subtopics:

- Create Currency Rate Type
  This topic describes the systematic instructions to configure currency rate type.

- View Currency Rate Type
  This topic describes the systematic instructions to view the list of configured currency rate type.

1.11.1 Create Currency Rate Type

This topic describes the systematic instructions to configure currency rate type.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Rate Type**.

2. Under **Currency Rate Type**, click **Create Currency Rate Type**.

   The **Create Currency Rate Type** screen displays.

   Figure 1-22   Create Currency Rate Type

3. Specify the fields on **Create Currency Rate Type** screen.

   > ✎ **Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

   Table 1-22   Create Currency Rate Type – Field Description

Field	Description
Currency Rate Type	Specify the currency rate type.
Currency Rate Type Description	Specify additional information about the currency rate type.

4. Click **Save** to save the details.

   The currency rate type is successfully created and can be viewed using the View Currency Rate Type screen.

1.11.2 View Currency Rate Type

This topic describes the systematic instructions to view the list of configured currency rate type.

The user can configure currency rate type using Create Currency Rate Type screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Currency Rate Type**.

2. Under **Currency Rate Type**, click **View Currency Rate Type**.

The **View Currency Rate Type** screen displays.

Figure 1-23   View Currency Rate Type

View Currency Rate Type

Currency Rate Type:
STANDARD
Description: Standard Rate Types
Authorized   Open   1

Page 1 of 1   (1 - 1 of 1 items) |<   <   1   >   >|

For more information on fields, refer to the field description table.

Table 1-23   View Currency Rate Type – Field Description

Field	Description
Currency Rate Type	Displays the currency rate type.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.12 Customer Access Group

This topic describes the information to configure the customer access group.

This topic contains the following subtopics:

- Create Customer Access Group
  This topic describes the systematic instructions to configure a customer access group.

- View Customer Access Group
  This topic describes the systematic instructions to view the list of configured customer access group.

1.12.1 Create Customer Access Group

This topic describes the systematic instructions to configure a customer access group.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Customer Access Group**.

2. Under **Customer Access Group**, click **Create Customer Access Group**.

   The **Create Customer Access Group** screen displays.

   Figure 1-24   Create Customer Access Group

3. Specify the fields on **Create Customer Access Group** screen.

   > **✎ Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

   Table 1-24   Create Customer Access Group – Field Description

Field	Description
Access Code	Specify the access group.
Access Code Description	Specify the additional information about the access group.

4. Click **Save** to save the details.

   The customer access group is successfully created and can be viewed using the **View Customer Access Group** screen.

> ✎ **Note:**
>
> Customer Access Group can be linked at the user level to restrict unauthorized access to Customer details. Refer **Oracle Banking Security Management System User Guide** for more details.

1.12.2 View Customer Access Group

This topic describes the systematic instructions to view the list of configured customer access group.

The user can configure customer access group using **Create Customer Access Group** screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Customer Access Group**.

2. Under **Customer Access Group**, click **View Customer Access Group**.

   The **View Customer Access Group** screen displays.

Figure 1-25   View Customer Access Group
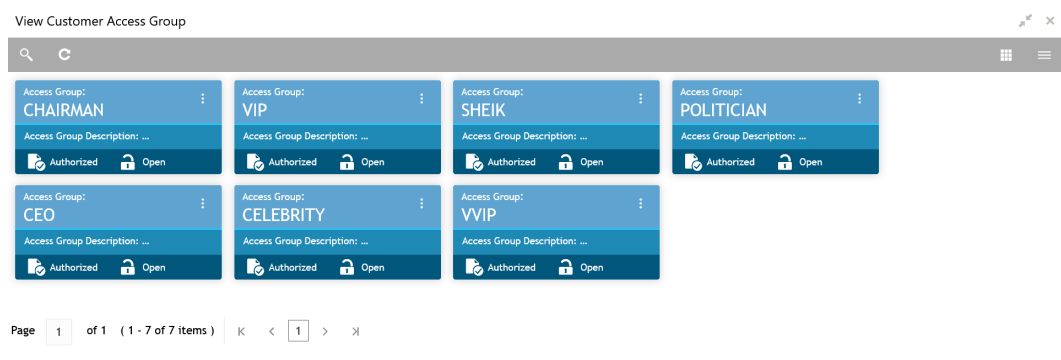
For more information on fields, refer to the field description table.

Table 1-25   View Customer Access Group – Field Description

Field	Description
Access Group	Displays the access group.
Access Group Description	Displays the additional information about the customer access group.
Authorization Status	Displays the authorization status of the access group. The options are: • **Authorized** • **Rejected** • **Unauthorized**

Table 1-25   (Cont.) View Customer Access Group – Field Description

Field	Description
Record Status	Displays the record status of the access group. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.13 Customer Category

This topic describes the information to configure a Customer Category

This topic contains the following subtopics:

- Create Customer Category
  This topic describes the systematic instructions to configure a customer category.

- View Customer Category
  This topic describes the systematic instructions to view the list of configured customer category.

1.13.1 Create Customer Category

This topic describes the systematic instructions to configure a customer category.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Customer Category**.

2. Under **Customer Category**, click **Create Customer Category**.

   The **Create Customer Category** screen displays.

   Figure 1-26   Create Customer Category

3. Specify the fields on **Create Customer Category** screen.

> **✏ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-26   Create Customer Category – Field Description

Field	Description
Customer Category	Specify the customer category.
Customer Category Description	Specify the additional information about the customer category.
Populate Changes	By default, this is disabled. If selected, displays the changes.

4. Click **Save** to save the details.

   The customer category is successfully created and can be viewed using the View Customer Category screen.

1.13.2 View Customer Category

This topic describes the systematic instructions to view the list of configured customer category.

The user can configure customer category using Create Customer Category screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Customer Category**.

2. Under **Customer Category**, click **View Customer Category**.

   The **View Customer Category** screen displays.

Figure 1-27   View Customer Category
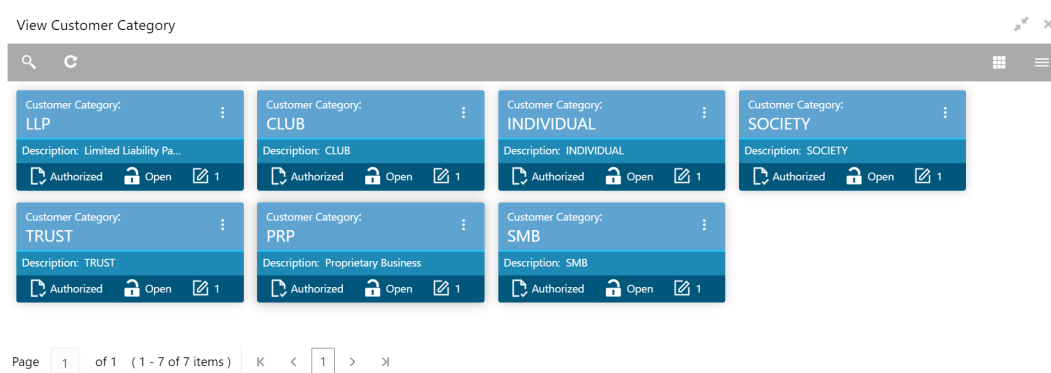
For more information on fields, refer to the field description table.

Table 1-27   View Customer Category – Field Description

Field	Description
Customer Category	Displays the customer category.
Authorization Status	Displays the authorization status of the report. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the record status of the report. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.14 ECA System

This topic describes the information to configure ECA system.

This topic contains the following subtopics:

- Create ECA System
  This topic describes the systematic instructions to configure ECA system details.

- View ECA System
  This topic describes the systematic instructions to view the list of configured ECA system.

1.14.1 Create ECA System

This topic describes the systematic instructions to configure ECA system details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **ECA System**.

2. Under **ECA System**, click **Create ECA System**.

   The **Create ECA System** screen displays.

Figure 1-28   Create ECA System

3. Specify the fields on **Create ECA System** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-28   Create ECA System – Field Description

Field	Description
Source System	Specify the source system.
Description	Specify the additional information about the ECA system.

4. Click **Save** to save details.

The ECA system is successfully created and can be viewed using the View ECA System screen.

1.14.2 View ECA System

This topic describes the systematic instructions to view the list of configured ECA system.

The user can configure ECA system using Create ECA System screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **ECA System**.

2. Under **ECA System**, click **View ECA System**.

The **View ECA System** screen displays.

Figure 1-29   View ECA System
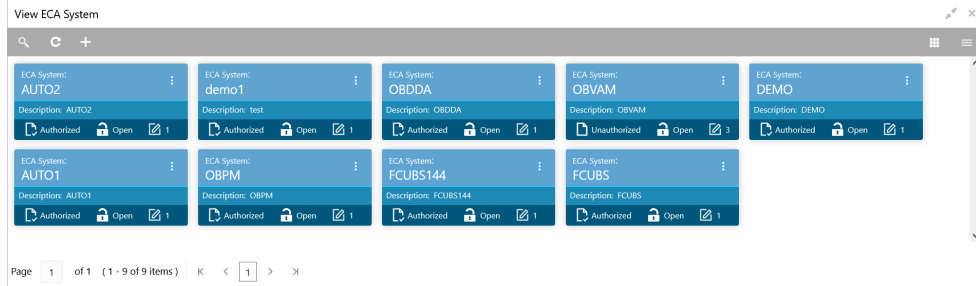
For more information on fields, refer to the field description table.

Table 1-29   View ECA System – Field Description

Field	Description
ECA System	Displays the name of the ECA system.
Description	Displays any additional information of the ECA system.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.15 External Bank Parameters

This topic describes the information to configure bank level parameters.

This topic contains the following subtopics:

• Create External Bank Parameters
This topic describes the systematic instructions to configure external bank parameters.

• View External Bank Parameters
This topic describes the systematic instructions to view the list of configured external bank parameters.

1.15.1 Create External Bank Parameters

This topic describes the systematic instructions to configure external bank parameters.

The **Bank Code** is auto-created for an entity when the entity is created.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Bank Parameters**.

2. Under **External Bank Parameters**, click **Create External Bank Parameters**.

   The **Create External Bank Parameters** screen displays.

   Figure 1-30   Create External Bank Parameters

3. Specify the fields on **Create External Bank Parameters** screen.

   > **Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

   Table 1-30   Create External Bank Parameters – Field Description

Field	Description
Bank Code	Specify the code of the bank.
Bank Name	Specify the name of the bank.
Head Office Branch	Click **Search** icon to view and select the required head office branch.
Branch Description	Displays the branch description based on the selected **Head Office Branch**.
Number of Days to Forget Customer	Specify the number of days to inactive/forget the customer.

4. Click **Save** to save the details.

   The external bank parameters is successfully created and can be viewed using the View External Bank Parameters screen.

1.15.2 View External Bank Parameters

This topic describes the systematic instructions to view the list of configured external bank parameters.

The user can configure external bank parameters using Create External Bank Parameters screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Bank Parameters**.

2. Under **External Bank Parameters**, click **View External Bank Parameters**.

    The **View External Bank Parameters** screen displays.

Figure 1-31   View External Bank Parameters

For more information on fields, refer to the field description table.

Table 1-31   View External Bank Parameters – Field Description

Field	Description
Head Office Branch	Displays the head office branch details.
Maker	Displays the name of the user who has configured the bank details.
Once Authorized	Indicates if the record is authorized once or not.
Bank Code	Displays the code of the bank.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.16 External Branch Parameters

This topics describes the information to configure branch level parameters.

This topic contains the following subtopics:

- **Create External Branch Parameters**
  This topic describes the systematic instructions to configure the external branch parameters.

- **View External Branch Parameters**
  This topic describes the systematic instructions to view the list of configured external bank parameters.

1.16.1 Create External Branch Parameters

This topic describes the systematic instructions to configure the external branch parameters.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Branch Parameters**.

2. Under **External Branch Parameters**, click **Create External Branch Parameters**.

   The **Create External Branch Parameters** screen displays.

Figure 1-32   Create External Branch Parameters

3. Specify the fields on **Create External Branch Parameters** screen.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-32   Create External Branch Parameters – Field Description

Field	Description
Branch Code	Specify a branch code.
Branch Name	Specify a name for the branch.
Local Currency	Click **Search** icon to view and select the required local currency.
Source System	Click **Search** icon to view and select the required source system.
Source Branch Code	Specify a source branch code.
Address Line 1-3	Specify the address details.
Host Code	Click **Search** and select the required host code.
Country Code	Displays the country code based on the selected **Host Code**.
Host Name	Specify the name for the host.
Walk-in Customer	Click **Search** icon to view and select the required walk-in customer.
Weekly Holiday 1-2	Select a weekly holiday from the drop-down list. > **✎ Note:** > There are two days of weekly holiday depending on the geographical zone.
Auto Authorization	By default, it is disabled. If selected, the record is automatically authorized.
Report DSN	Specify the details of the report DSN.
DSN Name	Specify the DSN name.
SWIFT Address	Search and select the required SWIFT address.
Default BIC	If selected, indicates the selected SWIFT address as the default BIC.

4. Click **Save** to save the details.

    The external branch parameters is successfully created and can be viewed using the View External Branch Parameters screen.

1.16.2 View External Branch Parameters

This topic describes the systematic instructions to view the list of configured external bank parameters.

The user can configure external branch parameters using Create External Branch Parameters screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Branch Parameters**.

2. Under **External Branch Parameters**, click **View External Branch Parameters**.

   The **View External Branch Parameters** screen displays.

Figure 1-33   View External Branch Parameters
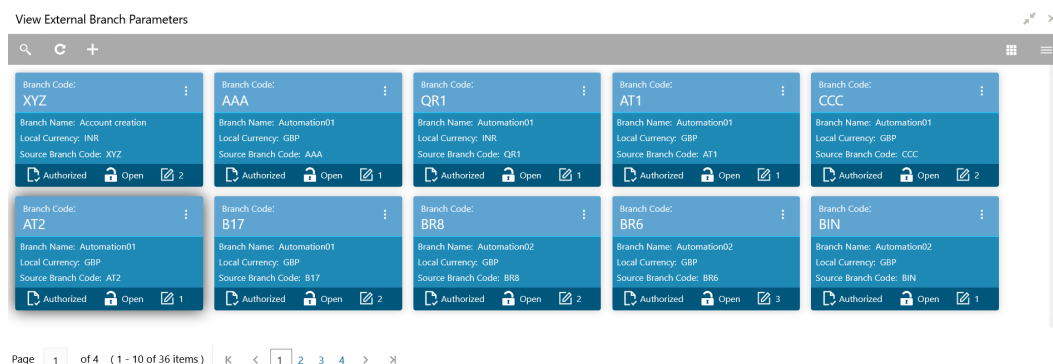
For more information on fields, refer to the field description table.

Table 1-33   View External Branch Parameters – Field Description

Field	Description
Branch Code	Displays the code of the bank.
Branch Name	Displays the name of the bank.
Local Currency	Displays the local currency details.
Source Branch Code	Displays the code of the source branch.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

> **Note:**
>
> The Branch Parameters for the Head Office (HO) Branch of the entity gets auto-created when the entity is defined in the Multi-Entity Maintenance. Further changes/configuration of the HO Branch can be performed by modifying the record for the HO Branch's Parameters.

1.17 External Chart Account

This topic describes the information to configure an external chart.

This topic contains the following subtopics:

- Create External Chart Account
  This topic describes the systematic instructions to configure external chart accounts.
- View External Chart Account
  This topic describes the systematic instructions to view the list of configured external chart accounts.

1.17.1 Create External Chart Account

This topic describes the systematic instructions to configure external chart accounts.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Chart Account**.

2. Under **External Chart Account**, click **Create External Chart Account**.

   The **Create External Chart Account** screen displays.

Figure 1-34   Create External Chart Account

3. Specify the fields on **Create External Chart Account** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-34   Create External Chart Account – Field Description

Field	Description
General Ledger Code	Specify the general ledger code.
General Ledger Description	Specify the additional information about the general ledger.
Source System	Click **Search** icon to view and select the required source system.
Source System GL Code	Specify the source system GL code.
Category	Select the category from the drop-down list.
Blocked	By default, this is disabled. If selected, indicates the external chart account is blocked.

4. Click **Save** to save the details.

    The external chart account is successfully created and can be viewed using the View External Chart Account screen.

1.17.2 View External Chart Account

This topic describes the systematic instructions to view the list of configured external chart accounts.

The user can configure external chart account using Create External Chart Account screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Chart Account**.

2. Under **External Chart Account**, click **View External Chart Account**.

    The **View External Chart Account** screen displays.

Figure 1-35   View External Chart Account
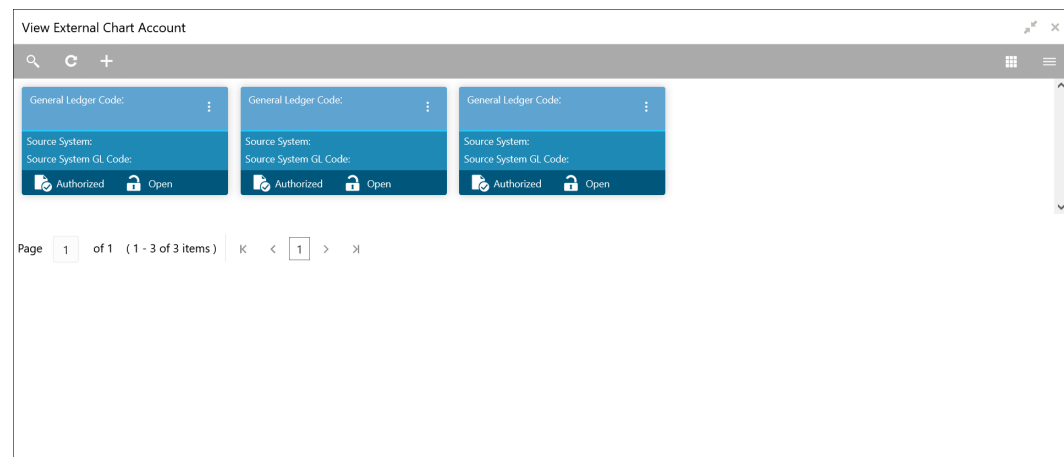
For more information on fields, refer to the field description table.

Table 1-35   View External Chart Account – Field Description

Field	Description
General Ledger Code	Displays the code of the general ledger.
Source System	Displays the source system details.
Source System GL Code	Displays the GL code of the source system.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.18 External Customer

This topic describes the information to configure the external customer details.

This topic contains the following subtopics:

- Create External Customer
  This topic describes the systematic instructions to configure the external customer details.

- View External Customer
  This topic describes the systematic instructions to view the list of configured external customer details.

1.18.1 Create External Customer

This topic describes the systematic instructions to configure the external customer details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Customer**.

2. Under **External Customer**, click **Create External Customer**.

   The **Create External Customer** screen displays.

Figure 1-36   Create External Customer

3. Specify the fields on **Create External Customer** screen.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-36   Create External Customer – Field Description

Field	Description
Customer Number	Specify the number for the customer.
Customer Name	Specify the name for the customer.
Short Name	Specify the short name for the customer.
Customer Type	Select one of the options: • **Individual**: If selected, the customer is an individual customer. • **Corporate**: If selected, the customer is a corporate customer. • **Bank**: If selected, the customer is a bank employee.
Source Customer ID	Specify the source customer ID.
Source System	Click **Search** icon to view and select the required source system.
Customer Category	Click **Search** icon to view and select the required customer category.
Relationship Manager ID	Specify the relationship manager ID.
Access Group	Search and select the required access group.
Address Line 1-4	Specify the customer address details.
Country	Click **Search** icon to view and select the required country.
Postal Code	Specify the postal code.
Deceased	By default, this is disabled. If selected, indicates the customer is deceased.

Table 1-36　(Cont.) Create External Customer – Field Description

Field	Description
Frozen	By default, this is disabled. If selected, indicates the customer account is frozen.
Whereabouts Unknown	By default, this is disabled. If selected, indicates the customers whereabouts are unknown.
Sanction Check Required	By default, this is disabled. If selected, indicates the sanction check is required.
Walk-in Customer	By default, this is disabled. If selected, indicates a walk-in customer.
Staff	By default, this is disabled. If selected, indicates a staff customer.
Language	Click **Search** icon to view and select the required language.
Nationality	Click **Search** icon to view and select the required nationality.

4. Click **Save** to save the details.

   The external customer is successfully created and can be viewed using the View External Customer screen. In addition, the external customers can be directly replicated from the host system using service API.

1.18.2 View External Customer

This topic describes the systematic instructions to view the list of configured external customer details.

The user can configure external customer using Create External Customer screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Customer**.

2. Under **External Customer**, click **View External Customer**.

   The **View External Customer** screen displays.

Figure 1-37　View External Customer
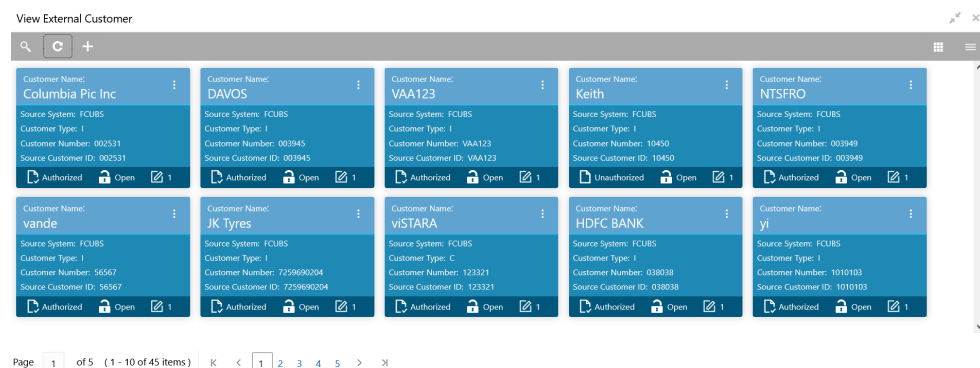
For more information on fields, refer to the field description table.

Table 1-37   View External Customer – Field Description

Field	Description
Customer Name	Displays the name of the customer.
Source System	Displays the source system details.
Customer Type	Displays the type of the customer.
Customer Number	Displays the customer number associated with the customer name.
Source Customer ID	Displays the source of the customer ID associated with the customer name.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.19 External Customer Account

This topic helps to configure the external customer account details.

This topic contains the following subtopics:

- Create External Customer Account
  This topic describes the systematic instructions to configure external customer account details.

- View External Customer Account
  This topic describes the systematic instructions to view the list of configured external customer accounts.
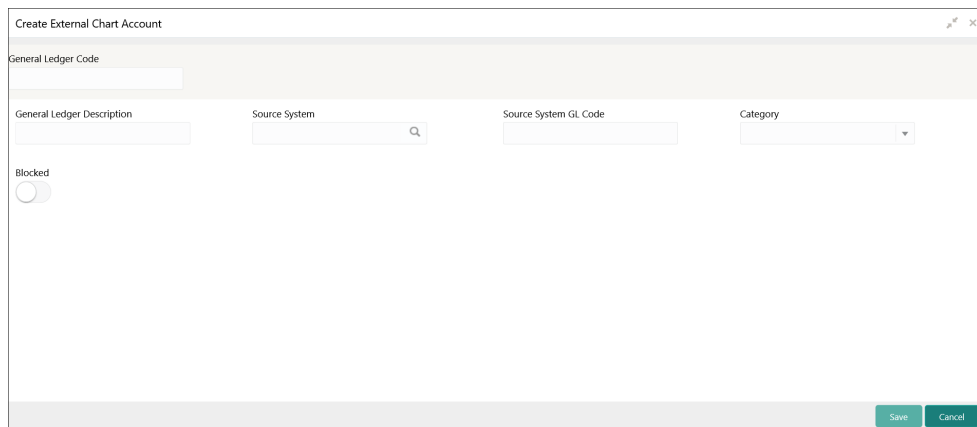
1.19.1 Create External Customer Account

This topic describes the systematic instructions to configure external customer account details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Customer Account**.

2. Under **External Customer Account**, click **Create External Customer Account**.

   The **Create External Customer Account** screen displays.

Figure 1-38   Create External Customer Account

3. Specify the fields on **Create External Customer Account** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-38   Create External Customer Account – Field Description

Field	Description
Customer Account Number	Specify the customer account number.
Account Name	Specify the name for an account.
Customer Number	Click **Search** icon to view and select the required customer number.
Customer Name	Displays the customer name based on the selected **Customer Number** .
Account Class	Select the account class from the drop-down list.
Account Currency	Click **Search** icon to view and select the required account currency.
Source Account Branch	Click **Search** icon to view and select the required source account branch.
Source Customer Account	Displays the source customer account based on the selected **Source Account Branch**.
Account IBAN	Specify the account IBAN details.
Address Line 1-4	Specify the address details.
Country	Click **Search** icon to view and select the required country.

Table 1-38   (Cont.) Create External Customer Account – Field Description

Field	Description
No Credit	By default, this is disabled. If selected, indicates the account does not have any credit facility.
No Debit	By default, this is disabled. If selected, indicates the account does not have any debit facility.
Blocked	By default, this is disabled. If selected, indicates the account status is blocked.
Frozen	By default, this is disabled. If selected, indicates the account status is frozen.
Dormant	By default, this is disabled. If selected, indicates the account status is dormant.
External Credit Approval Required	By default, this is disabled. If selected, indicates ECA check is required for the external customer account.
External Credit Approval System	Click **Search** icon to view and select the required external credit approval system.
Host Code	Click **Search** icon to view and select the required host code.
Account Open Date	Select an effective date for the account from the drop-down calendar.

4. Click **Save** to save the details.

The external customer account is successfully created and can be viewed using the View External Customer Account screen. In addition, the external customers can be directly replicated from the host system using service API.

1.19.2 View External Customer Account

This topic describes the systematic instructions to view the list of configured external customer accounts.

The user can configure external customer account using Create External Customer Account screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Customer Account**.

2. Under **External Customer Account**, click **View External Customer Account**.

The **View External Customer Account** screen displays.

Figure 1-39   View External Customer Account
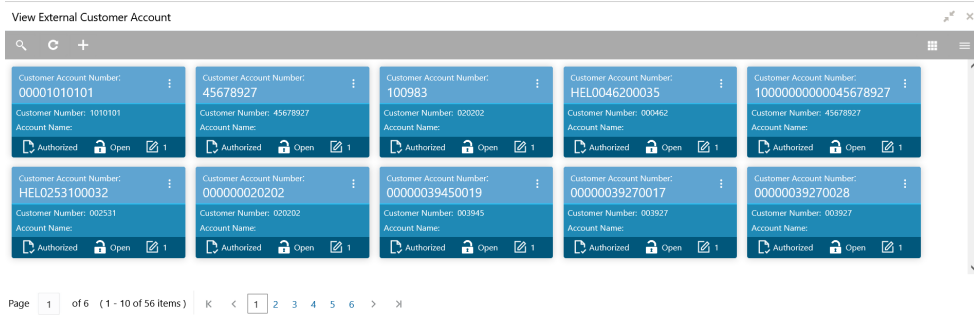
For more information on fields, refer to the field description table.

Table 1-39   View External Customer Account – Field Description

Field	Description
Customer Account Number	Displays the customer account number associated with the account name.
Customer Number	Displays the customer number associated with the account name.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.20 External Customer Account Structured Address

This topic describes the information to configure the external customer account structured address details.

This topic contains the following subtopics:

- Create External Customer Account Structured Address
  This topic describes the systematic instructions to configure external customer account structured address.

- View External Customer Account Structured Address
  This topic describes the systematic instructions to view the list of configured external customer account structured addresses.

1.20.1 Create External Customer Account Structured Address

This topic describes the systematic instructions to configure external customer account structured address.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Customer Account Structured Address**.

2. Under **External Customer Account Structured Address**, click **Create External Customer Account Structured Address**.

   The **Create External Customer Account Structured Address** screen displays.

Figure 1-40   Create External Customer Account Structured Address

3. Specify the fields on **Create External Customer Account Structured Address** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-40   Create External Customer Account Structured Address – Field Description

Field	Description
Customer Account	Click **Search** icon to view and select the required customer account.
Account Name	Displays the Account Name, Based on the **Customer Account** is selected.
Department	Specify the department.
Sub Department	Search and select the required country.
Street Name	Specify the street name.

Table 1-40   (Cont.) Create External Customer Account Structured Address – Field Description

Field	Description
Building Number	Specify the building number.
Building Name	Specify the building name.
Floor	Specify the floor.
Post Box	Specify the post box details.
Room	Specify the room number.
Post Code	Specify the post code.
Town Name	Specify the town name.
Town Location Name	Specify the town location name.
District Name	Specify the district name.
Country Sub Division	Specify the country sub division.
Country	Click **Search** icon to view and select the required country name.

4. Click **Save** to save the details.

   The external customer account structured address is successfully created and can be viewed using the View External Customer Account Structured Address screen.

1.20.2 View External Customer Account Structured Address

This topic describes the systematic instructions to view the list of configured external customer account structured addresses.

The user can configure external customer account structured address account using Create External Customer Account Structured Address screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Customer Account Structured Address**.

2. Under **External Customer Account Structured Address**, click **View External Customer Account Structured Address**.

   The **View External Customer Account Structured Address** screen displays.

Figure 1-41   View External Customer Account Structured Address
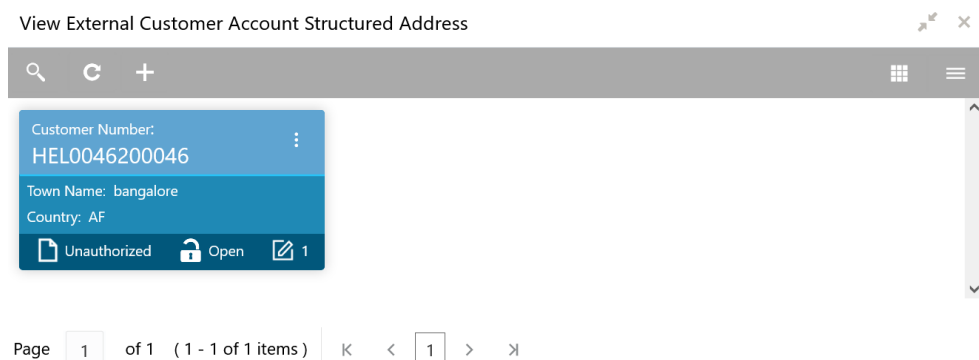
For more information on fields, refer to the field description table.

Table 1-41   View External Customer Account Structured Address – Field Description

Field	Description
Customer Number	Displays the customer number.
Town Name	Displays the town name of the customer.
Country	Displays the country of the customer.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.21 External Virtual Account Structured Address

This topic describes the information to configure the external virtual account structured address details.

This topic contains the following subtopics:

• View External Virtual Account Structured Address
  This topic describes the systematic instructions to view the list of configured virtual account structured addresses.

1.21.1 View External Virtual Account Structured Address

This topic describes the systematic instructions to view the list of configured virtual account structured addresses.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **External Virtual Account Structured Address**.

2. Under **External Virtual Account Structured Address**, click **View External Virtual Account Structured Address**.

The **View External Virtual Account Structured Address** screen displays.

Figure 1-42   View External Virtual Account Structured Address
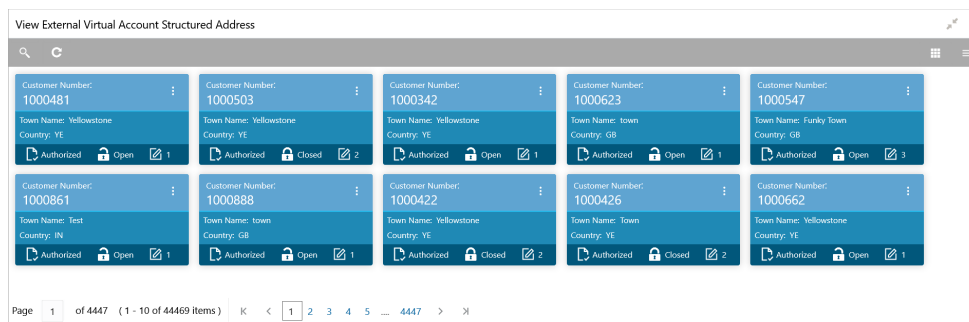
For more information on fields, refer to the field description table.

Table 1-42   View External Virtual Account Structured Address – Field Description

Field	Description
Customer Number	Displays the customer number.
Town Name	Displays the town name of the customer.
Country	Displays the country name of the customer.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

The user can click on the specific tile to view the structured address details.

1.22 Forget Process

This topic describes the information to configure a customer detail who wants to be forgotten using forget process.

The Personally identifiable information (PII) is any data that could potentially identify a specific individual. PII data access can be controlled based on the user role and you can configure details of a customer who wants to be forgotten if the customer withdraws/does not avail the virtual account facility.

This topic contains the following subtopics:

• Forget Customer
This topic describes the systematic instructions to configure a customer to be forgotten.

- View Forgotten Customer
  This topic describes the systematic instructions to view the list of the customers to be forgetten.

1.22.1 Forget Customer

This topic describes the systematic instructions to configure a customer to be forgotten.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Forget Process**.

2. Under **Forget Process**, click **Forget Customer**.

   The **Forget Customer** screen displays.

Figure 1-43   Forget Customer

3. Specify the fields on **Forget Customer** screen.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-43   Forget Customer – Field Description

Field	Description
Forget Customer Process ID	Specify a forget customer process ID.
Forget Customer Process Type	Select one of the options: • **Customer Initiated**: If selected, indicates the customer has initiated the process. • **Bank Initiated**: If selected, indicates the bank has initiated the process.

Table 1-43   (Cont.) Forget Customer – Field Description

Field	Description
Customer Number	Click **Search** icon to view and select the customer number.
Process Status	Displays the process status.

4. Click **+** to specify the customer/bank details.

5. Click **Save** to save the details.

   The forget customer is successfully done and can be viewed using the View Forgotten Customer screen.

1.22.2 View Forgotten Customer

This topic describes the systematic instructions to view the list of the customers to be forgetten.

The user can configure a customer detail who wants to be forgotten using the Forget Customer.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Forget Process**.

2. Under **Forget Process**, click **View Forgotten Customer**.

   The **View Forgotten Customer** screen displays.

Figure 1-44   View Forgotten Customer
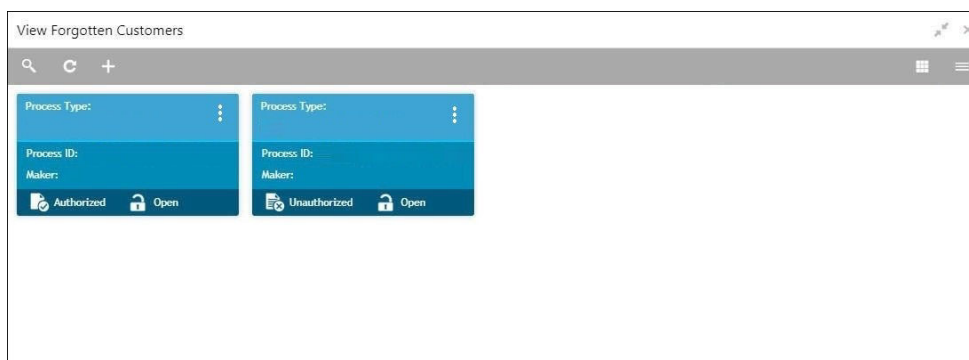
For more information on fields, refer to the field description table.

Table 1-44   View Forgotten Customer – Field Description

Field	Description
Process Type	Indicates if the process is initiated by the customer/bank
Process ID	Displays the forgotten customer process ID.
Maker	Displays the name of the user who has configured the forgotten customer details.

Table 1-44   (Cont.) View Forgotten Customer – Field Description

Field	Description
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.23 Host Code

This topic describes the information to configure the host code.

The user can group branches in the same zone or region under a host for specific processing. The user can have multiple hosts depending on processing requirements.

This topic contains the following subtopics:

• Create Host Code
  This topic describes the systematic instructions to configure host code.

• View Host Code
  This topic describes the systematic instructions to view the list of configured host codes.

1.23.1 Create Host Code

This topic describes the systematic instructions to configure host code.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Host Code**.

2. Under **Host Code**, click **Create Host Code**.

   The **Create Host Code** screen displays.

Figure 1-45   Create Host Code

3. Specify the fields on **Create Host Code** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-45   Create Host Code – Field Description

Field	Description
Host Code	Specify the host code details.
Description	Specify the additional information about the host code.
Country Code	Click **Search** icon to view and select the required country code.
Processing Time Zone	Specify the processing time zone details.
Default Branch Code	Click **Search** icon to view and select the required default branch code.

4. Click **Save** to save the details.

The host code is successfully created and can be viewed using the View Host Code screen.

1.23.2 View Host Code

This topic describes the systematic instructions to view the list of configured host codes.

The user can configure host code using Create Host Code screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Host Code**.

2. Under **Host Code**, click **View Host Code**.

The **View Host Code** screen displays.

Figure 1-46   View Host Code
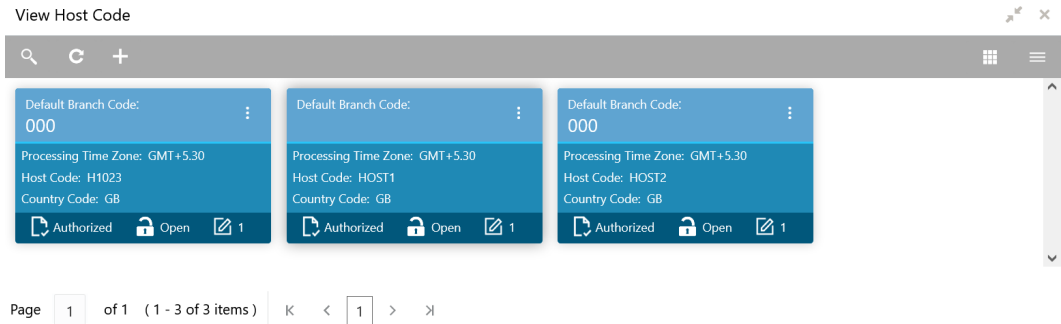
For more information on fields, refer to the field description table.

Table 1-46   View Host Code – Field Description

Field	Description
Default Branch Code	Displays the default branch code associated with the host code.
Processing Time Zone	Displays the processing time zone.
Host Code	Displays the host code details.
Country Code	Displays the country code details.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.24 Language Code

This topic describes the information to configure a language code.

This topic contains the following subtopics:

*   Create Language Code
    This topic describes the systematic instructions to configure a language code.

*   View Language Code
    This topic describes the systematic instructions to view the list of configured host codes.

1.24.1 Create Language Code

This topic describes the systematic instructions to configure a language code.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Language Code**.

2. Under **Language Code**, click **Create Language Code**.

   The **Create Language Code** screen displays.

Figure 1-47   Create Language Code

3. Specify the fields on **Create Language Code** screen.

> ✏️ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-47   Create Language Code – Field Description

Field	Description
Language Code	Specify the code for the language.
Language Name	Specify the name for the language associated with the language code.
Display Direction	Specify the display direction.
Language ISO Code	Specify the language ISO code.

4. Click **Save** to save the details.

   The language code is successfully created and can be viewed using the View Language Code screen.

1.24.2 View Language Code

This topic describes the systematic instructions to view the list of configured host codes.

The user can configure language code using Create Language Code screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Language Code**.

2. Under **Language Code**, click **View Language Code**.

   The **View Language Code** screen displays.

Figure 1-48   View Language Code
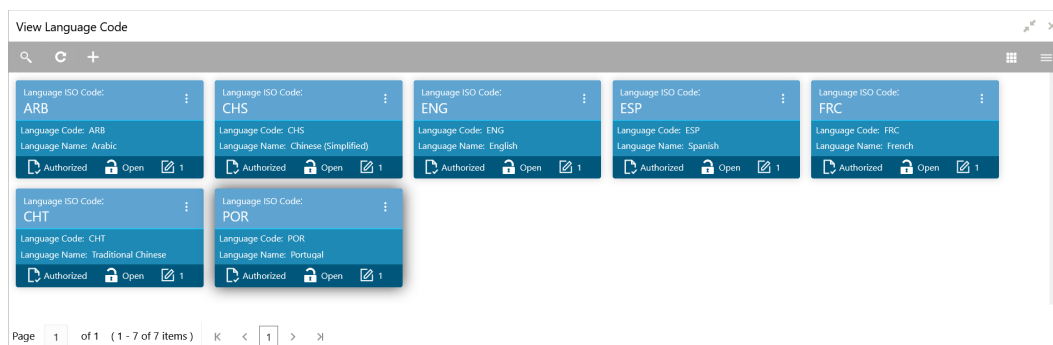
For more information on fields, refer to the field description table.

Table 1-48   View Language Code – Field Description

Field	Description
Language ISO Code	Displays the default branch code associated with the host code.
Language Code	Displays the processing time zone.
Language Name	Displays the host code details.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.25 Local Holiday

This topic describes the information to configure a local holiday.

This topic contains the following subtopics:

- Create Local Holiday
  This topic describes the systematic instructions to configure local holidays.
- View Local Holiday
  This topic describes the systematic instructions to view the list of configured local holidays.

1.25.1 Create Local Holiday

This topic describes the systematic instructions to configure local holidays.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Local Holiday**.

2. Under **Local Holiday**, click **Create Local Holiday**.

   The **Create Local Holiday** screen displays.

   Figure 1-49   Create Local Holiday

3. Specify the fields on **Create Local Holiday** screen.

   > **Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

Table 1-49   Create Local Holiday – Field Description

Field	Description
Branch Code	Click **Search** icon to view and select the required branch code.
Year	Specify the year details.
Weekly Holidays	By default, this is disabled. If selected, you can define weekly holidays.
Unexpected Holidays	By default, this is disabled. If selected, you can define unexpected holidays.

4.   Select the dates using the calendar.

> **Note:**
>
> The selected dates appear in pink highlighted circle.

5.   Click **Save** to save the details.

The local holiday is successfully created and can be viewed using the View Local Holiday screen.

1.25.2 View Local Holiday

This topic describes the systematic instructions to view the list of configured local holidays.

The user can configure local holiday using Create Local Holiday screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1.   From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Local Holiday**.

2.   Under **Local Holiday**, click **View Local Holiday**.

The **View Local Holiday** screen displays.

Figure 1-50   View Local Holiday

For more information on fields, refer to the field description table.

Table 1-50   View Local Holiday – Field Description

Field	Description
Branch Code	Displays the code of the branch.
Unexpected Holiday	Indicates if the record is an unexpected holiday.
Year	Displays the year of the holiday.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.26 Media

This topic describes the information to configure the media.

This topic contains the following subtopics:

- Create Media
  This topic describes the systematic instructions to configure media.

- View Media
  This topic describes the systematic instructions to view the list of configured media.

1.26.1 Create Media

This topic describes the systematic instructions to configure media.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Media**.

2. Under **Media**, click **Create Media**.

   The **Create Media** screen displays.

Figure 1-51   Create Media

3. Specify the fields on **Create Media** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-51   Create Media – Field Description

Field	Description
Media Code	Specify a unique media code to identify while associating with an advice.
Media Description	Specify additional information about the media.
Media Number	Specify a unique number for the media type.
Message Terminator	Specify the padded characters to mark the end of an incoming messages.
Message Suffix	Specify the padding characters to mark the end of an outgoing messages.
Stop Process	By default, this option is disabled. If selected, halts the processing of incoming and outgoing messages.
Padding Required	By default, this option is disabled. If selected, pads the characters in every outgoing messages.
TW (Test Word) Required Status	By default, this option is disabled. If selected, enables the option for word testing.
Media Priority	Specify the media priority from the spin box. When a message is dispatched to the customers, the media type used for sending the messages will be the one that is on high priority.
Number of Character	Specify the number the padding characters should be repeated for the advice from the spin box.
Media Code	Specify the unique media code to identify while associating with an advice.
Compatible Media	By default, this option is disabled. If selected, indicates the media is compatible.

4. Click **+** to add media details.

5. Click **Save** to save the details.

The media is successfully created and can be viewed using the View Media screen.

1.26.2 View Media

This topic describes the systematic instructions to view the list of configured media.

The user can configure media using Create Media screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Media**.

2. Under **Media**, click **View Media**.

The **View Media** screen displays.

Figure 1-52   View Media
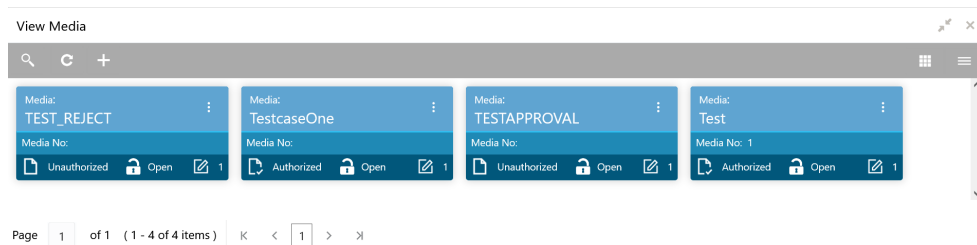
For more information on fields, refer to the field description table.

Table 1-52   View Media – Field Description

Field	Description
Media	Displays the name of the media.
Media Number	Displays the number of the media.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.27 Multi-Currency Account Linkage

This topic describes the information to link the sub-accounts to a core multi-currency account.

This topic contains the following subtopics:

- Create MCA Linkage
  This topic describes the systematic instructions to link the sub-accounts to a core multi-currency account.
- View MCA Linkage
  This topic describes the systematic instructions to view the list of configured sub-accounts to a core multi-currency account.

1.27.1 Create MCA Linkage

This topic describes the systematic instructions to link the sub-accounts to a core multi-currency account.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Multi-Currency Account Linkage**.

2. Under **Multi-Currency Account Linkage**, click **Create MCA Linkage**.

   The **Create MCA Linkage** screen displays.

Figure 1-53   Create MCA Linkage

3. Specify the fields on **Create MCA Linkage** screen.

   > **Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

Table 1-53   Create MCA Linkage – Field Description

Field	Description
Multi-Currency Account No	Click **Search** icon to view and select the multi-currency account number from the list of values.
Sub Accounts	Displays the details of the sub accounts.
Currency Code	Specify the currency code of the sub account.
Account Number	Specify the account number of the sub account.
Primary	Select **Yes**, if the sub account is **Primary**. If it is not **Primary**, select **No**.

4. Click **Save** to save the details.

   The MCA linkage is successfully created and can be viewed using the View MCA Linkage screen.

1.27.2 View MCA Linkage

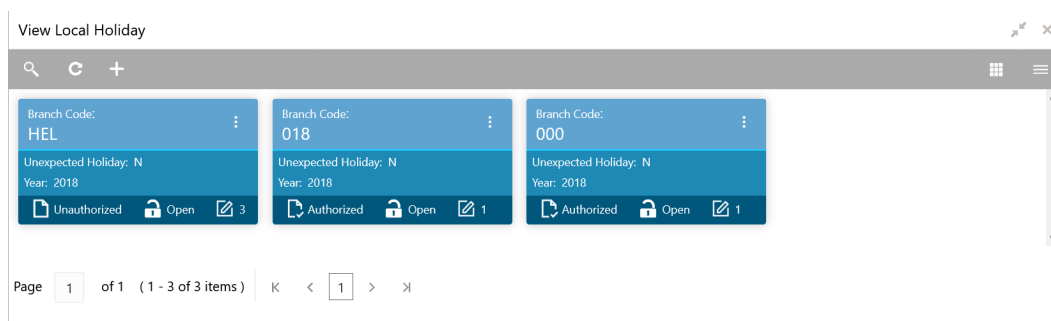This topic describes the systematic instructions to view the list of configured sub-accounts to a core multi-currency account.

The user can configure MCA linkage using Create MCA Linkage screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Multi-Currency Account Linkage**.

2. Under **Multi-Currency Account Linkage**, click **View MCA Linkage**.

   The **View MCA Linkage** screen displays.

Figure 1-54   View MCA Linkage
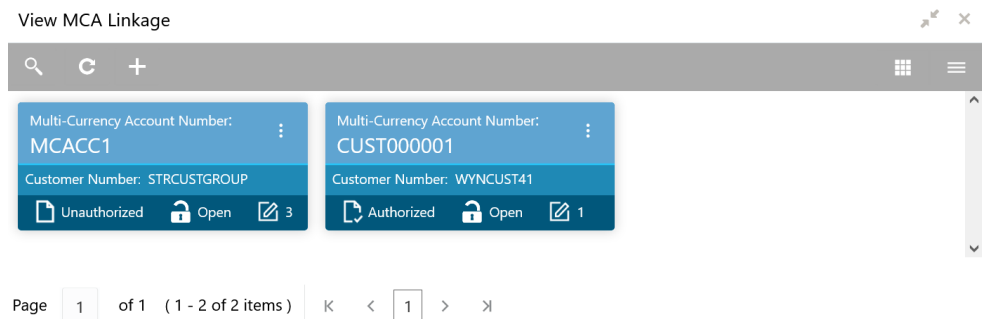
For more information on fields, refer to the field description table.

Table 1-54   View MCA Linkage – Field Description

Field	Description
Multi-Currency Account Number	Displays the multi-currency account number.

Table 1-54   (Cont.) View MCA Linkage – Field Description

Field	Description
Customer Number	Displays the customer number.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.28 Process Code

This topic describes the information to set the process code to the individual stages according to the process.

This topic contains the following subtopics:

- Process Code Maintenance
  This topic describes the systematic instructions to define the stages for a particular process.
- View Process Code
  This topic describes the systematic instructions to view the list of configured process codes.

1.28.1 Process Code Maintenance

This topic describes the systematic instructions to define the stages for a particular process.

The process code information in this screen will be used in further business processing to construct the stages.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Process Code**.

   The **Process Code** screen displays.

Figure 1-55   Process Code

2. Specify the fields on **Process Code** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-55   Process Code – Field Description

Field	Description
Process Code	Specify the code.
Process Name	Specify the process name.
Process Version	Specify the process version.
Domain	Specify the process domain.
Stage ID	Specify the unique stage ID.
Stage Description	Specify the stage description.
Seq Order	Displays the sequential order of the stage in the entire process.
Source Stage	Select it to indicate if the specific stage is the source stage of the process.
Add Row	Click **Add Row** to add a row and to capture the stage details that needs to be mapped to the process code.
Delete Row	Click **Delete Row** to delete a row with stage details.
Phase Code	Specify the phase code.
Phase Description	Specify the phase description.
Seq Order	Displays the sequential order of the phase.
Stage ID	Select the stage ID from the drop down list. Available options in the drop-down will be based on Stage ID mentioned at Process Code level.
Add Row	Click **Add Row** to add a row and to capture the phase details that needs to be mapped to the process code.
Delete Row	Click **Delete Row** to delete a row with phase details.

3. Click **Save** to save the details.

The process code is successfully created and can be viewed using the View Process Code screen.

1.28.2 View Process Code

This topic describes the systematic instructions to view the list of configured process codes.

The user can configure process code using Process Code Maintenance screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Process Code**.

2. Under **Process Code**, click **View Process Code**.

The **View Process Code** screen displays.

Figure 1-56   View Process Code
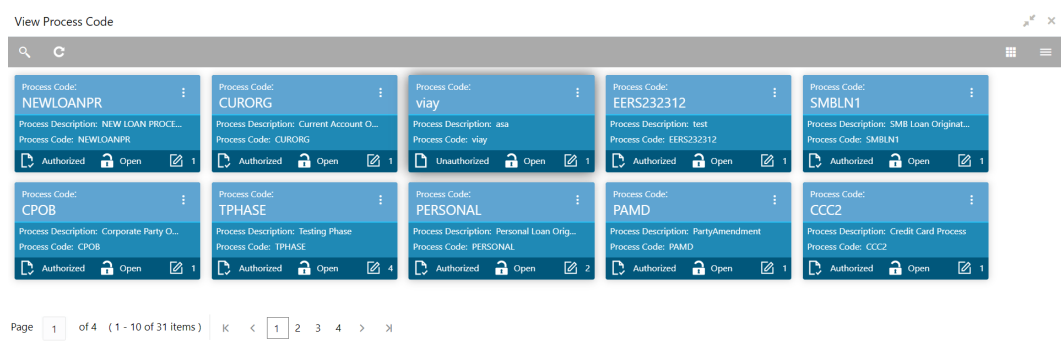
For more information on fields, refer to the field description table.

Table 1-56   View Process Code – Field Description

Field	Description
Process Code	Displays the process code.
Description	Displays the description of process code.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.29 System Dates

This topic describes the information to view the system date details.

This topic contains the following subtopics:

- View System Dates
  This topic describes the systematic instructions to view the list of configured system dates.

1.29.1 View System Dates

This topic describes the systematic instructions to view the list of configured system dates.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **System Dates**.

2. Under **System Dates**, click **View System Dates**.

   The **View System Dates** screen displays.

Figure 1-57   View System Dates
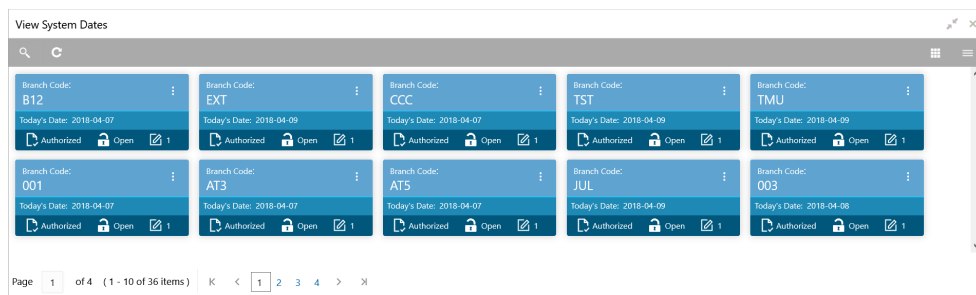
For more information on fields, refer to the field description table.

Table 1-57   View System Dates – Field Description

Field	Description
Branch Code	Displays the code of the branch.
Today's Date	Displays system current date.
Today's Date in Text	Displays the system current date in words.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**

Table 1-57   (Cont.) View System Dates – Field Description

Field	Description
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

> ✎ **Note:**
>
> When the entity is created from the Multi-Entity Maintenances, the System Dates for the Head Office (HO) Branch would be automatically created.

1.30 Transaction Code

This topic describes the information to configure the transaction code.

This topic contains the following subtopics:

- Create Transaction Code
  This topic describes the systematic instructions to configure transaction code details.

- View Transaction Code
  This topic describes the systematic instructions to view the list of configured transaction code.

1.30.1 Create Transaction Code

This topic describes the systematic instructions to configure transaction code details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Transaction Code**.

2. Under **Transaction Code**, click **Create Transaction Code**.

   The **Create Transaction Code** screen displays.

Figure 1-58   Create Transaction Code

3. Specify the fields on **Create Transaction Code** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-58   Create Transaction Code – Field Description

Field	Description
Transaction Code	Specify the transaction code details.
Description	Specify additional information about the transaction code.
Source System	Click **Search** icon to view and select the required source system.
Source Transaction Code	Specify the source transaction code details.

4. Click **Save** to save the details.

   The transaction code is successfully created and can be viewed using the View Transaction Code screen.

1.30.2 View Transaction Code

This topic describes the systematic instructions to view the list of configured transaction code.

The user can configure transaction code using Create Transaction Code screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Transaction Code**.

2. Under **Transaction Code**, click **View Transaction Code**.

   The **View Transaction Code** screen displays.

Figure 1-59   View Transaction Code
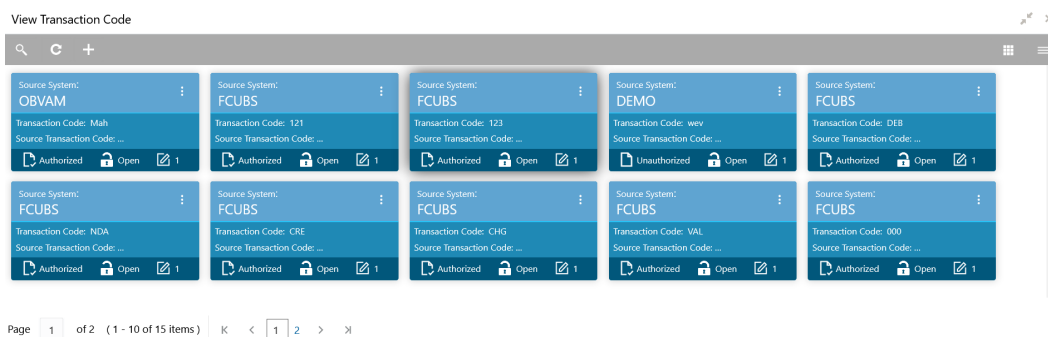
For more information on fields, refer to the field description table.

Table 1-59   View Transaction Code – Field Description

Field	Description
Source System	Displays the source system details.
Transaction Code	Displays the transaction code details.
Source Transaction Code	Displays the source transaction code associated with the transaction code.
Authorization Status	Displays the authorization status of the record. The options are: **Authorized** **Rejected** **Unauthorized**
Record Status	Displays the status of the record. The options are: **Open** **Closed**
Modification Number	Displays the number of modification performed on the record.

1.31 Upload Source

This topic describes the information to upload a source code

This topic contains the following subtopics:

- Create Upload Source
  This topic describes the systematic instructions to create upload source.

- View Upload Source
  This topic describes the systematic instructions to view the list of configured source code.

1.31.1 Create Upload Source

This topic describes the systematic instructions to create upload source.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Upload Source**.

2. Under **Upload Source**, click **Create Upload Source**.

   The **Create Upload Source** screen displays.

Figure 1-60   Create Upload Source

3. Specify the fields on **Create Upload Source** screen.

> ✎ **Note:**
>
>   The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-60   Create Upload Source – Field Description

Field	Description
Source Code	Specify the source code details.
Source Description	Specify additional information of the source code.
Base Data from Flexcube	By default, this is disabled. If selected, indicates the base data is from FLEXCUBE.
System Authorization Required	By default, this is disabled. If selected, indicates the system requires authorization.

4. Click **Save** to save the details.

   The upload source is successfully created and can be viewed using the View Upload Source screen.

1.31.2 View Upload Source

This topic describes the systematic instructions to view the list of configured source code.

The user can configure upload source using Create Upload Source screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Upload Source**.

2. Under **Upload Source**, click **View Upload Source**.

   The **View Upload Source** screen displays.

   Figure 1-61   View Upload Source
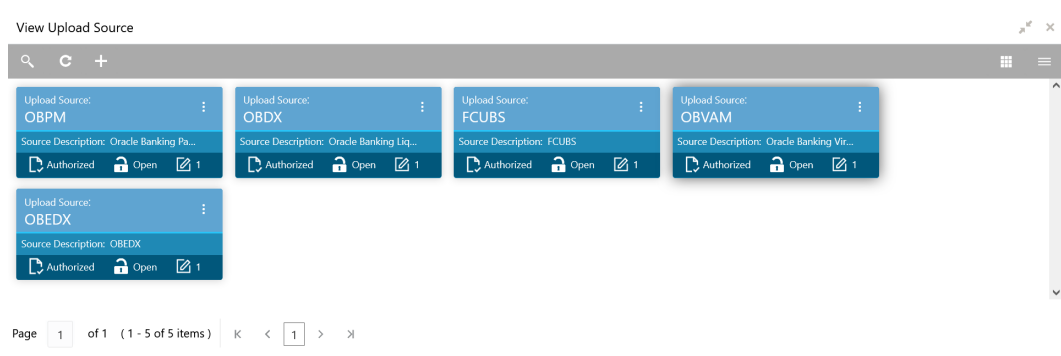
   For more information on fields, refer to the field description table.

   Table 1-61   View Upload Source – Field Description

Field	Description
Upload Source	Displays the upload source details.
Source Description	Displays information about the source code.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.32 Upload Source Preference

This topic describes the information to configure upload source preference.

This topic contains the following subtopics:

- Create Upload Source Preference
This topic describes the systematic instructions to configure upload source preference.

- View Upload Source Preference
This topic describes the systematic instructions to view the list of configured upload source preferences.

1.32.1 Create Upload Source Preference

This topic describes the systematic instructions to configure upload source preference.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Upload Source Preference**.

2. Under **Upload Source Preference**, click **Create Upload Source Preference**.

   The **Create Upload Source Preference** screen displays.

Figure 1-62   Create Upload Source Preference

3. Specify the fields on **Create Upload Source Preference** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-62   Create Upload Source Preference – Field Description

Field	Description
Source Code	Click **Search** icon to view and select the required source code.
On Error	Select an error from the drop-down list.
On Override	Select an override from the drop-down list.

Table 1-62   (Cont.) Create Upload Source Preference – Field Description

Field	Description
On Repairable Exception	Select the repairable exception from the drop-down list.
On Queue Exception	Select the queue exception from the drop-down list.
Status	Select a status from the drop-down list.
Purge Days	Specify the purging days if the user wants to maintain any days to be purged while processing interface.
Allow Deferred Processing	By default, this is disabled. If selected, defers process the upload source preference.
Allow EOD with Deferred	By default, this is disabled. If selected, processes the EOD with deferred.
Deletion Allowed	By default, this is disabled. If selected, deletes the upload source preferences.
Reverse Allowed	By default, this is disabled. If selected, reverses the upload source preferences.
Amend Allowed	By default, this is disabled. If selected, amends the upload source preferences.
Proceed with EOD	By default, this is disabled. If selected, proceeds with the EOD.

4. Click **Save** to save the details.

   The upload source preference is successfully created and can be viewed using the View Upload Source Preference screen.

1.32.2 View Upload Source Preference

This topic describes the systematic instructions to view the list of configured upload source preferences.

The user can configure upload source preference using Create Upload Source Preference screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Upload Source Preference**.

2. Under **Upload Source Preference**, click **View Upload Source Preference**.

   The **View Upload Source Preference** screen displays.

Figure 1-63   View Upload Source Preference

For more information on fields, refer to the field description table.

Table 1-63   View Upload Source Preference – Field Description

Field	Description
Source Code	Displays the code of the source.
Status	Displays the status of the post upload.
Purge Days	Displays the number of purge days.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

1.33 Pricing Source System

This topic describes the information to configure the pricing source system.

This topic contains the following subtopics:

• Create Pricing Source System
  This topic describes the systematic instructions to configure pricing source system details.

• View Pricing Source System
  This topic describes the systematic instructions to view the list of configured Pricing Source system.

1.33.1 Create Pricing Source System

This topic describes the systematic instructions to configure pricing source system details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Pricing Source System**.

2. Under **Pricing Source System**, click **Create Pricing Source System**.

   The **Create Pricing Source System** screen displays.

Figure 1-64   Create Pricing Source System

3. Specify the fields on **Create Pricing Source System** screen.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-64   Create Pricing Source System – Field Description

Field	Description
Pricing Source System	Specify the pricing source system.
Pricing Source Description	Specify the additional information about the Pricing Source system.

4. Click **Save** to save the details.

   The pricing source system is successfully created and can be viewed using the View Pricing Source System screen.

1.33.2 View Pricing Source System

This topic describes the systematic instructions to view the list of configured Pricing Source system.

The user can configure the pricing source system using Create Pricing Source System screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Pricing Source System**.

2. Under **Pricing Source System**, click **View Pricing Source System**.

   The **View Pricing Source System** screen displays.

Figure 1-65   View Pricing Source System
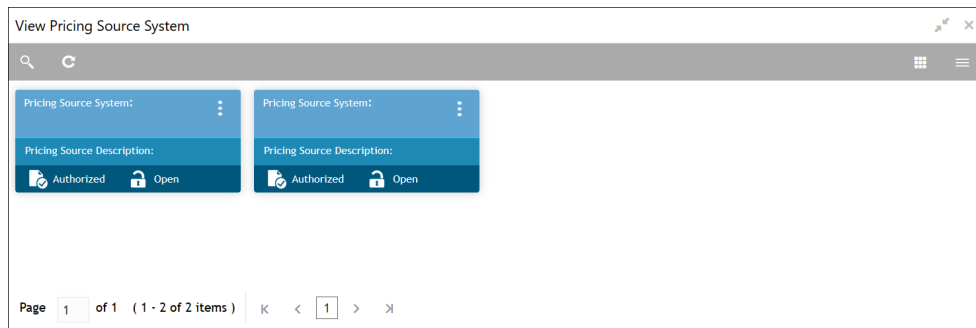
For more information on fields, refer to the field description table.

Table 1-65   View Pricing Source System – Field Description

Field	Description
Pricing Source System	Displays the name of the Pricing Source system.
Pricing Source System Description	Displays any additional information of the Pricing Source system.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**

1.34 Integrating Bureau Integration Service with Oracle Banking Routing Hub

This topic describes the information to integrate the Bureau Integration service with Oracle Banking Routing Hub.

This topic contains the following subtopics:

- Oracle Banking Routing Hub Configuration
  This topic describes the information about Oracle Banking Routing Hub Configuration for the Bureau Integration service.

1.34.1 Oracle Banking Routing Hub Configuration

This topic describes the information about Oracle Banking Routing Hub Configuration for the Bureau Integration service.

The user needs to import the existing service consumer and providers into the system.

- Service Consumers
  This topic describes systematic instructions to configure the service consumers.

- Service Providers
  This topic describes the systematic instructions to configure the service providers.

- Experian Configuration
  This topic provides the figures for the Experian configuration.

- Equifax Configuration
  This topic describes the information about Equifax configuration.

- Document Configuration
  This topic describes the information about document configuration.

- Troubleshooting
  This topic describes the information for troubleshooting the Oracle Banking Routing Hub.

1.34.1.1 Service Consumers

This topic describes systematic instructions to configure the service consumers.

The **Service Consumer** is an Oracle product that invokes Oracle Banking Routing Hub API. Oracle Banking Routing Hub analyses, evaluates the destination product processor and, transforms the data into a format of the same.
The **Service Consumer** comprises the source and destination integration details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Routing Hub**.

2. Under **Routing Hub**, click **Service Consumers**.

   The **Service Consumers** screen displays.

Figure 1-66   Service Consumers
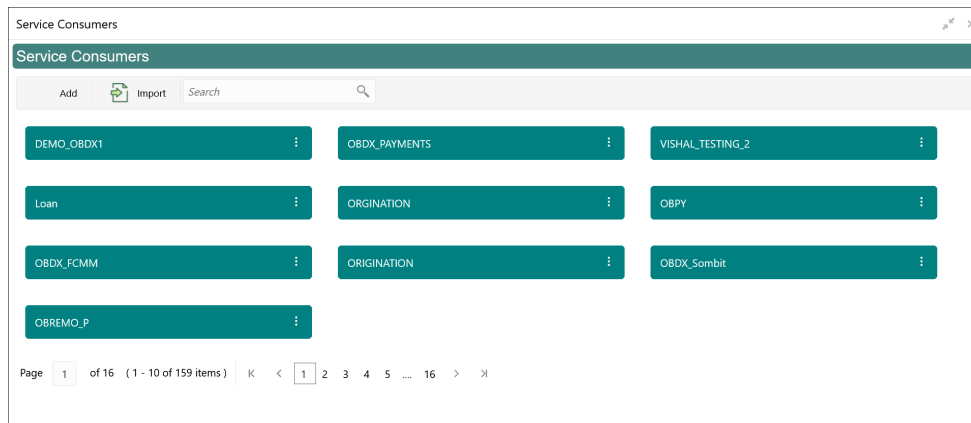
Add Service Consumer

3. Click **Add**.

    The **Add Service Consumer** screen displays.

Figure 1-67   Add Service Consumer
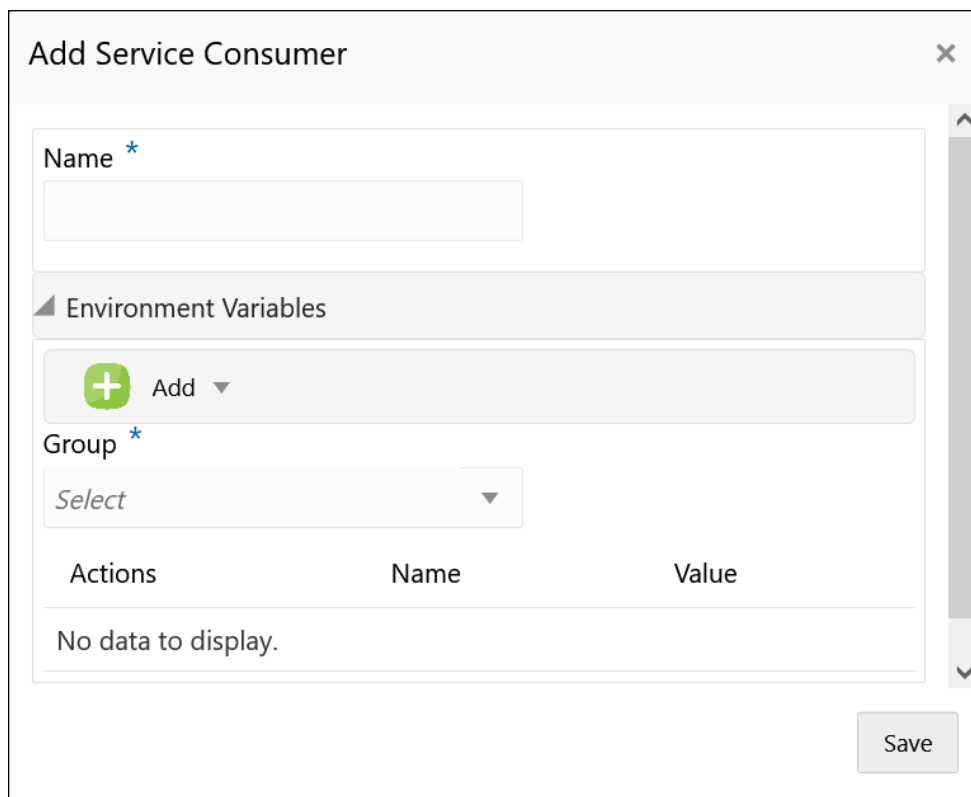
4. Specify the fields on **Add Service Consumer** screen.

> ✏ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-66   Add Service Consumer - Field Description

Field	Description

Name	Specify the name of the service consumer.
	
	✎ **Note:**
	
	   • Enter 0 to maximum of 255 characters.
	   • No numeric value at beginning and no space allowed.

Add	To add, refer to step 5. Select the group from the drop-down list. The available options are: • **Group** • **Variable**
Group	Select the group from the drop-down list.
Action	Displays the action. The user can edit or delete the header.
Name	Displays the name of the header.
Value	Displays the value of the header.

Environment Variables:
The user must define the group of variables which can be accessed throughout the specific consumer's configuration.

The syntax for accessing environment variables is
below: $env.Environment_Group_Name.Environment_Variable_Name

For example, $env.COMMON.BRANCH_CODE

5. To add **Environment Variables**, follow below steps.

   a. On **Add Service Consumers**, click **Add** and select **Group** from drop-down list to add the group.

      The **Add Environment Group** screen displays.

Figure 1-68   Add Environment Group

b. Specify the fields on **Add Environment Group** screen and click **OK**.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-67   Add Environment Group - Field Description

Field	Description
Name	Specify the name of the environment group. **Note:** • Enter 0 to maximum of 255 characters. • No numeric value at beginning and no space allowed.

c. Click **Add** on **Add Service Consumer** screen and select **Variable** from drop-down list to add the variable.

The **Add Environment Variable** screen displays.

Figure 1-69   Add Environment Variable

d.   Specify the fields on **Add Environment Variable** screen and click **OK**.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-68   Add Environment Variable - Field Description

Field	Description
Name	Specify the name of the environment variable. ✎ **Note:** • Enter 0 to maximum of 255 characters. • No numeric value at beginning and no space allowed.
Value	Specify the value of the environment variable. The value can either be hardcoded or Velocity mapping.

6.   Click **Save** to save the details.

The **Confirmation** screen displays.

Figure 1-70   Confirmation - Add Service Consumers

7. Click **Confirm** to save the record.

Import Service Consumer

8. Click **Import**.

   The **Import Service Consumer** screen displays.

Figure 1-71   Import Service Consumer
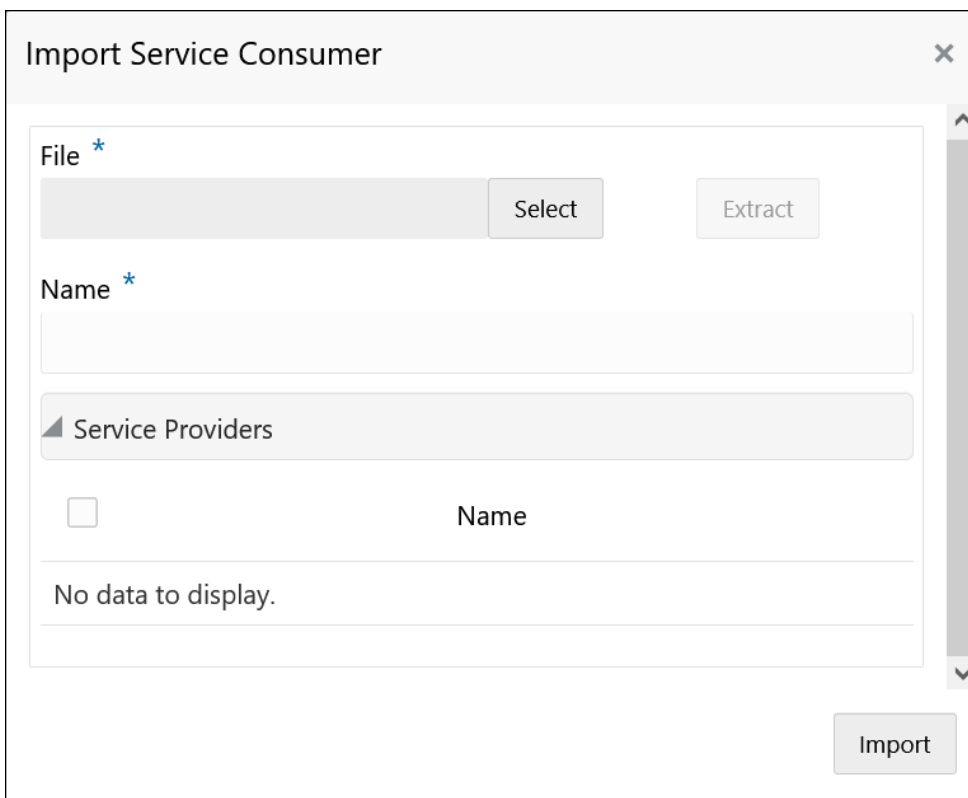
9. Specify the fields on **Import Service Consumer** screen and click **OK**.

> 🖍 **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-69   Import Service Consumer - Field Description

Field	Description
File	Select the file using **Select**. **Note:** Allows only to select one file and accepts only JSON file.
Extract	Extracts the consumer name and service provider list from JSON file and displays it in the respective elements.
Name	Specify the name of the service provider. **Note:** • Enter 0 to maximum of 255 characters. • No numeric value at beginning and no space allowed.
Name	Displays the list of service providers names that are present in JSON file.

10. Click **Import** to import the selected file.

    The **Confirmation** screen displays.

Figure 1-72   Confirmation - Import Service Consumer
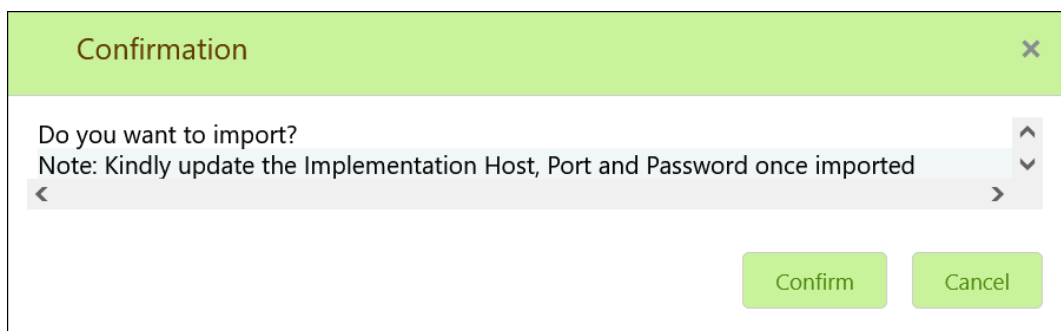
11. Click **Confirm** to import the service consumer.

> **Note:**
>
> Below data needs to be changed after importing provider configuration file:
>
> • Implementation Host and Port
>
> • Implementation Authentication Password

View Service Consumer

12. Click 3 dots button (operation menu) and click **View**.

The **View Service Consumer** screen displays.

Figure 1-73   View Service Consumer

The user can click edit button to edit the **Service Consumer**.

Edit Service Consumer

13. Click 3 dots button (operation menu) and click **Edit**.

The **Edit Service Consumer** screen displays.

Figure 1-74   Edit Service Consumer

14. Click **Save** once the edit is done.

    The **Confirmation** screen displays.

Figure 1-75   Confirmation - Edit Service Consumer

15. Click **Confirm** to save the record.

Delete Service Consumer

16. Click 3 dots button (operation menu) and click **Delete**.

    The **Confirmation** screen displays.

Figure 1-76   Confirmation - Delete Service Consumer
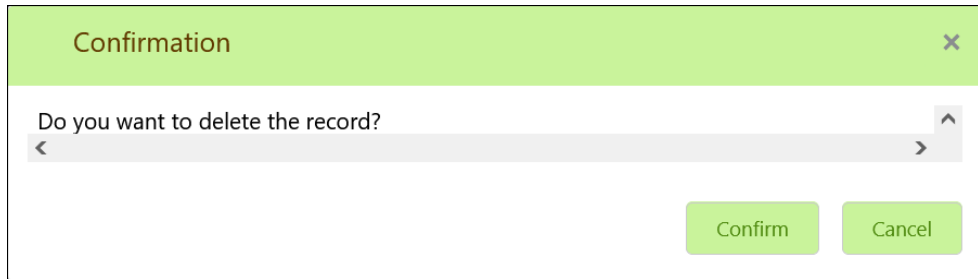
17. Click **Confirm** to delete the record.

Export Service Consumer in JSON

18. Click 3 dots button (operation menu) and click **Export**. Select **JSON**.

   The **Export Service Consumer** screen displays.

Figure 1-77   Export Service Consumer - JSON
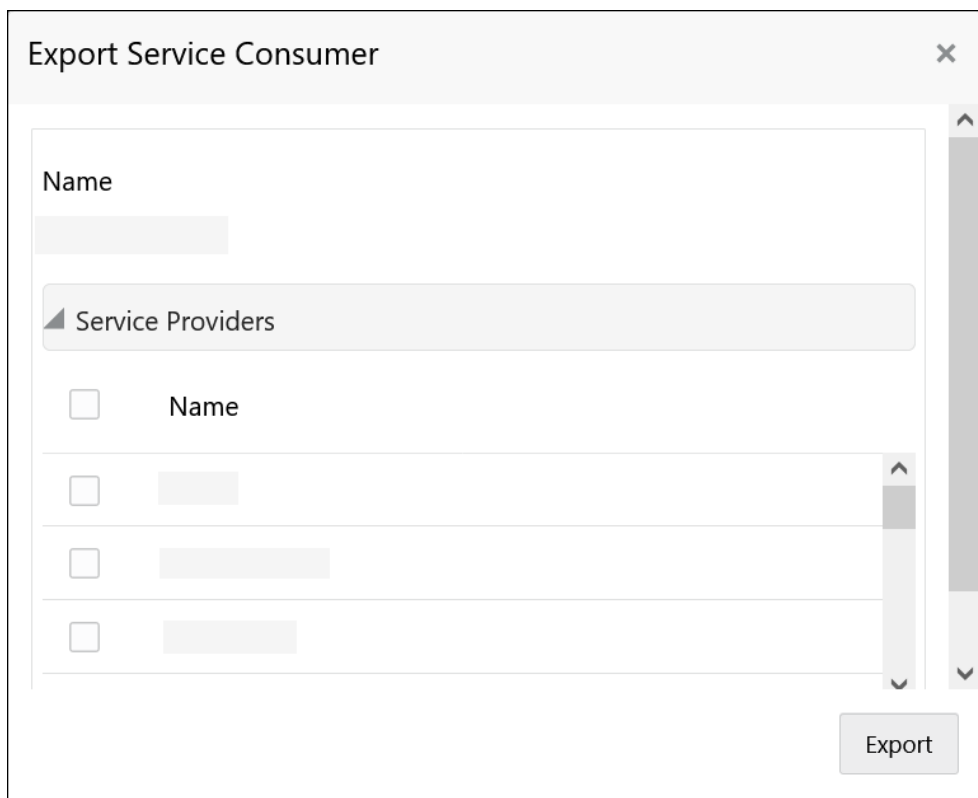
> **✎ Note:**
>
> - The user has an option to select service providers from the list which needs to be exported or can click on select all for all service providers.
> - The JSON Export feature exports below data:
>   - Selected service consumer
>   - All consumer services
>   - Selected service providers with services
>   - Default implementation of selected service providers with services (without Host, Port and Authentication Password)
>   - Default transformations
>   - All default implementation routes

19. Select the required service providers and click **Export**.

The **Confirmation** screen appears.

Figure 1-78   Confirmation - Export Service Consumer in JSON
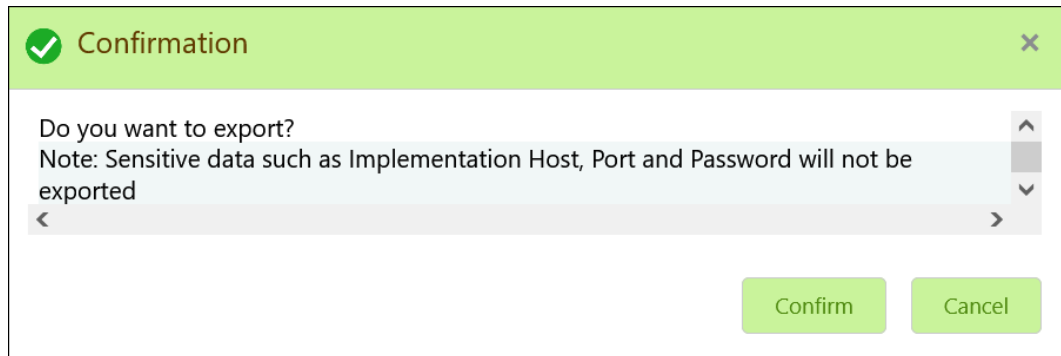
20. Click **Confirm** to export in JSON.

Export Service Consumer in SQL

21. Click **Export** and select **SQL**.

The **Confirmation** screen appears.

Figure 1-79   Confirmation
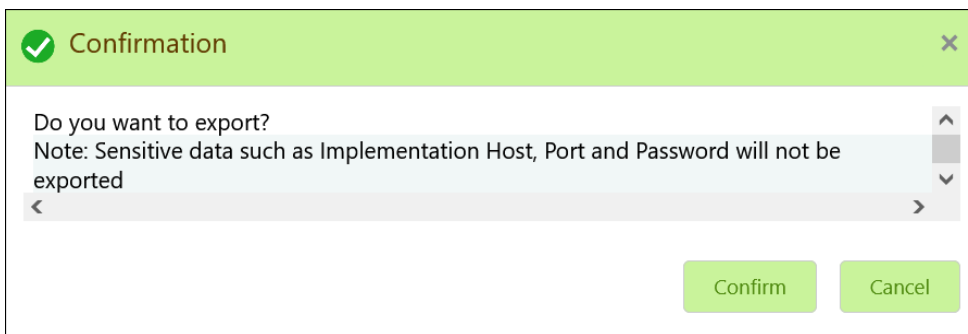
> **✎ Note:**
>
> The SQL Export feature exports entire configuration without Host, Port, and Authentication Password details.

22. Click **Confirm** to export the Service Consumer in SQL.

1.34.1.2 Service Providers

This topic describes the systematic instructions to configure the service providers.

The **Service Providers** are the product processors configure to process request send by oracle banking routing hub on behalf of service consumers. It comprises of the destination integration details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** Screen, click **Core Maintenance**, Under **Core Maintenance**, click **Routing Hub**.

2. Under **Routing Hub**, click **Service Consumers**.

3. On **Service Consumers** screen, click the required service consumer.

The **Service Providers** screen displays.

Figure 1-80   Service Providers
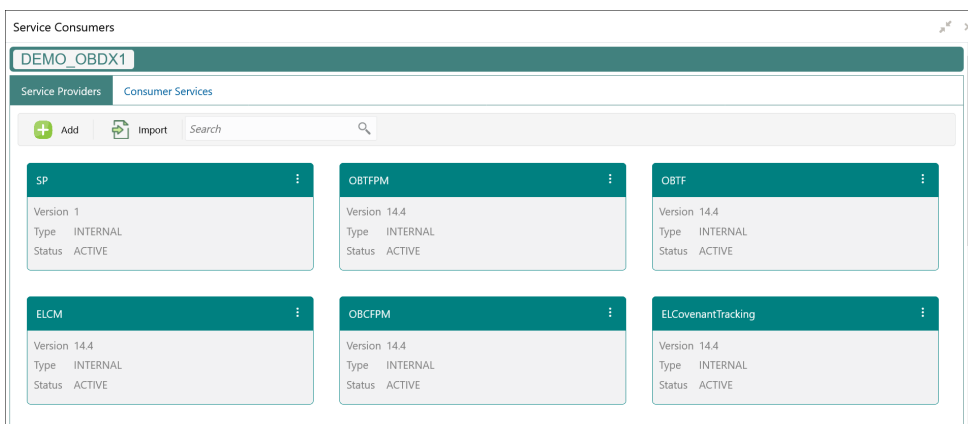
To Add Service Provider

4. Click **Add**.

The **Add Service Provider** screen displays.

Figure 1-81   Add Service Provider

5. Specify the fields on **Add Service Provider** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-70   Add Service Provider - Field Description

Field	Description
Product Name	Specify the product name of the service provider. **Note:** • Enter 0 to maximum of 255 characters. • No numeric value at beginning and no space allowed.
Type	Select the type of service provider from drop-down list The available options are: • **INTERNAL** • **EXTERNAL**
Version	Specify the provider version. **Note:** • Enter 0 to maximum of 255 characters. • Only numeric or decimal values are allowed.
Active	Predefined values are Active / Inactive If provider is marked as inactive, then all related routes will be stopped.
Add	To add, refer to step 4.
Actions	Displays the action. The user can edit or delete the header.
Name	Displays the name of the header.
Value	Displays the value of the header.
Type	Select the type of service from drop-down list. The available options are: • **WSDL** • **SWAGGER**
URL	Specify the service URL of the file location.
Import	Click **Import** to extract the service information from URL.
Service	Displays the extracted service from the selected URL.
Operation	Displays the extracted operation from the selected URL.

Headers

External product processor might require some standard headers to be passed along with the request. User can specify the headers which are required by service endpoints for its all implementations but not present in swagger file.

6. To add **Headers**, follow below steps.

   a. Click **Add**.

   The **Add Header** screen displays.

Figure 1-82   Add Header

b. Specify the fields on **Add Header** screen and click **OK**.

> ✎ **Note:**
>
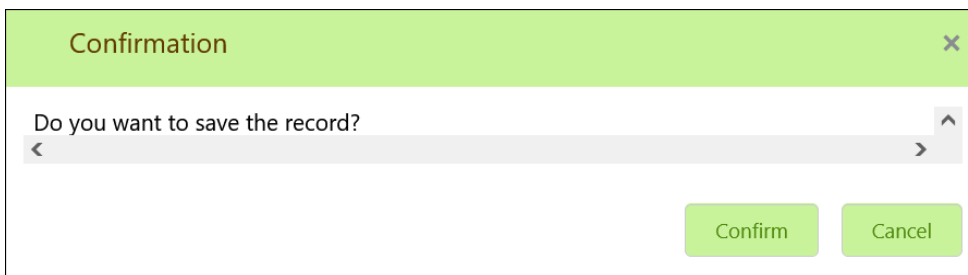> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-71   Add Header - Field Description

Field	Description
Name	Specify the name of the header.
Value	Specify the value of the header.

7. Click **Save** to save the details.

The **Confirmation** screen displays.

Figure 1-83   Confirmation

8. Click **Confirm** to save the record.

Import Service Provider

9. Click **Import**.

The **Import Service Provider** screen displays.

Figure 1-84   Import Service Provider
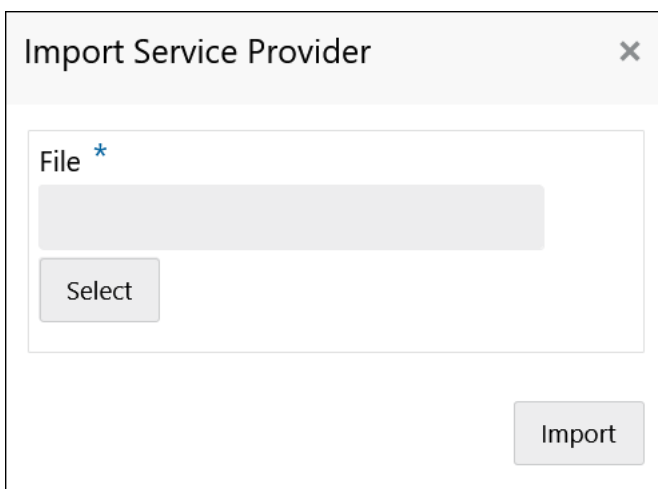
> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-72   Import Service Provider - Field Description

Field	Description
File	Select the file using **Select** button. > **Note:** > Allows only to select one file and accepts only JSON file.

10. Click **Import** to import the selected file.

The **Confirmation** screen displays.

Figure 1-85   Confirmation - Import
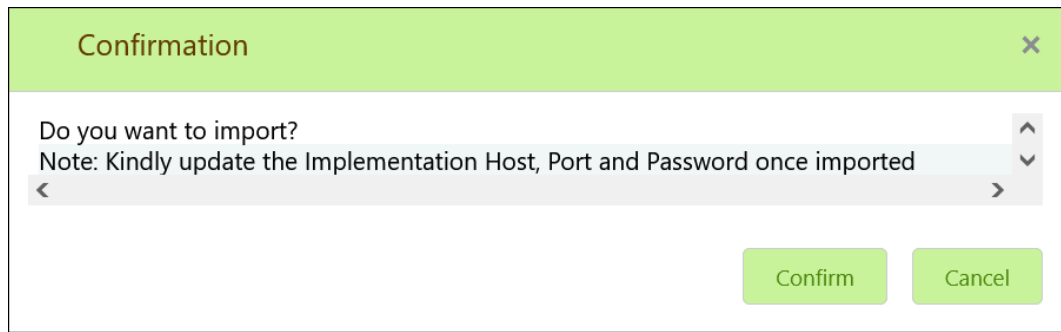
> **✎ Note:**
>
> Below data needs to be changed after importing provider configuration file:
> - Implementation Host and Port
> - Implementation Authentication Password

11. Click **Confirm** to import the record.

View Service Provider

12. Click 3 dots button (operation menu) and click **View**.

The **View Service Provider** screen displays.

Figure 1-86   View Service Provider
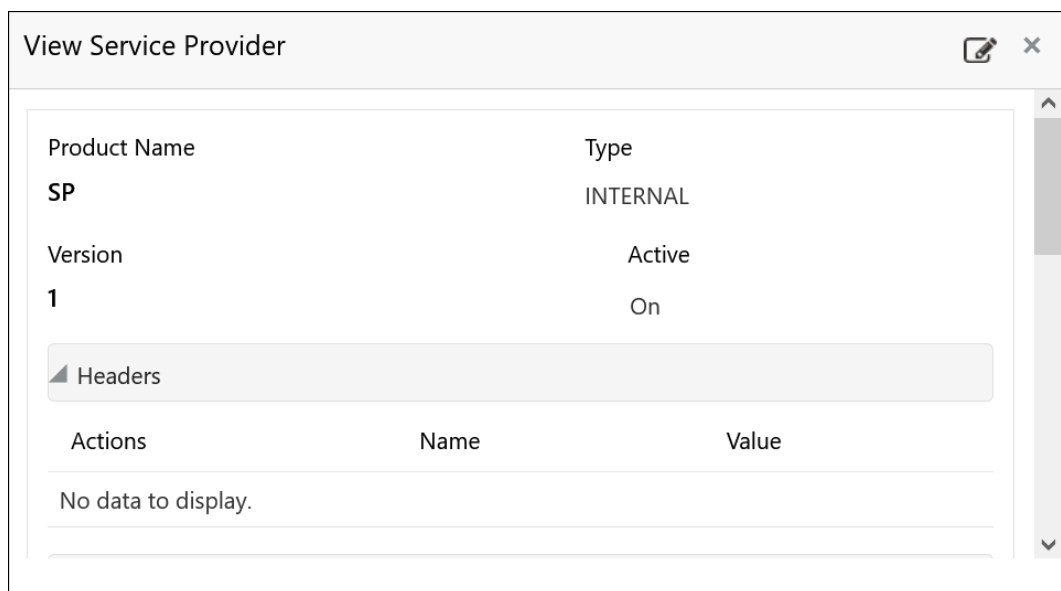
The user can click edit button to edit the **Service Provider**.

Edit Service Provider

13. Click 3 dots button (operation menu) and click **Edit**.

    The **Edit Service Provider** screen displays.

    Figure 1-87   Edit Service Provider


14. Click **Save** once the edit is done.

    The **Confirmation** screen displays.

    Figure 1-88   Confirmation - Edit Service Provider

15. Click **Confirm** to save the record.

Delete Service Provider

16. Click 3 dots button (operation menu) and click **Delete**.

    The **Confirmation** screen displays.

    Figure 1-89   Confirmation - Delete Service Provider

17. Click **Confirm** to delete the record.

Export Service Provider

18. Click 3 dots button (operation menu) and click **Export**.

The **Confirmation** screen displays.

Figure 1-90   Confirmation - Export Service Provider
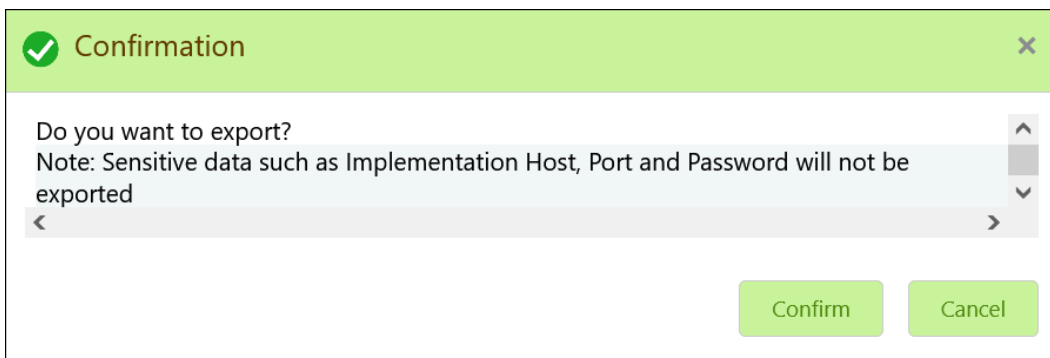
> ✎ **Note:**
>
> The following data cannot be exported:
>
> • Implementation Host
>
> • Implementation Port
>
> • Implementation Authentication Password
>
> The above data needs to be configured manually after importing the configuration file. Same has been mentioned in Import section.

19. Click **Confirm** to export the record.

1.34.1.3 Experian Configuration

This topic provides the figures for the Experian configuration.

Experian Fetch Credit Report

Figure 1-91   Experian Fetch Credit Report

Figure 1-92   Experian Fetch Credit Report

Experian Sandbox

The **Service Consumer** is used to export details of fetch credit report from sandbox environment.

Figure 1-93   Experian Sandbox

1.34.1.4 Equifax Configuration

This topic describes the information about Equifax configuration.

Equifax is configured in lookup as a bureau and rule services to configure in Oracle Banking Routing Hub as consumer service to fetch details from Equifax sand.

Equifax Fetch Credit Report

Figure 1-94   Equifax Fetch Credit Report

Figure 1-95   Equifax Fetch Credit Report

Equifax Sandbox

The **Service Consumer** exports details of fetch credit report from sandbox environment.

Figure 1-96   Equifax Sandbox
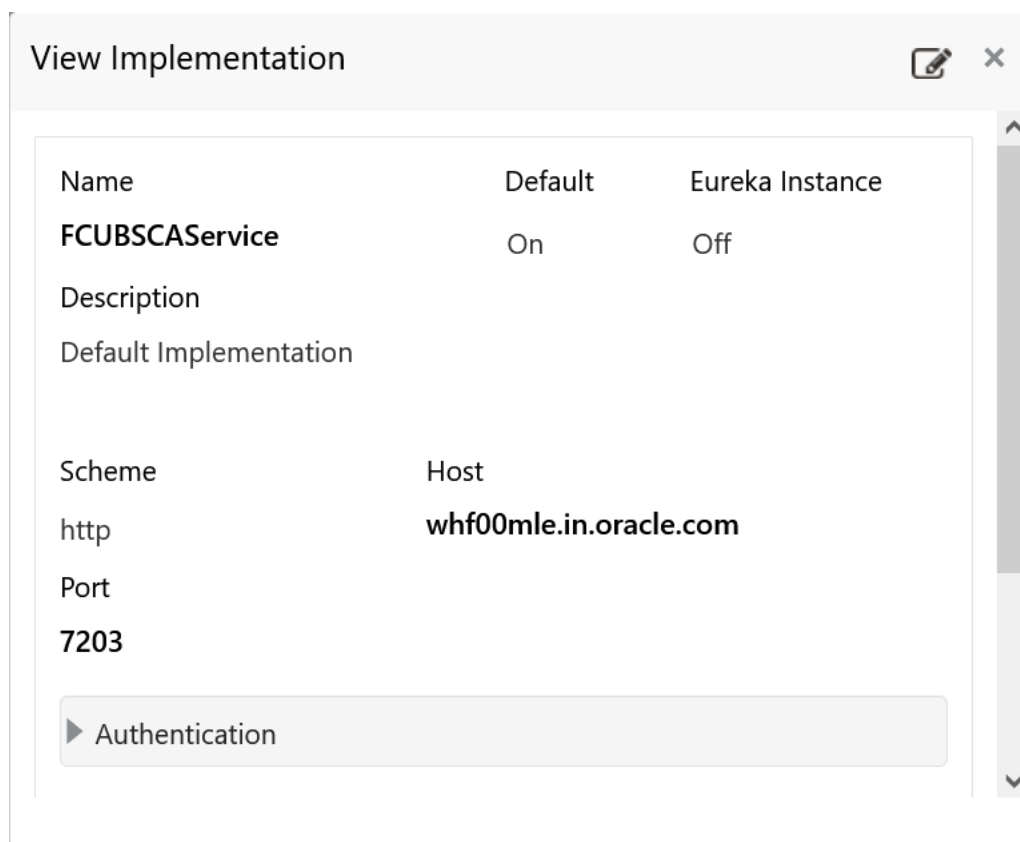
1.34.1.5 Document Configuration

This topic describes the information about document configuration.

Bureaus usually send applicants credit reports in PDF or encrypted format. The product processors prefers the PDF reports for easy readability and usability. In addition, product processors want to display PDF reports in their system and share these reports with the applicants. In such cases, the PDF credit reports are stored in the document server, which can be accessed by the bureau integration service and the product processor.

1.34.1.6 Troubleshooting

This topic describes the information for troubleshooting the Oracle Banking Routing Hub.

Oracle Banking Origination issues faced during cmc-obcbs-service and cmc-obrh-services integration

The password for the Experian account had expired.

The solution is to login to the Experian website and reset the password. The new password is generated via mail and you can configure in Oracle Banking Routing Hub for token generation.

Unable to connect to external server

Oracle Banking Routing Hub server is unable to connect to the experian server. The proxy is not configured

The VM arguments were added for oracle banking routing hub's managed server.

- `Dhttps.proxyHost=www-proxy-idc.in.example.com`

- `Dhttps.proxyPort=80`

Oracle Banking Routing Hub environment variable value not found

The environment variable for the Bureau Integration Service product processor is improper.
`($.headers["bureauType"][0])` The correct path was
provided(`$.headers["bureauType"][0]`

1.35 Bureau Integration Service

This topic provides the overview about the Bureau Integration Service.

Bureau Integration Service facilitates financial institutions to send requests to the credit bureau agencies for credit scores and reports. It also facilitates viewing reports received from the bureaus.

The credit report presents the credit information of an individual or a company, which is fetched by credit bureaus from various financial institutions. It is a detailed report, which contains the history of borrowings, repayment routine, defaults, and delays. This report contains vital information about a customer's credit score, personal information, employment details, contact information, and details of accounts in various banks of a given geographical region. The objective of this report is to present the financial history of an individual or a company, which further helps a bank to take a decision on granting a loan based on the credit score of a company or an individual.

For requesting and receiving the credit reports, bureau integration service is integrated with the financial institution or the product processor.

The oracle banking routing hub facilitates routing and transforming the information between the product processor, the underlying integration service and the bureau. The flow is as follows:

1. The product processor requests bureau integration service for credit reports. It provides the required customer information for whom the report is requested.

2. The routing hub transforms the data and forwards the request to the bureau integration service.

3. Once the integration service receives the request, the data is processed based on various criteria. The criteria contain the rules and facts of the product processor that are maintained in the rules engine.

4. Bureaus to be called are identified based on evaluation of the rules.

5. The integration service then sends the request to the routing hub, which transforms the data and sends the request to the respective credit bureaus.

6. The bureau processes the request and sends the credit report back.

7. The routing hub receives the report and transforms the report as per the defined template and sends it back to bureau integration service.

8. Bureau integration service then saves the data, displays the credit report, and sends the same to the product processor through the routing hub.

One or more bureaus can be called based on evaluation of the rules. The bureaus can be either called simultaneously or based on the response from the previous bureau call.

Bureau integration service maintains aging for credit report of an applicant. History service allows to store and pull existing credit report of an individual customer. The integration service retrieves report from history for those applicants if subsequent call to same bureau is made within defined period, beyond which a new credit report is called from the bureau. Existing credit reports from history are sent back to the product processor.

In case of multiple applicants being received by bureau integration service as a part of a lending application, based on the evaluation of criteria, the integration service consolidates all the multiple bureau responses into one and sends it to the product processor.

A new bureau can be added with only a configuration and without any change in the code. Two lookup types are required to be created in the bureau integration service. One for bureau and another for bureau product type. The additional maintenance required is configuration of the new bureau in the routing hub.

Bureau integration service supports override of criteria rules if the product processor wants to call a specific bureau or bureau product, for an applicant. In such cases, bureau service will not check criteria for rules evaluation. Instead, bureau service will call the bureau as intimated by the product processor in the request. Here, product processor can list one or more bureau's to be called.

Bureau Integration service supports decoding of encoded pdf string from a bureau response to a pdf report using web content document server. The document server generates a unique document ID for each record stored. Bureau service can access the pdf reports using this document ID.

The below flow diagram depicts how bureau integration service works with the integrated product processor and interfaces with the routing hub for fetching and displaying the credit bureau reports:

Figure 1-97   Bureau Integration Service
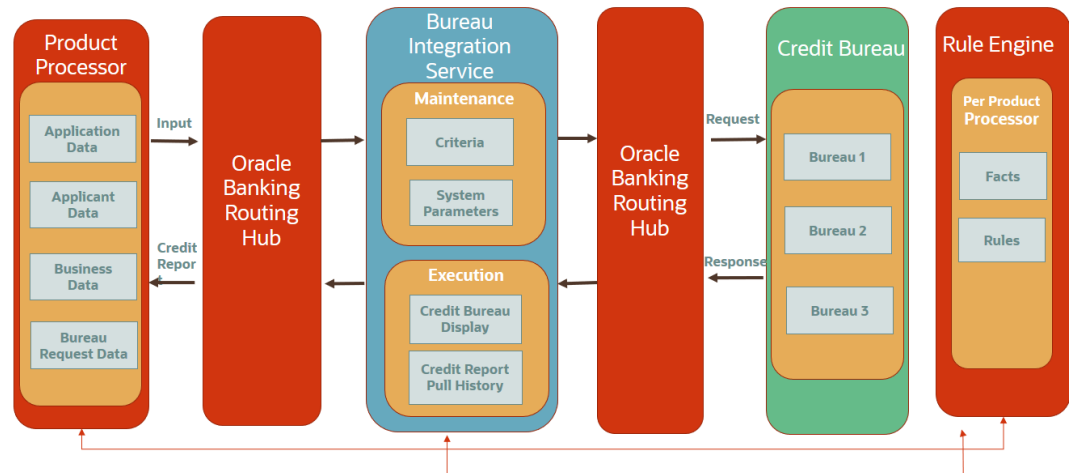
- Authorization Process
  This topic describes systematic instructions to authorize and approve a record.

1.35.1 Authorization Process

This topic describes systematic instructions to authorize and approve a record.

Specify **User ID** and **Password**, and login to **Home** screen.

1. Navigate to the required screen.

2. Click **Authorize**.

   The record pending for authorization appears.

3. Select the required record and click **Approve**.

   The records are displayed in a widget.
   If the user have modified the lookup, criteria twice, system displays two widgets with respective modification number along with the modified details.

4. Specify the remarks to approve the record in the **Remarks**.

5. Click **Confirm** and authorize the record.

   The record is authorized successfully.

1.36 Credit Bureau Display

This topic describes the information about Credit Bureau display.

The Credit Bureau Display screen facilitates to view the reports received from the various bureaus. The report has credit history details and credit score of the customer based on these details.

This topic contains the following subtopics:

- View Credit Bureau Report
  This topic describes the systematic instructions to view the credit bureau report based on the various filter options provided.

1.36.1 View Credit Bureau Report
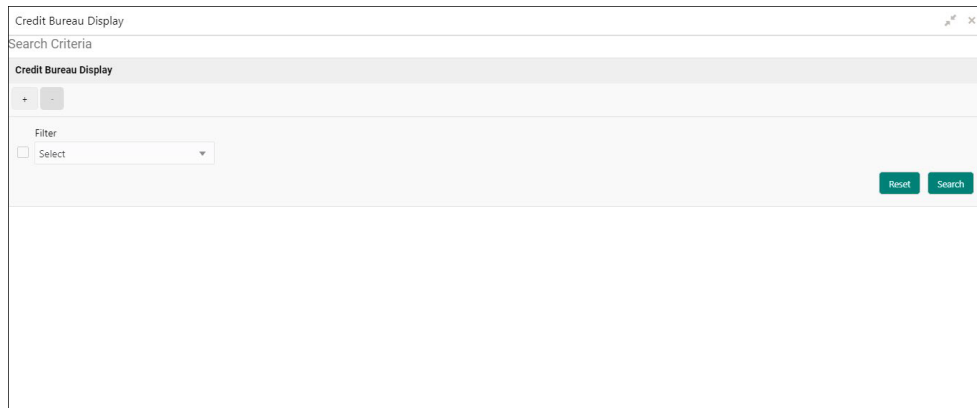
This topic describes the systematic instructions to view the credit bureau report based on the various filter options provided.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Credit Bureau**. Under **Credit Bureau**, click **Operations**.

2. Under **Operations**, click **Credit Bureau Display**.

   The **Credit Bureau Display** screen is displays.

Figure 1-98   Credit Bureau Display

3. Specify the fields on **Credit Bureau Display** screen.

   > **Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

Table 1-73   Credit Bureau Display- Field Description

Field	Description
Filter	Select the required option based on which you can search for the credit bureau reports from the drop-down list. The options are: • **External Reference Number** • **Inquiry ID** • **Inquiry Date** • **Bureau Name** • **Product Processor** • **Application Number** • **Bureau Report ID**
Value	Specify the required details or select the appropriate option for the selected filter option. **Note:** This field appears once the user select the filter option as **Inquiry Date** and value as Date Range.
From Date	Select the start date of the period during which the report was generated. **Note:** This field appears if the user select the filter option as **Inquiry Date** and value as **Date Range**.
To Date	Select the end date of the period during which the report was generated. **Note:** This field appears if the user select the filter option as **Inquiry Date** and value as **Date Range**.

4. On the **Search Criteria** screen, specify the details and click **Search**.

The search results displays showing a list of records based on the specified search criteria.

Figure 1-99   Credit Bureau Display - Report History

For more information on fields, refer to the field description table.

Table 1-74   Credit Bureau Display - Report History – Field Description

Field	Description
Inquiry Date	Displays the inquiry date of the request from product processor to bureau integration service.
External Reference Number	Displays the external reference number provided by the product processor.
Product Processor	Displays the name of the product processor that sent the request.

5. Click the arrow icon to view the corresponding list of reports.

The list of reports displays on **Credit Bureau Display** screen.

Figure 1-100   Credit Bureau Display - List of Report

For more information on fields, refer to the field description table.

Table 1-75   Create Bureau Display - List of Report – Field Description

Field	Description
Applicant Name	Displays the name of the applicant.
Bureau Name	Displays the name of the credit bureau agency.
Inquiry ID	Displays the inquiry ID generated by bureau integration service.
Report ID	Displays the report ID provided by the credit bureau agency.
Report Date	Displays the date on which the credit bureau report is generated by the bureau.
Product	Displays the product of the credit bureau agency.
View	Click **View** to view the credit bureau report.

6. Click the **View** link to view the credit bureau report.

   The **Create Bureau Display - Bureau Report** displays.

Figure 1-101   Create Bureau Display - Bureau Report

For more information on fields, refer to the field description table.

Table 1-76   Create Bureau Display - Bureau Report – Field Description

Field	Description
Bureau Name	Displays the name of the credit bureau agency.
Product Name	Displays the product name of the credit bureau agency.
Report ID	Displays the report ID provided by the credit bureau agency.
Report Date	Displays the date on which the credit bureau report is generated by the bureau.

1.37 Lookup

This topic describes the information about the lookup feature in Bureau Integration service.

The lookup are the service for mapping of keys and values used to enrich the description of the data displayed to the user. The lookup screen allows user to define contents for a list of drop-down or value fields. These are used throughout the system. The identified fields only accept the entries stored.

Below are some examples of the lookup fields.

- Static/Enumeration values

  – Credit Bureau: For example, credit bureau1, credit bureau 2, and credit bureau 3.

  – Comparison Operator: Equals and Greater than.

- Dependent lookups based on another selection

  – Based on Country, State should have different values in the lookup.

  – Based on Country, Currency should have different values in the lookup.

This topic contains the following subtopics:

- Create Lookup
  This topic describes the systematic instructions to create lookup definitions by updating various details in Bureau Integration service.

- View Lookup
  This topic describes the systematic instructions to view the list of configured lookups for Bureau Integration service.

1.37.1 Create Lookup

This topic describes the systematic instructions to create lookup definitions by updating various details in Bureau Integration service.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **Lookup**.

3. Under **Lookup**, click **Create Lookup**.

   The **Create Lookup** screen displays.

Figure 1-102   Create Lookup

4. Specify the fields on **Create Lookup** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-77   Create Lookup - Field Description

Field	Description
Lookup Type	Specify the unique lookup type name.
Description	Specify the short description for lookup.
+ button	Click to add a new row.
- button	Click to delete a row that is already added.
Lookup Code	Specify the unique lookup code.
Description	Specify the short description for lookup.
Sort Order	Specify the sort order.
Dependent Identifier	Specify the dependent Identifier.
Enable	Click the toggle status to enable the parameter.

5. Click **Save** to save the details.

The lookup is successfully created and can be viewed using the View Lookup screen.

1.37.2 View Lookup

This topic describes the systematic instructions to view the list of configured lookups for Bureau Integration service.

The user can configure the lookup using the Create Lookup screen. The status of the created lookup is displayed as **Unauthorized** and **Open**. Once the checker authorizes the lookup, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From the **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **Lookup**.

3. Under **Lookup**, click **View Lookup**.

   The **View Lookup** screen displays.

Figure 1-103   View Lookup
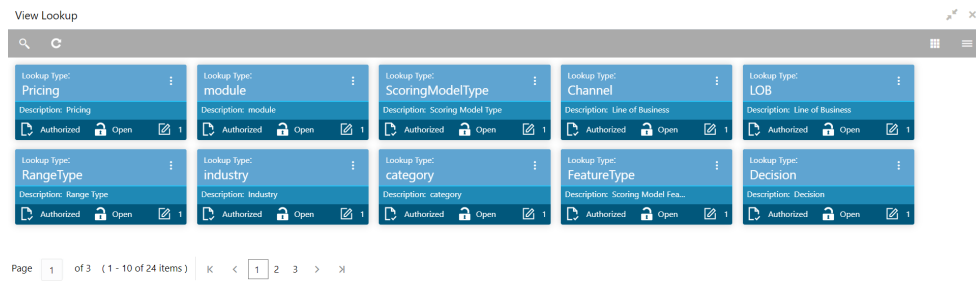
For more information on fields, refer to the field description table.

Table 1-78   View Lookup – Field Description

Field	Description
Lookup Type	Displays the lookup type.
Description	Displays the description of the lookup.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search**.

5. Specify the search criteria to fetch the required lookup.

   The **View Lookup - Search** screen dislays.

Figure 1-104   View Lookup - Search

For more information on fields, refer to the field description table.

Table 1-79   View Lookup – Search – Field Description

Field	Description
Lookup Type	Specify the lookup type.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

6. Click **three-dots** icon to modify, close, or view the created lookup code.

7. Click **Unlock** icon to modify the following fields. The fields are displayed in the **Lookup Maintenance** screen.

   • Lookup Code

   • Description

   • Sort Order

   • Dependent Identifier

   • Enable

   The **Lookup Maintenance - Modify** screen displays.

Figure 1-105   Lookup Maintenance - Modify

For more information on fields, refer to the field description table.

Table 1-80   Lookup Maintenance - Modify - Field Description

Field	Description
Lookup Type	Displays lookup type name.
Description	Displays the short description of the lookup. User can modify the same.
+ button	Click to add a new row.
- button	Click to delete a row that is already added.
Lookup Code	Displays the lookup code for the created lookup. User can modify the same.
Description	Displays the description for the created lookup.
Sort Order	Displays the sort order for the created lookup. User can modify the same.
Dependent Identifier	Displays the dependent Identifier for the created lookup. User can modify the same.
Enable	Indicates if the lookup is enabled or not. User can modify the same.

8. Click **Save** to update the modified fields.

9. Click **View** icon to view the created lookup code. The fields are displayed in **Lookup Maintenance** screen.

The **Lookup Maintenance - View** screen displays.

Figure 1-106   Lookup Maintenance - View
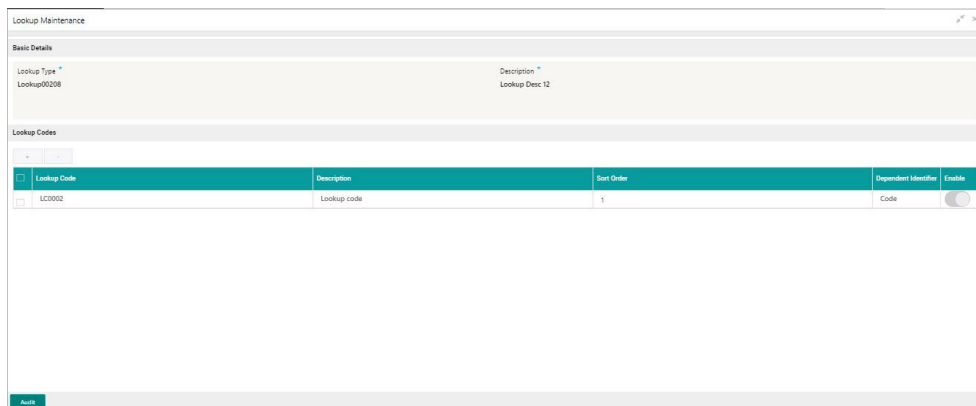
For more information on fields, refer to the field description table.

Table 1-81   Lookup Maintenance - View - Field Description

Field	Description
Lookup Type	Displays the created lookup type.
Description	Displays the description for the created lookup.
Lookup Code	Displays the lookup code for the created lookup.
Description	Displays the description for the created lookup.

Table 1-81   (Cont.) Lookup Maintenance - View - Field Description

Field	Description
Sort Order	Displays the sort order for the created lookup.
Dependent Identifier	Displays the dependent identifier for the created lookup.
Enable	Displays the lookup code if enabled for the created lookup.

1.38 Criteria

This topic describes the information about the criteria to identify the Credit Bureau.

The Criteria screen facilitates to setup criteria definition, which are used in evaluating the request and response criteria (business rules) to identify which bureau is to be called for the request.

Examples:

- Call credit bureau 1, for personal loan product, and call credit bureau 1 and 2 for home loan products.

- Call credit bureau 1, if zip code of the applicant is between 70000 – 80000 and call credit bureau 2, if zip code of the applicant is between 30000 – 40000.

- Call credit bureau 3, if score from credit bureau 1 is less than 600.

This topic contains the following subtopics:

- Create Bureau Criteria
  This topic describes the systematic instructions to create bureau criteria by updating various details.

- View Bureau Criteria
  This topic describes the systematic instructions to view the bureau criteria.

1.38.1 Create Bureau Criteria

This topic describes the systematic instructions to create bureau criteria by updating various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **Criteria**.

3. Under **Criteria**, click **Create Bureau Criteria**.

   The **Create Bureau Criteria** screen displays.

Figure 1-107   Create Bureau Criteria

4. Specify the fields on **Create Bureau Criteria** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

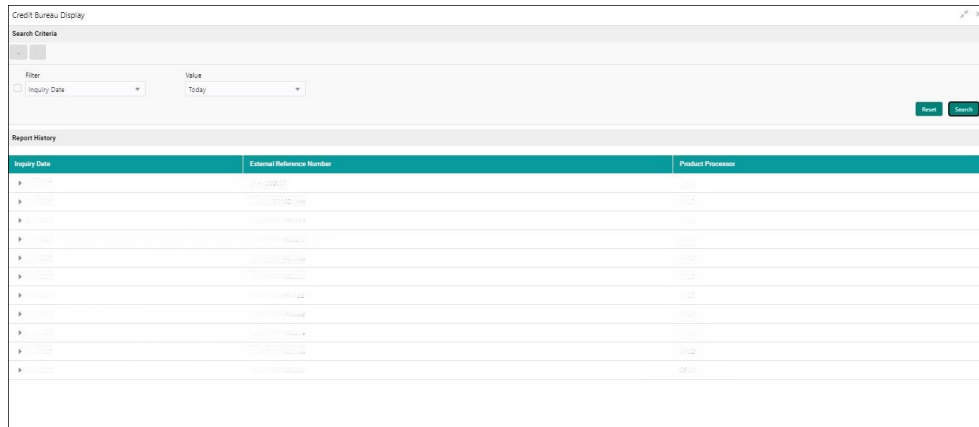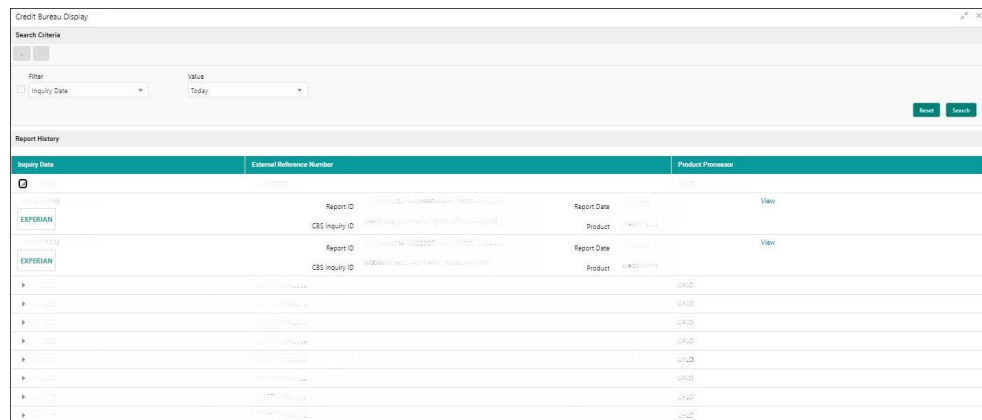For more information on fields, refer to the field description table.

Table 1-82   Create Bureau Criteria – Field Description

Field	Description
Criteria Code	Specify the unique criteria code.
Description	Specify a short description for the criteria code.
Product Processor	Specify the product processor for which the criteria is being created.
+ button	Click to add a new row.
- button	Click to delete a row that is already added.
(info icon)	Click to get the information about the rule.
Rule ID	Specify the rule ID.
Description	Displays the description of the rule ID selected.
Priority	Specify the priority of the criteria.
Call All Bureau	Click the toggle status to call all bureaus.
Enable	Click the toggle status to enable the rule criteria.
Action	This field is enabled if the **Call All Bureau** toggle is **OFF**.
+ button	Click this icon to add the child rule to the parent rule.

Table 1-82 (Cont.) Create Bureau Criteria – Field Description

Field	Description
Rule ID	Select the rule ID from the drop down list. **✎ Note:** This field is enabled if the **Call All Bureau** toggle is **OFF**.
	Click to get the information about the rules. **✎ Note:** This field is enabled if the **Call All Bureau** toggle is **OFF**.
Description	Displays the description of the rule ID selected it is auto populated. **✎ Note:** This field is enabled if the **Call All Bureau** toggle is **OFF**.
Priority	Specify the priority of the criteria. **✎ Note:** This field is enabled if the **Call All Bureau** toggle is **OFF**.
Enable	Click the toggle status to enable the rule criteria. **✎ Note:** This field is enabled if the **Call All Bureau** toggle is **OFF**.

5. Click **Save** to save the details.

The criteria are successfully created and can be viewed using the View Bureau Criteria screen.

1.38.2 View Bureau Criteria

This topic describes the systematic instructions to view the bureau criteria.

The user can configure the bureau criteria using the Create Bureau Criteria screen. The status of the created lookup is displayed as **Unauthorized** and **Open**. Once the checker authorizes the criteria, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **Criteria**.

3. Under **Criteria**, click **View Bureau Criteria**.

   The **View Bureau Criteria** screen displays.

Figure 1-108   View Bureau Criteria
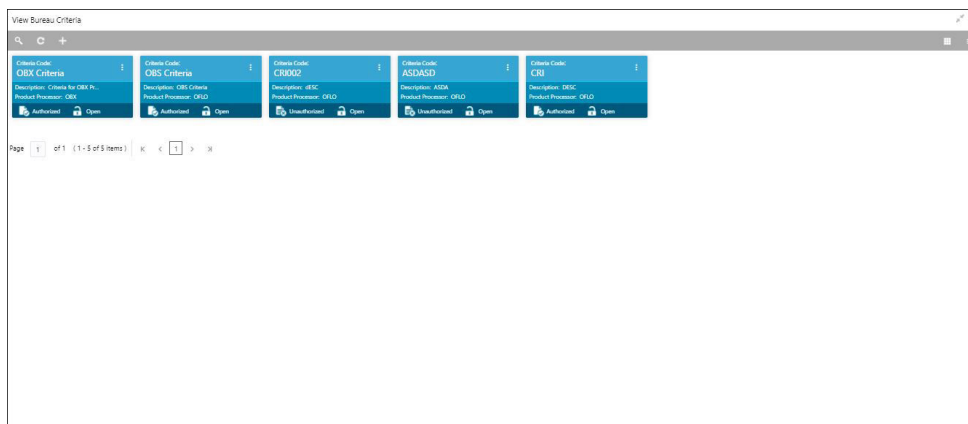
For more information on fields, refer to the field description table.

Table 1-83   View Bureau Criteria – Field Description

Field	Description
Criteria Code	Displays the criteria code.
Description	Displays the description of the criteria code.
Product Processor	Displays the product processor of the criteria.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**

Table 1-83   (Cont.) View Bureau Criteria – Field Description

Field	Description
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

5. Specify the search criteria to fetch the required criteria code.

6. Click **Search**

   The **View Criteria - Search** screen displays.

Figure 1-109   View Criteria - Search

For more information on fields, refer to the field description table.

Table 1-84   View Criteria - Search – Field Description

Field	Description
Criteria Code	Specify the criteria code.
Description	Specify the criteria description.
Product Processor	Select the product processor from the drop-down list.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

7. Click **three-dots** icon to unlock, delete, authorize or view the created criteria code.

8. Click **Unlock** icon to modify the following fields.

   • Rule ID

   • Description

   • Priority

   • Call All Bureau Status

   • Enable

   The **Bureau Criteria Maintenance** screen displays.

Figure 1-110   Bureau Criteria Maintenance
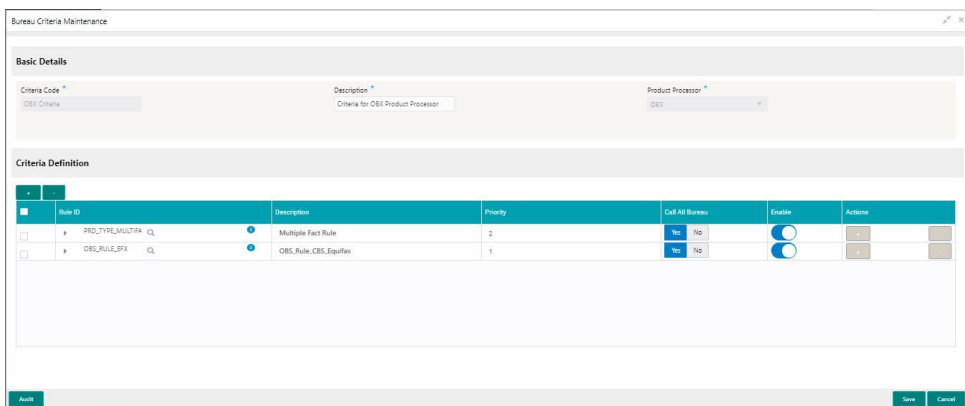
For more information on fields, refer to the field description table.

Table 1-85   Bureau Criteria Maintenance - Modify - Field Description

Field	Description
Criteria Code	Displays the created criteria code.
Description	Displays the description for the created criteria code.
Product Processor	Dispalys the product processor for which the criteria is being created.
Rule ID	Displays the rule ID for the created criteria.
Description	Displays the description for the created criteria.
Priority	Displays the the priority for the created criteria.
Call All Bureau	Dispalys if call all bureau has been enabled for the created criteria.
Enable	Displays the criteria code if enabled for the created criteria.
Actions	Displays the actions of the created criteria.

9. Click **Save** to update the modified fields.

10. Click **View** icon to view the created criteria code.

   The **Bureau Criteria Maintenance - View** screen displays.

Figure 1-111   Bureau Criteria Maintenance - View
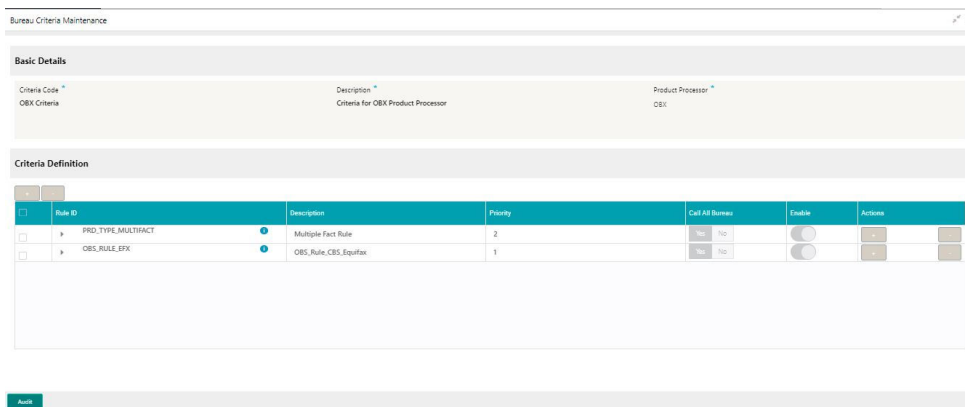
For more information on fields, refer to the field description table.

Table 1-86   Bureau Criteria Maintenance - View - Field Description

Field	Description
Lookup Type	Displays the created criteria code.
Description	Displays the created criteria description.
Product Processor	Displays the product processor of the created criteria.
Rule ID	Displays the rule ID for the created criteria.
Description	Displays the description for the created criteria.
Priority	Displays the priority for the created criteria.
Call All Bureau	Displays if call all bureau has been enabled for the created criteria.
Enable	Displays the criteria code if enabled for the created criteria.
Actions	Displays the actions of the created criteria.

1.39 System Parameter

This topic describes the information about the system parameter configured in Bureau Integration service.

System parameters define the information or values used throughout the system and drives the behavior of the features. They control the way task is executed, or whether the system performs a particular task. Some of the parameters are set when the system is installed, but the values associated with the parameter needs to be reviewed and is to be maintained.

Example:

- Set minimum days to pull credit bureau report from same bureau from initial pull.

- Credit bureau report purge days.

This topic contains the following subtopics:

- Create System Parameter
  This topic describes the systematic instructions to create system parameter by updating various details.

- View System Parameter
  This topic describes the systematic instructions to view the list of configured system parameter.

1.39.1 Create System Parameter

This topic describes the systematic instructions to create system parameter by updating various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **System Parameter**.

3. Under **System Parameter** , click **Create System Parameter**.

The **Create System Parameter** screen displays.

Figure 1-112   Create System Parameter

4. Specify the fields on **Create System Parameter** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-87   Create System Parameter - Field Description

Field	Description
Parameter Code	Select the parameter code from the drop-down list.
Parameter Description	Specify the short description for the parameter code.
Product Processor	Select the product processor from the drop-down list for which the parameter is being created.
Value	Specify the value for the parameter code.

5. Click **Save** to save the details.

   The System Parameter is successfully created and can be viewed using the View System Parameter screen.

1.39.2 View System Parameter

This topic describes the systematic instructions to view the list of configured system parameter.

The user can configure the system parameter using the Create System Parameter screen. The status of the created system parameter is displayed as **Unauthorized** and **Open.**Once the checker authorizes the system parameter, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **System Parameter**.

3. Under **System Parameter**, click **View System Parameter**.

   The **View System Parameter** screen displays.

Figure 1-113   View System Parameter
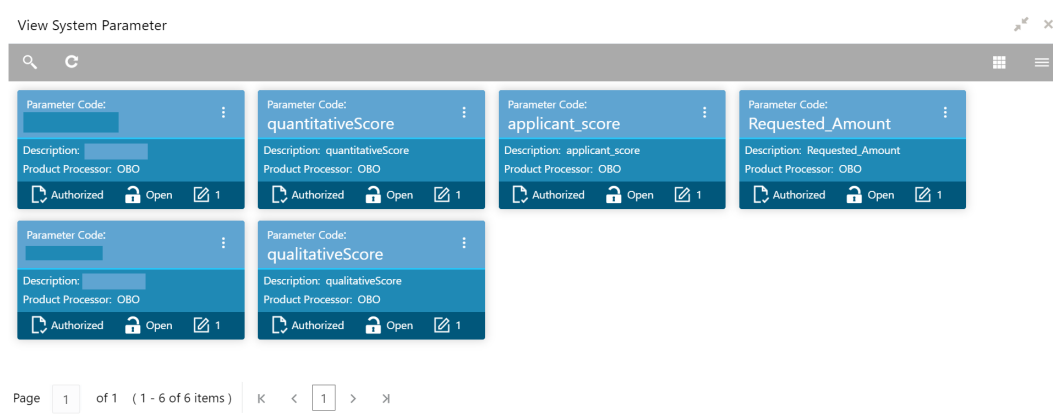
For more information on fields, refer to the field description table.

Table 1-88   View System Parameter - Field Description

Field	Description
Parameter Code	Displays the parameter code.
Description	Displays the description of the parameter code.
Product Processor	Displays the product processor of the parameter.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

5. Specify the search criteria to fetch the required system parameter.

6. Click **Search**

   The **View System Parameter - Search** screen displays.

Figure 1-114   View System Parameter - Search

For more information on fields, refer to the field description table.

Table 1-89   View System Parameter - Search - Field Description

Field	Description
Parameter Code	Specify the parameter code.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

7. Click **three-dots** icon to unlock, delete, authorize or view the created system parameter code.

8. Click **Unlock** icon to modify the fields.

   • Product processor

   • Value

   The **System Parameter Maintenance - Modify** screen displays.

Figure 1-115   System Parameter Maintenance - Modify

For more information on fields, refer to the field description table.

Table 1-90   System Parameter Maintenance - Modify - Field Description

Field	Description
Parameter Code	Displays the created system parameter code.
Parameter Description	Displays the created system parameter description.
Product Processor	Displays the product processor of the created system parameter. User can modify the same.
Value	Displays the value for the created system parameter. User can modify the same.

9. Click **Save** to update the modified fields.

10. Click **View** icon to view the created system parameter code. The fields are displayed in **System Parameter Maintenance** screen.

   The **System Parameter Maintenance - View** screen displays.

Figure 1-116   System Parameter Maintenance - View
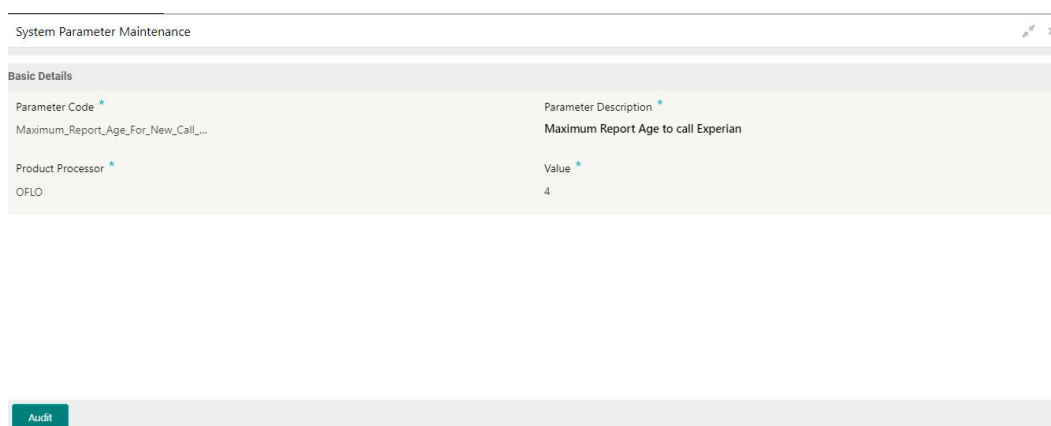
For more information on fields, refer to the field description table.

Table 1-91   System Parameter Maintenance - View - Field Description

Field	Description
Parameter Code	Displays the created system parameter code.
Parameter Description	Displays the created system parameter description.
Product Processor	Displays the product processor of the created system parameter.
Value	Displays the value for the created system parameter.

1.40 Integrating Decision Service with Oracle Banking Routing Hub

This topic describes the information to integrate the Decision service with Oracle Banking Routing Hub.

This topic contains the following subtopics:

- Oracle Banking Routing Hub Configuration
  This topic describes the information about Oracle Banking Routing Hub Configuration for the Decision service.

- Oracle Banking Origination to Decision Service Configuration
  This topic describes the information about Oracle Banking Origination to Decision Service Configuration

1.40.1 Oracle Banking Routing Hub Configuration

This topic describes the information about Oracle Banking Routing Hub Configuration for the Decision service.

- Service Consumers
  This topic describes systematic instructions to configure the service consumers.

- Service Providers
  This topic describes the systematic instructions to configure the service providers.

1.40.1.1 Service Consumers

This topic describes systematic instructions to configure the service consumers.

The **Service Consumer** is an Oracle product that invokes Oracle Banking Routing Hub API. Oracle Banking Routing Hub analyses, evaluates the destination product processor and, transforms the data into a format of the same.
The **Service Consumer** comprises the source and destination integration details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Routing Hub**.

2. Under **Routing Hub**, click **Service Consumers**.

   The **Service Consumers** screen displays.

Figure 1-117   Service Consumers
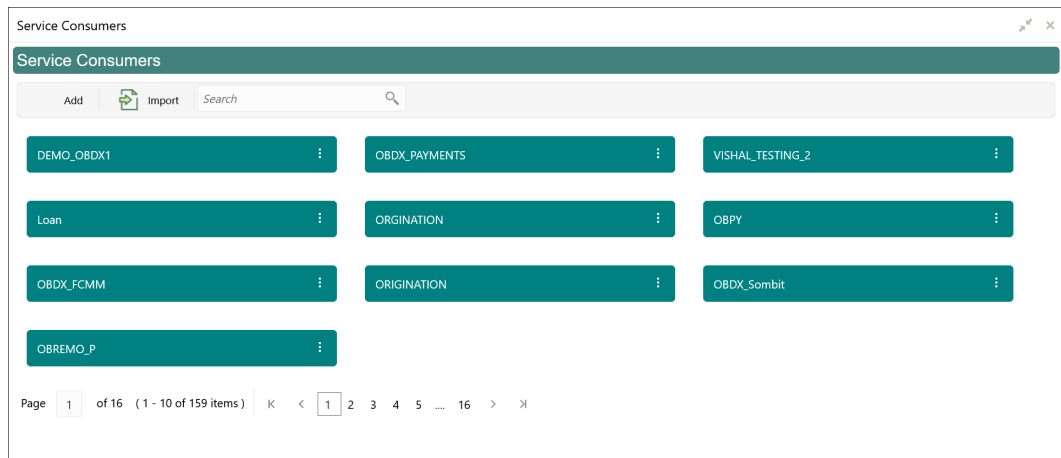
Add Service Consumer

3. Click **Add**.

The **Add Service Consumer** screen displays.

Figure 1-118   Add Service Consumer
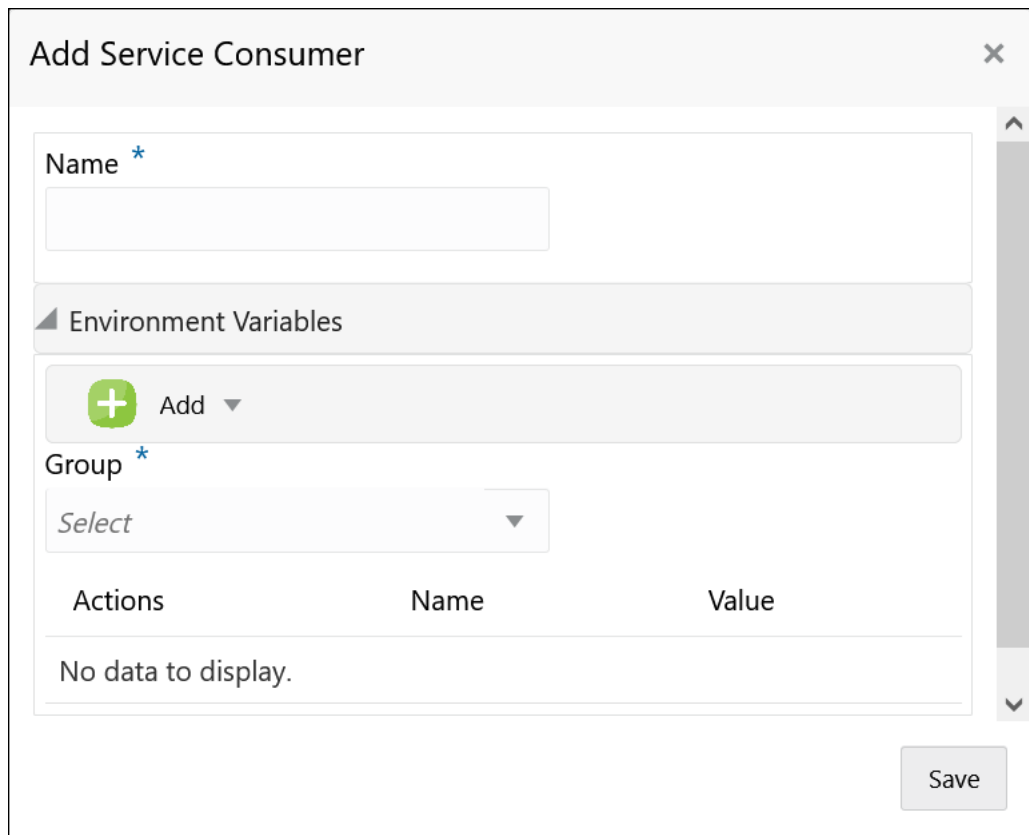
4. Specify the fields on **Add Service Consumer** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-92   Add Service Consumer - Field Description

Field	Description
Name	Specify the name of the service consumer. > ✎ **Note:** > • Enter 0 to maximum of 255 characters. > • No numeric value at beginning and no space allowed.
Add	To add, refer to step 5. Select the group from the drop-down list. The available options are: • **Group** • **Variable**
Group	Select the group from the drop-down list.
Action	Displays the action. The user can edit or delete the header.
Name	Displays the name of the header.
Value	Displays the value of the header.

Environment Variables:
The user must define the group of variables which can be accessed throughout the specific consumer's configuration.

The syntax for accessing environment variables is below: $env.Environment_Group_Name.Environment_Variable_Name

For example, $env.COMMON.BRANCH_CODE

5. To add **Environment Variables**, follow below steps.

   a. On **Add Service Consumers**, click **Add** and select **Group** from drop-down list to add the group.

      The **Add Environment Group** screen displays.

Figure 1-119   Add Environment Group

b. Specify the fields on **Add Environment Group** screen and click **OK**.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-93   Add Environment Group - Field Description

Field	Description
Name	Specify the name of the environment group. > **Note:** > - Enter 0 to maximum of 255 characters. > - No numeric value at beginning and no space allowed.

c. Click **Add** on **Add Service Consumer** screen and select **Variable** from drop-down list to add the variable.

The **Add Environment Variable** screen displays.

Figure 1-120   Add Environment Variable

d. Specify the fields on **Add Environment Variable** screen and click **OK**.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-94   Add Environment Variable - Field Description

Field	Description
Name	Specify the name of the environment variable. > **Note:** > • Enter 0 to maximum of 255 characters. > • No numeric value at beginning and no space allowed.
Value	Specify the value of the environment variable. The value can either be hardcoded or Velocity mapping.

6. Click **Save** to save the details.

The **Confirmation** screen displays.

Figure 1-121   Confirmation - Add Service Consumers
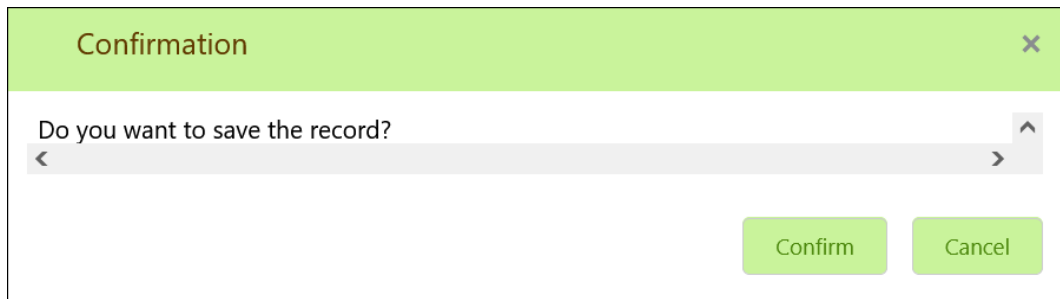
7. Click **Confirm** to save the record.

Import Service Consumer

8. Click **Import**.

The **Import Service Consumer** screen displays.

Figure 1-122   Import Service Consumer
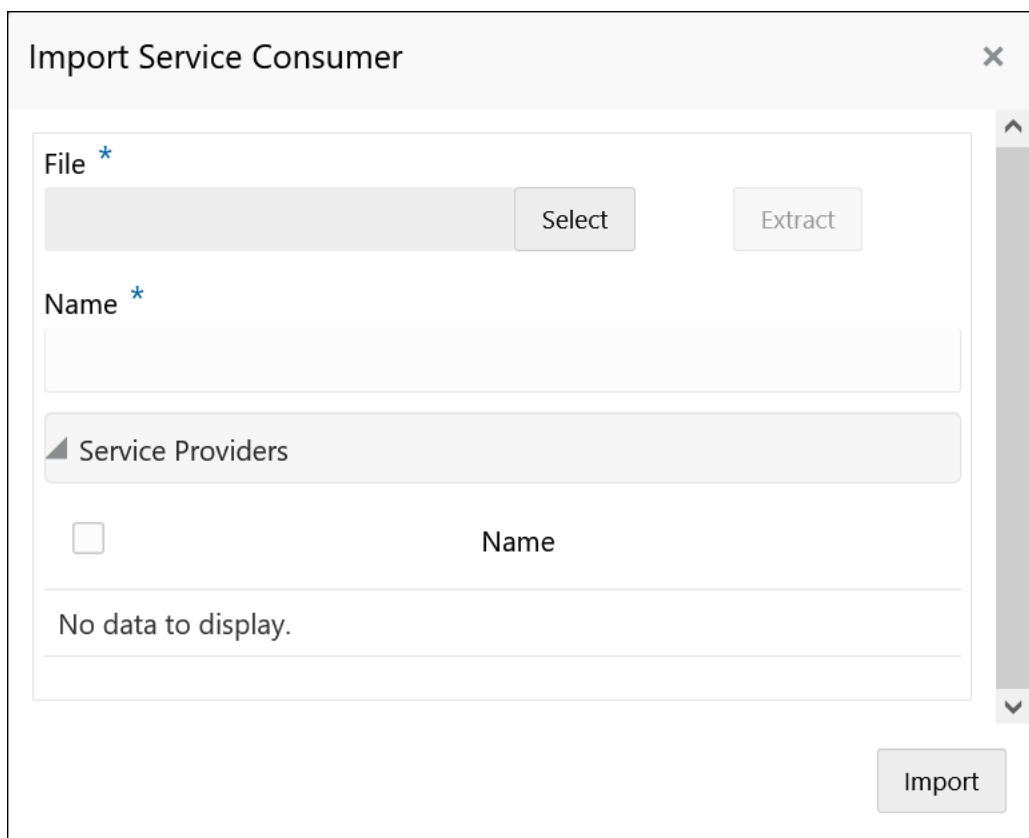
9. Specify the fields on **Import Service Consumer** screen and click **OK**.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-95   Import Service Consumer - Field Description

Field	Description
File	Select the file using **Select**. **Note:** Allows only to select one file and accepts only JSON file.
Extract	Extracts the consumer name and service provider list from JSON file and displays it in the respective elements.
Name	Specify the name of the service provider. **Note:** • Enter 0 to maximum of 255 characters. • No numeric value at beginning and no space allowed.
Name	Displays the list of service providers names that are present in JSON file.

10. Click **Import** to import the selected file.

   The **Confirmation** screen displays.

Figure 1-123   Confirmation - Import Service Consumer
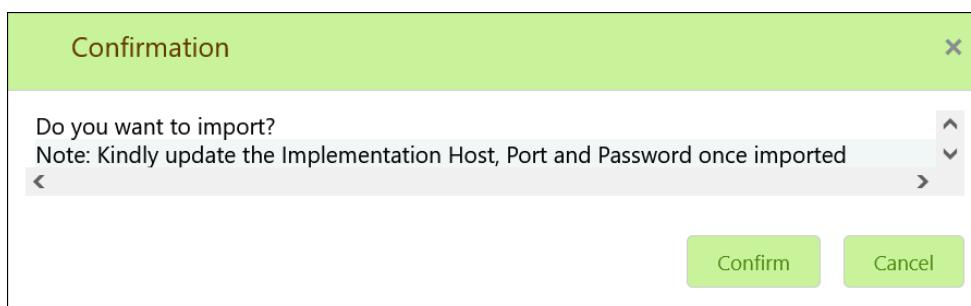
11. Click **Confirm** to import the service consumer.

> **✎ Note:**
>
> Below data needs to be changed after importing provider configuration file:
> - Implementation Host and Port
> - Implementation Authentication Password
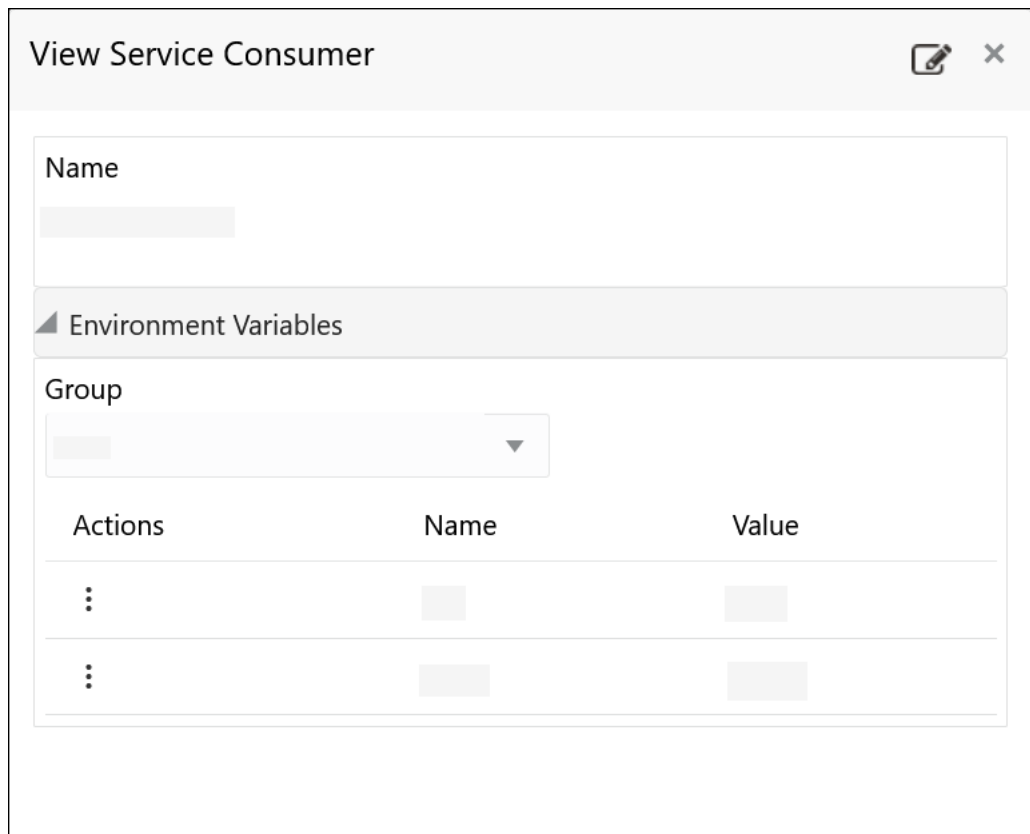
View Service Consumer

12. Click 3 dots button (operation menu) and click **View**.

    The **View Service Consumer** screen displays.

Figure 1-124   View Service Consumer

The user can click edit button to edit the **Service Consumer**.

Edit Service Consumer

13. Click 3 dots button (operation menu) and click **Edit**.

    The **Edit Service Consumer** screen displays.

Figure 1-125   Edit Service Consumer

14. Click **Save** once the edit is done.

    The **Confirmation** screen displays.

Figure 1-126   Confirmation - Edit Service Consumer

15. Click **Confirm** to save the record.

Delete Service Consumer

16. Click 3 dots button (operation menu) and click **Delete**.

    The **Confirmation** screen displays.

Figure 1-127   Confirmation - Delete Service Consumer
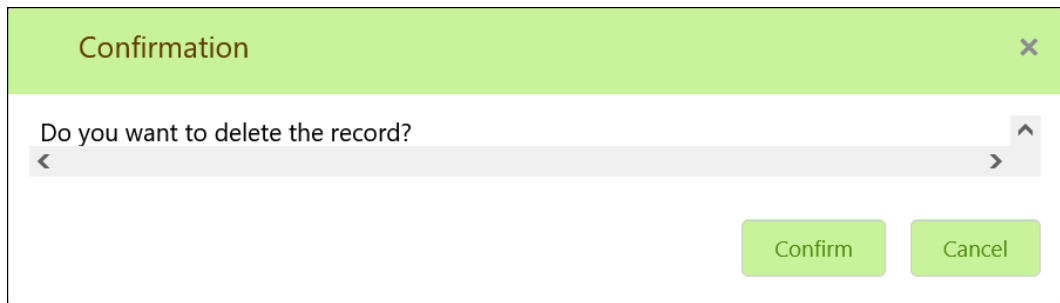
17. Click **Confirm** to delete the record.

Export Service Consumer in JSON

18. Click 3 dots button (operation menu) and click **Export**. Select **JSON**.

The **Export Service Consumer** screen displays.

Figure 1-128   Export Service Consumer - JSON
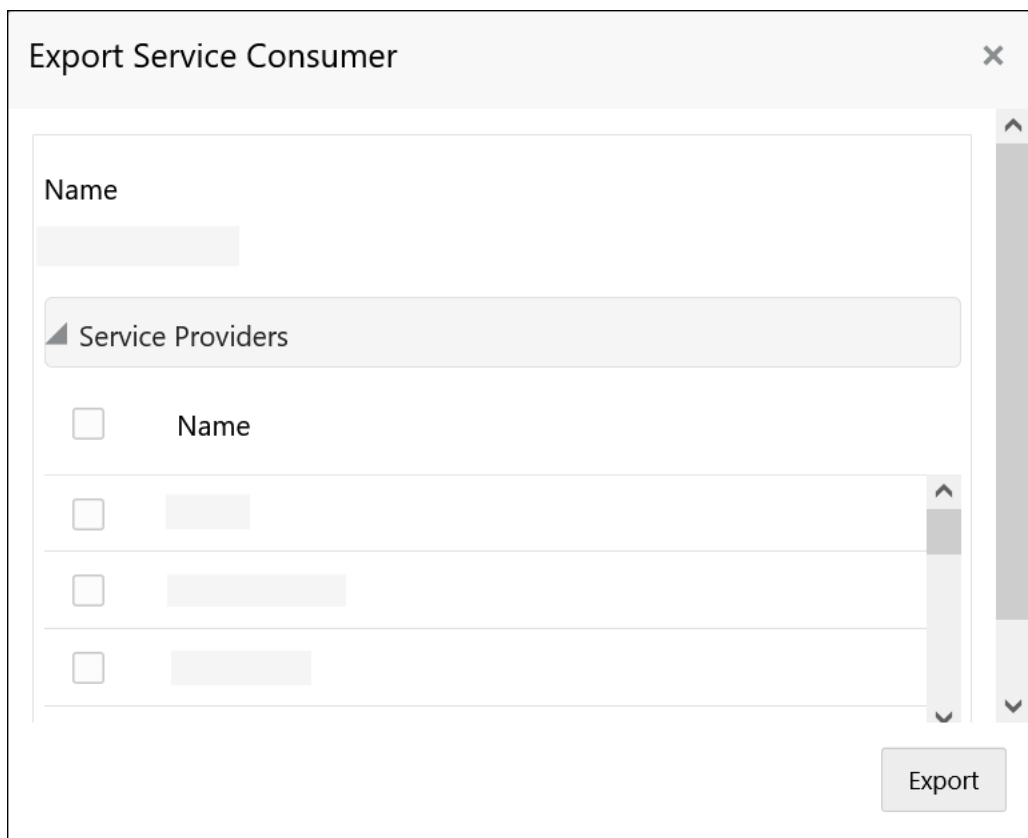
> **✎ Note:**
>
> - The user has an option to select service providers from the list which needs to be exported or can click on select all for all service providers.
> - The JSON Export feature exports below data:
>   - Selected service consumer
>   - All consumer services
>   - Selected service providers with services
>   - Default implementation of selected service providers with services (without Host, Port and Authentication Password)
>   - Default transformations
>   - All default implementation routes

19. Select the required service providers and click **Export**.

The **Confirmation** screen appears.

Figure 1-129   Confirmation - Export Service Consumer in JSON
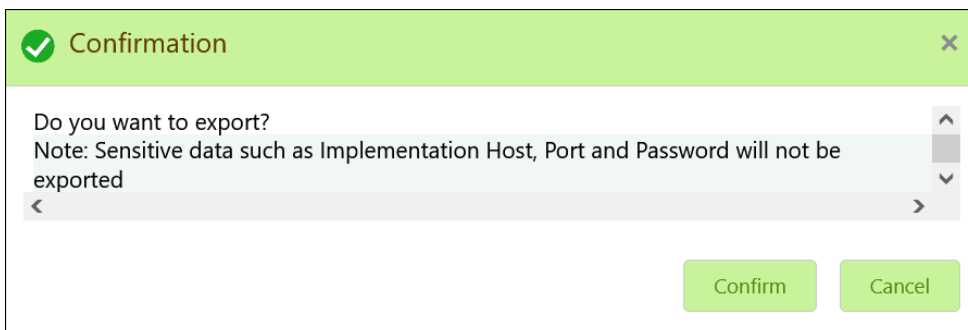
20. Click **Confirm** to export in JSON.

Export Service Consumer in SQL

21. Click **Export** and select **SQL**.

The **Confirmation** screen appears.

Figure 1-130   Confirmation
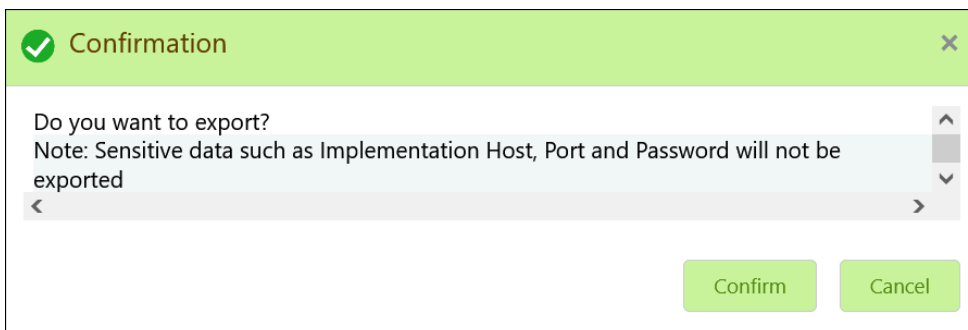
> **Note:**
>
> The SQL Export feature exports entire configuration without Host, Port, and Authentication Password details.

22. Click **Confirm** to export the Service Consumer in SQL.

1.40.1.2 Service Providers

This topic describes the systematic instructions to configure the service providers.

The **Service Providers** are the product processors configure to process request send by oracle banking routing hub on behalf of service consumers. It comprises of the destination integration details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** Screen, click **Core Maintenance**, Under **Core Maintenance**, click **Routing Hub**.

2. Under **Routing Hub**, click **Service Consumers**.

3. On **Service Consumers** screen, click the required service consumer.

The **Service Providers** screen displays.

Figure 1-131   Service Providers
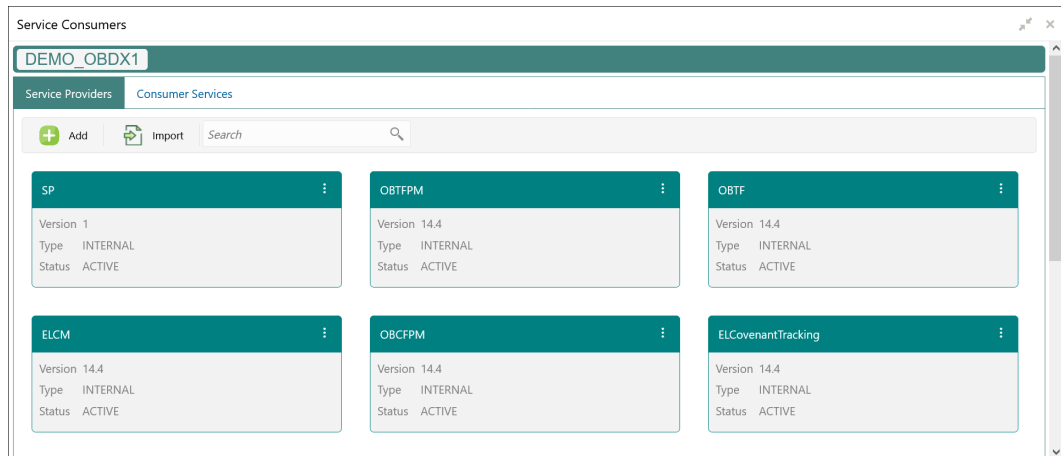
To Add Service Provider

4. Click **Add**.

The **Add Service Provider** screen displays.

Figure 1-132   Add Service Provider

5. Specify the fields on **Add Service Provider** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-96   Add Service Provider - Field Description

Field	Description
Product Name	Specify the product name of the service provider. **Note:** • Enter 0 to maximum of 255 characters. • No numeric value at beginning and no space allowed.
Type	Select the type of service provider from drop-down list The available options are: • **INTERNAL** • **EXTERNAL**
Version	Specify the provider version. **Note:** • Enter 0 to maximum of 255 characters. • Only numeric or decimal values are allowed.
Active	Predefined values are Active / Inactive If provider is marked as inactive, then all related routes will be stopped.
Add	To add, refer to step 4.
Actions	Displays the action. The user can edit or delete the header.
Name	Displays the name of the header.
Value	Displays the value of the header.
Type	Select the type of service from drop-down list. The available options are: • **WSDL** • **SWAGGER**
URL	Specify the service URL of the file location.
Import	Click **Import** to extract the service information from URL.
Service	Displays the extracted service from the selected URL.
Operation	Displays the extracted operation from the selected URL.

Headers

External product processor might require some standard headers to be passed along with the request. User can specify the headers which are required by service endpoints for its all implementations but not present in swagger file.

6. To add **Headers**, follow below steps.

   a. Click **Add**.

      The **Add Header** screen displays.

Figure 1-133   Add Header

b.   Specify the fields on **Add Header** screen and click **OK**.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-97   Add Header - Field Description

Field	Description
Name	Specify the name of the header.
Value	Specify the value of the header.

7.   Click **Save** to save the details.

The **Confirmation** screen displays.

Figure 1-134   Confirmation

8. Click **Confirm** to save the record.

Import Service Provider

9. Click **Import**.

The **Import Service Provider** screen displays.

Figure 1-135   Import Service Provider

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-98   Import Service Provider - Field Description

Field	Description
File	Select the file using **Select** button. > **Note:** > Allows only to select one file and accepts only JSON file.

10. Click **Import** to import the selected file.

The **Confirmation** screen displays.

Figure 1-136   Confirmation - Import
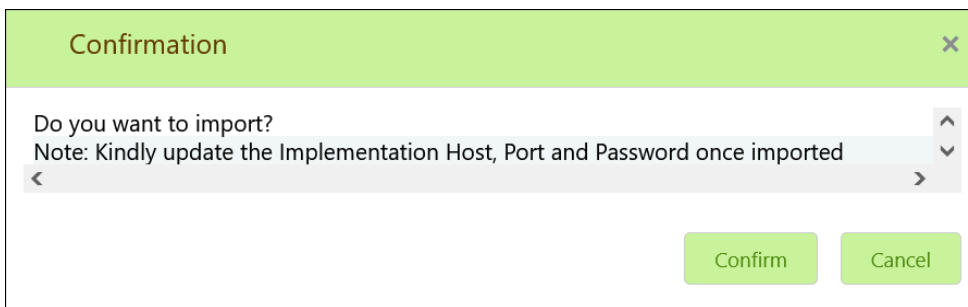
> **Note:**
>
> Below data needs to be changed after importing provider configuration file:
>
> - Implementation Host and Port
> - Implementation Authentication Password

11. Click **Confirm** to import the record.

View Service Provider

12. Click 3 dots button (operation menu) and click **View**.

The **View Service Provider** screen displays.

Figure 1-137   View Service Provider
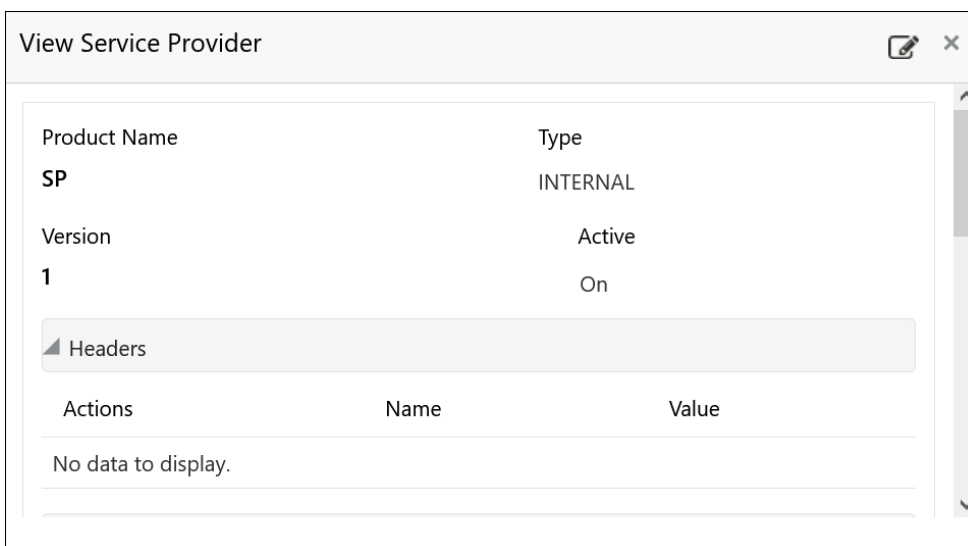
The user can click edit button to edit the **Service Provider**.

Edit Service Provider

13. Click 3 dots button (operation menu) and click **Edit**.

The **Edit Service Provider** screen displays.

Figure 1-138   Edit Service Provider

14. Click **Save** once the edit is done.

The **Confirmation** screen displays.

Figure 1-139   Confirmation - Edit Service Provider

15. Click **Confirm** to save the record.

Delete Service Provider

16. Click 3 dots button (operation menu) and click **Delete**.

The **Confirmation** screen displays.

Figure 1-140   Confirmation - Delete Service Provider
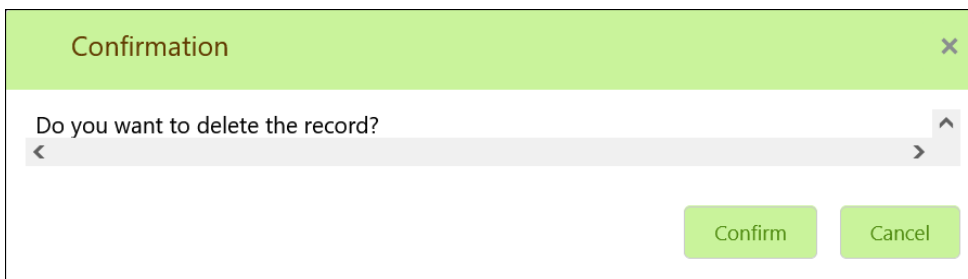
17. Click **Confirm** to delete the record.

Export Service Provider

18. Click 3 dots button (operation menu) and click **Export**.

    The **Confirmation** screen displays.

Figure 1-141   Confirmation - Export Service Provider
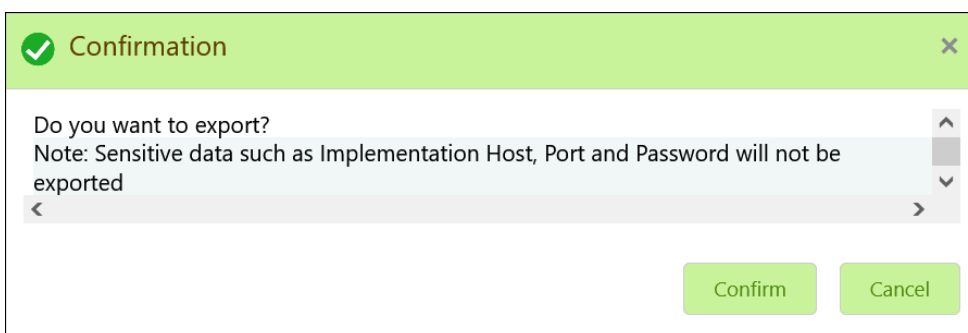
> ✏️ **Note:**
>
> The following data cannot be exported:
>
> • Implementation Host
>
> • Implementation Port
>
> • Implementation Authentication Password
>
> The above data needs to be configured manually after importing the configuration file. Same has been mentioned in Import section.

19. Click **Confirm** to export the record.

1.40.2 Oracle Banking Origination to Decision Service Configuration

This topic describes the information about Oracle Banking Origination to Decision Service Configuration

This topic contains the following subtopics:

- Fetch Credit Decision
  This topic describes about the figures for the fetch credit decision.

1.40.2.1 Fetch Credit Decision

This topic describes about the figures for the fetch credit decision.

Figure 1-142   Fetch Credit Decision – Header
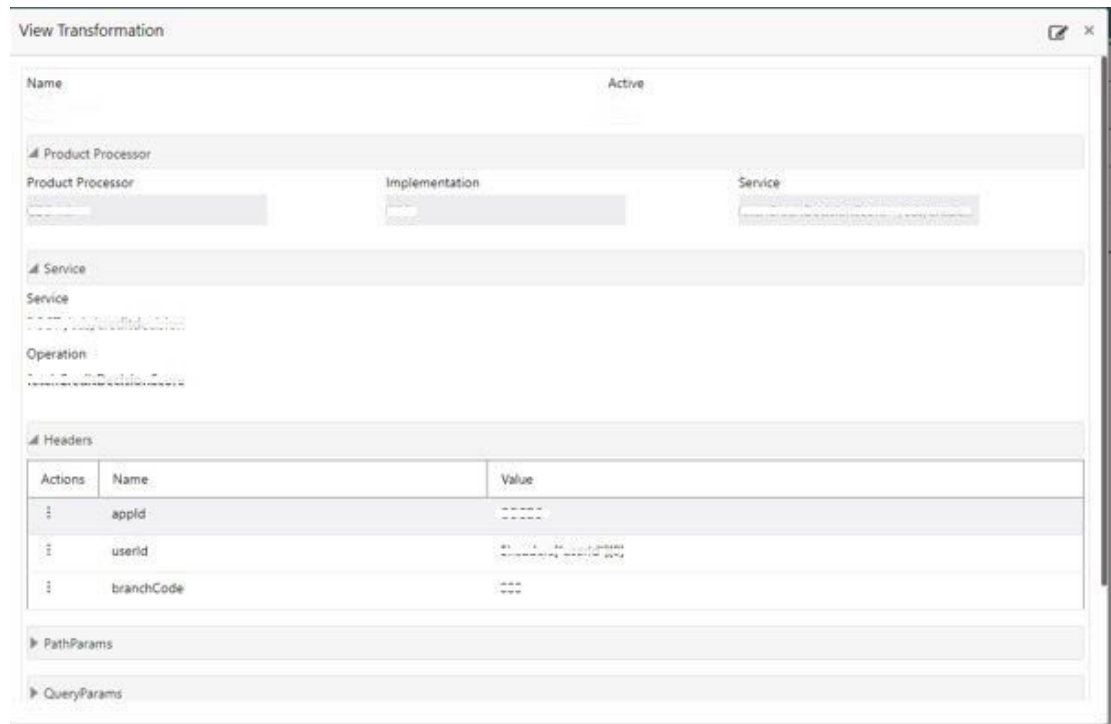
Figure 1-143   Fetch Credit Decision – Transformation
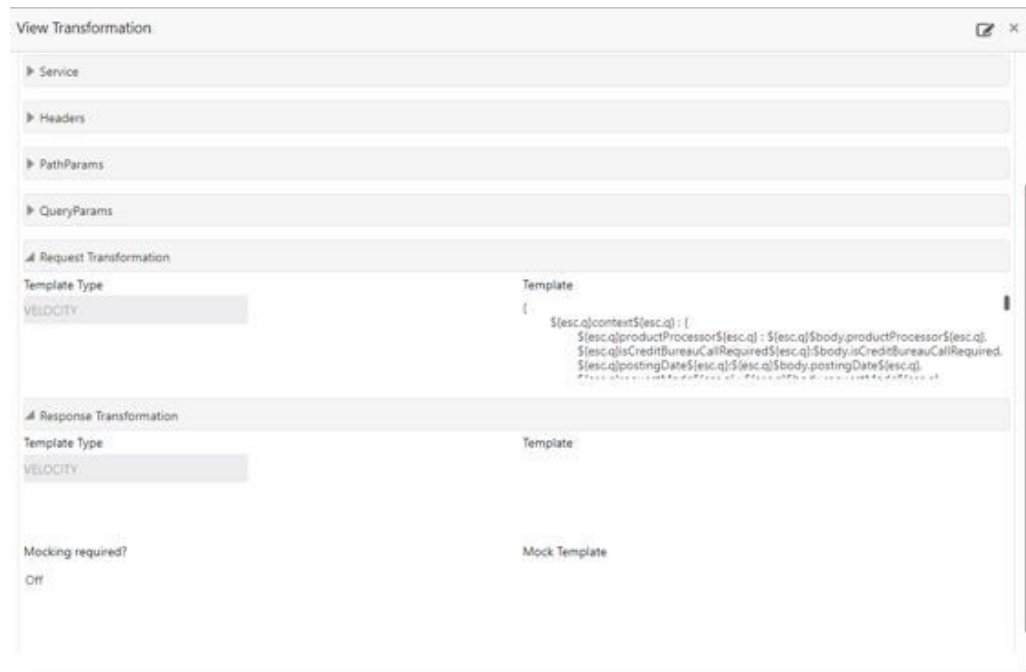
Figure 1-144   Consumer Services

1.41 Decision Service

This topic describes the information about decision service.

This topic contains the following subtopics:

- Overview
  This topic describes the overview about the Decision service.

- Process Flow
  This topic describes the information about the entire process flow for the Decision service.

- Strategy Configuration
  This topic describes the information about the strategy configuration for Decision service.

1.41.1 Overview

This topic describes the overview about the Decision service.

The Decision service provides automatic decision making capabilities that can allow lenders to develop simple business processes and strengthen the decision-making process.

It gives flexibility to adjust the credit scoring model according to the lending policy.

When an organization calls the decision service to make a decision based on data attributes shared, system solves the best fit scoring model and provide scores and decisions.

Decision Service is a robust and scalable system that can be easily integrated with any product processor providing auto decision capability and risk based pricing.

Figure 1-145   Decision Service Overview
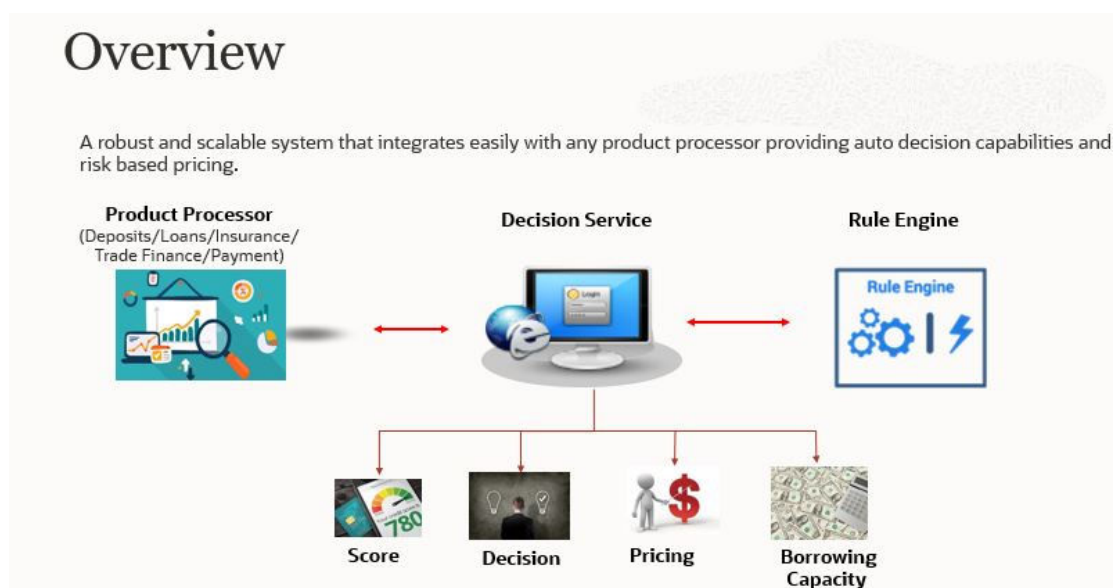
Decision service can be called from various product processor such as Collections, Deposits, Loans, Insurance, Trade Finance or Payment etc. This product processor calls the decision service and the decision service intern uses the rule engine to configure various complex rules.

The decision service can calculate behavioral scores and suggest the best recommended collection strategy accordingly. For lending products, it can offer a credit score, a decision based on the score, the recommended rate of interest and the ability to calculate which is the maximum amount that can be borrowed by the applicant.

1.41.2 Process Flow

This topic describes the information about the entire process flow for the Decision service.

Figure 1-146   Decision Service - Process Flow
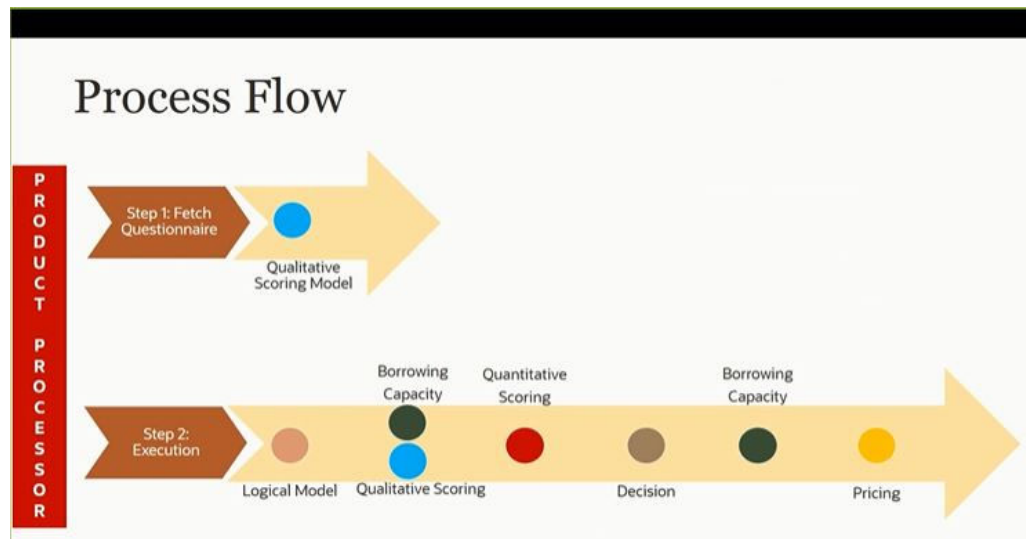
Questionnaire

The first step is to get the questionnaire. The product processor sends the data of all the applicants in the application. A qualitative scoring model is resolved for each applicant and this information along with the details of the questionnaire is sent back to the product processor. The product processor captures the response to the questions and sends back as part of the second step which is the execution of the credit decision.

Validation Model

First step in execution of the credit decision is validation screening. In this application prescreening is done to check the basic eligibility of the application as per the bank's policy. For example, if the bank's policy is not to fund to property in flood prone area, then as a part of this step, if the property is in flood prone area then the application will be rejected and the application will not be processed further. Or the applicant's minimum age should be more then 18 and the applicant applying is of less than 18, in that case the application is rejected, and it will not be processed further.

Borrowing Capacity

Once eligibility is checked, the next step is borrowing capacity. This is the maximum loan amount the applicant is eligible for. The stage at which it is to be calculated depends on the configuration made. It can be calculated before the scoring after the decision. The loan amount considered for decision is minimum of requested loan amount or the amount calculated for scoring, decision and pricing.

Qualitative Score

After borrowing capacity, the next step is qualitative scoring done using the feedback from the applicants for questionnaire.

Quantitative Score

After qualitative scoring next step is quantitative scoring where scoring is done using application and bureau attributes such as salary, number of credit lines, bureau score, etc.

Decision and Grade

The decision on the application is done based on the quantitative and qualitative scores. The decision can be approve, manual or decline.

The borrowing capacity can also be calculated after the decision, in this case, the amount calculated will be used only for pricing.

Pricing

The last step is to determine the recommended interest rate. This is a risk-based price that refers to offering different interest rates to different customers depending on their risk exposure.

1.41.3 Strategy Configuration

This topic describes the information about the strategy configuration for Decision service.

Decision service is used for multiple purposes such as borrowing capacity, borrowing capacity plus pricing, only pricing, only decision, logical plus decision, etc. System should have an ability to configure the strategy like when the decision service is being called for borrowing capacity, should the request pass through the logical check. In addition, the product processor can configure different strategies for different product types or customer types. Strategy configuration allows the product processor to configure the strategy as per its requirements for all the modes for which decision service can be called. Separate strategy can be defined for origination, servicing or collection. In addition, multiple strategy can be defined for the same module like for origination, that is, multiple strategy can be defined. This maintenance allows the product processor to configure the strategy according to its need for all the modes for which the decision service can be called for.

The various request types using which the product processor can call the decision service are mentioned below:

- Score, Decision, and Pricing
- Score and Decision
- Scores
- Pricing and Borrowing Capacity
- Pricing
- Borrowing Capacity
- Decision
- Qualitative Score
- Quantitative Score

1.42 Product Processor

This topic describes the information about the product processor.

The source system calling the decision system for decisioning the credit application is defined as product processor. There are multiple data segments like account information, customer details, collateral details, credit bureau information or any additional notes if any is received from the product processor for credit decisioning and pricing in decision service.

This topic contains the following subtopics:

- Create Product Processor
  This topic describes the systematic instructions to create product processor by updating various details.

- View Product Processor
  This topic describes the systematic instructions to view the list of product processor.

1.42.1 Create Product Processor
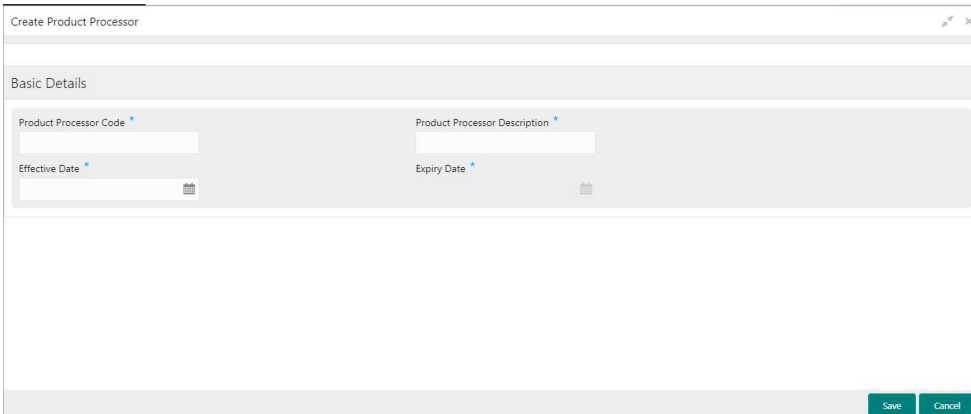
This topic describes the systematic instructions to create product processor by updating various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **Product Processor**.

3. Under **Product Processor** , click **Create Product Processor**.

   The **Create Product Processor** screen displays.

Figure 1-147   Create Product Processor

4. Specify the fields on **Create Product Processor** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-99   Create Product Processor - Field Description

Field	Description
Product Processor Code	Specify the unique product processor code.
Product Processor Description	Specify the short description for product processor.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.

5. Click **Save** to save the details.

    The product processor is successfully created and can be viewed using the View Product Processor screen.

1.42.2 View Product Processor

This topic describes the systematic instructions to view the list of product processor.

The user can create the product processor using the Create Product Processor screen. The status of the created system parameter is displayed as **Unauthorized** and **Open.**Once the checker authorizes the system parameter, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Bureau**.

2. Under **Credit Bureau**, click **Maintenance**. Under **Maintenance**, click **Product Processor**.

3. Under **Product Processor** , click **View Product Processor** .

    The **View Product Processor** screen displays.

Figure 1-148   View Product Processor

For more information on fields, refer to the field description table.

Table 1-100   View Product Processor - Field Description

Field	Description
Product Processor Code	Displays the product processor code.
Product Processor Description	Displays the description of the product processor.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

5. Specify the search criteria to fetch the required product processor.

   The **View Product Processor - Search** screen displays.

   Figure 1-149   View Product Processor - Search

   For more information on fields, refer to the field description table.

   Table 1-101   View Product Processor - Search - Field Description

Field	Description
Product Processor Code	Specify the product processor code.
Product Processor Description	Specify the product processor description.
Authorization Status	Select the authorization status of the product processor. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status of the product processor. The available options are: • **Open** • **Closed**

6. Click **Search**.

7. Click **three-dots** icon to modify, delete, authorize or view the created product processor.

8. To authorize the product processor, refer to the Authorization process.

9. Click **Unlock** icon to modify the following fields. The fields are displayed in the **Prodcuct Processor Maintenance** screen.

   • Product Processor Description

   • Effective date, before authorisation

   • Expiry Date

   The **Product Processor Maintenance - Unlock** screen displays.

   Figure 1-150   Product Processor Maintenance - Unlock

   For more information on fields, refer to the field description table.

   Table 1-102   Product Processor Maintenance - Unlock - Field Description

Field	Description
Product Processor Code	Displays the product processor code.
Product Processor Description	Displays the product processor description. User can modify the same.
Effective Date	Displays the effective date of the created product processor. User can modify the same before authorization if it is future dated.
Expiry Date	Displays the expiry date of the created product processor. User can modify the same.

10. Click **Save** to update the modified fields.

11. Click **View** icon to view the created product processor.

    The **Product Processor Maintenance - View** screen displays.

Figure 1-151   Product Processor Maintenance - View

For more information on fields, refer to the field description table.

Table 1-103   Product Processor Maintenance - View - Field Description

Field	Description
Product Processor Code	Displays the product processor code.
Product Processor Description	Displays the product processor description.
Effective Date	Displays the effective date of the created product processor.
Expiry Date	Displays the expiry date of the created product processor.

1.43 Lookups

This topic describes the information about the lookups feature in Decision service.

The lookups are the service for mapping of keys and values used to enrich the description of the data displayed to the user. The lookup screen allows user to define contents for a list of drop-down or value fields. These are used throughout the system. The identified fields only accept the entries stored.

Below are some examples of the lookup fields.

• Static/Enumeration values

   – Decision: Like Approve, Decline, Manual.

   – Colour – like red, green etc. Colour is used to highlight the decision i.e. Approve to be highlighted in Green, Reject can be highlighted in Red. The colour and decision combination is configurable.

   – Grade like A, B, C etc.

   – Strategy Configuration Code

   – ScoringModelType,

   – ExecutionSteps,

   – ExecutionModes,

   – BWCExecStage,

– QuestionType,

– QuestionSubType

- Dependent lookups based on another selection

    – Pricing lookup - Based on decision, Pricing should have different behaviour based on decision.

This topic contains the following subtopics:

- Create Lookups
  This topic describes the systematic instructions to create lookup definitions by updating various details.

- View Lookups
  This topic describes the systematic instructions to view the list of configured lookups for Decision service.

1.43.1 Create Lookups

This topic describes the systematic instructions to create lookup definitions by updating various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision** , click **Maintenance**. Under **Maintenance**, click **Lookups**.

3. Under **Lookup**, click **Create Lookups**.

   The **Create Lookups** screen displays.

   Figure 1-152   Create Lookups

4. Specify the fields on **Create Lookups** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-104   Create Lookups - Field Description

Field	Description
Lookup Type	Specify the unique lookup type name.
Description	Specify the short description for lookup.
+ button	Click to add a new row.
- button	Click to delete a row that is already added.
Lookup Code	Specify the unique lookup code.
Description	Specify the short description for lookup.
Sort Order	Specify the sort order.
Dependent Identifier	Specify the dependent Identifier.
Enable	By default this option is enabled. Indicates if the lookup is enabled or not.

5. Click **Save** to save the details.

   The lookups is successfully created and can be viewed using the View Lookups screen.

1.43.2 View Lookups

This topic describes the systematic instructions to view the list of configured lookups for Decision service.

The user can configure the lookups using the Create Lookups screen. The status of the created lookups is displayed as **Unauthorized** and **Open**. Once the checker authorizes the lookups, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision** , click **Maintenance**. Under **Maintenance**, click **Lookups**.

3. Under **Lookups**, click **View Lookups**.

   The **View Lookups** screen displays.

Figure 1-153   View Lookups
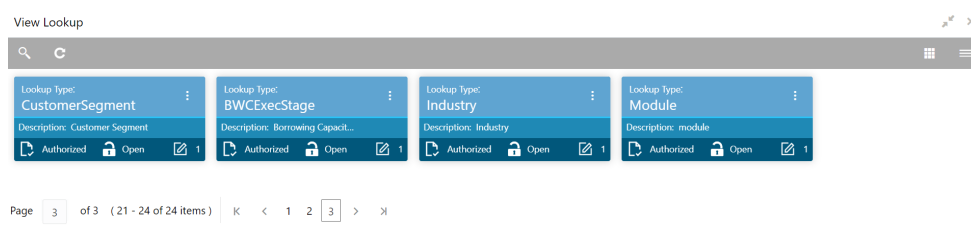
For more information on fields, refer to the field description table.

Table 1-105   View Lookups - Field Description

Field	Description
Lookup Type	Displays the lookup type.
Description	Displays the description of the lookup type.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

   The **View Lookups - Search** screen displays.

Figure 1-154   View Lookups - Search
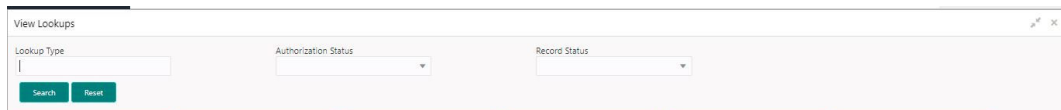
For more information on fields, refer to the field description table.

Table 1-106   View Lookups – Search – Field Description

Field	Description
Lookup Type	Specify the lookup type.
Authorization Status	Select the authorization status of the lookups. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status of the lookup. The options are: • **Open** • **Closed**

5. Click **Search**.

6. Click **three-dot** icon unlock, delete, authorize or view the created lookups.

7. Click **Unlock** icon to modify the fields.

   • Description

   • Lookup Code

   • Sort Order

- Dependent Identigfier

- Enable

The **Lookup Maintenance - Modify** screen displays.

Figure 1-155   Lookup Maintenance - Modify

For more information on fields, refer to the field description table.

Table 1-107   Lookup Maintenance - Modify - Field Description

Field	Description
Lookup Type	Displays the created lookup type.
Description	Specify the description of the lookup type.
Lookup Code	Displays the lookup code for the created lookup.
Description	Displays the description for the created lookup.
Sort Order	Displays the sort order for the created lookup.
Dependent Identifier	Displays the dependent identifier for the created lookup.
Enable	Displays the lookup code if enabled for the created lookup.

8. Click **Save** to update the modified fields.

9. Click **View** icon to view the created lookup code.

   The **Lookup Maintenance - View** screen displays.

Figure 1-156   Lookup Maintenance - View

For more information on fields, refer to the field description table.

Table 1-108   Lookup Maintenance - View - Field Description

Field	Description
Lookup Type	Displays the created lookup type.
Description	Displays the created lookup type description.
Lookup Code	Displays the lookup code for the created lookup.
Description	Displays the description for the created lookup.
Sort Order	Displays the sort order for the created lookup.
Dependent Identifier	Displays the dependent identifier for the created lookup.
Enable	Displays the lookup code if enabled for the created lookup.

1.44 System Parameter

This topic describes the information about the system parameter configured in Decision service.

System Parameter define the information or values used throughout the system and drives the behavior of the features. They control the way task is executed, or whether the system performs a particular task. Some of the parameters are set when the system is installed, but the values associated with the parameter needs to be reviewed and is to be maintained.

Example:

- qualitativeScore

- quantitativeScore

- applicant_score

- Requested Amount

- CDS GRADE

The fact associated to these system parameters are used programmatically and added in the pool of facts. To define the system parameters, the keys of the system parameters have to be defined in a lookup called SYSPARAM.

This topic contains the following subtopics:

- Create System Parameter
  This topic describes the systematic instructions to create system parameter by updating the various details.

- View System Parameter
  This topic describes the systematic instructions to view the list of configured system parameter.

1.44.1 Create System Parameter

This topic describes the systematic instructions to create system parameter by updating the various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **System Parameter**.

3. Under **System Parameter** , click **Create System Parameter**.

   The **Create System Parameter** screen displays.

   Figure 1-157   Create System Parameter

4. Specify the fields on **Create System Parameter** screen.

   > **Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

Table 1-109   Create System Parameter - Field Description

Field	Description
Parameter Code	Select the parameter code from the drop-down list.
Parameter Description	Specify the short description for the parameter code.
Product Processor	Select the product processor from the drop-down list for which the parameter is being created.
Value	Specify the value for the parameter code.

5. Click **Save** to save the details.

   The parameters is successfully created and can be viewed using the View System Parameter screen.

1.44.2 View System Parameter

This topic describes the systematic instructions to view the list of configured system parameter.

The user can configure the system parameter using the Create System Parameter screen. The status of the created system parameter is displayed as **Unauthorized** and **Open**. Once the checker authorizes the system parameter, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **System Parameter**.

3. Under **System Parameter**, click **View System Parameter**.

   The **View System Parameter** screen displays.

Figure 1-158   View System Parameter

For more information on fields, refer to the field description table.

Table 1-110   View System Parameter - Field Description

Field	Description
Parameter Code	Displays the parameter code.
Description	Displays the description of the parameter code.
Product Processor	Displays the product processor of the parameter.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

   The **View System Parameter - Search** screen displays.

Figure 1-159   View System Parameter - Search

For more information on fields, refer to the field description table.

Table 1-111   View System Parameter - Search – Field Description

Field	Description
Parameter Code	Specify the parameter code.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

5. Click **Search**.

6. Click **three-dot** icon to unlock, delete, authorize or view the created parameters.

7. Click **Unlock** icon to modify the fields.

   The **System Parameter Maintenance - Unlock** screen displays.

Figure 1-160   System Parameter Maintenance - Unlock

For more information on fields, refer to the field description table.

Table 1-112   System Parameter Maintenance - Unlock - Field Description

Field	Description
Parameter Code	Displays the created parameter code.
Parameter Description	Displays the created parameter description.
Product Processor	Specify the product processor of the created parameter.
Value	Specify the value for the created parameter.

8. Click **Save** to update the modified fields.

9. Click **View** icon to view the created parameter code.

   The **System Parameter Maintenance - View** screen displays.

Figure 1-161   System Parameter Maintenance - View

For more information on fields, refer to the field description table.

Table 1-113   System Parameter Maintenance - View - Field Description

Field	Description
Parameter Code	Displays the created parameter code.
Parameter Description	Displays the created parameter description.
Product Processor	Displays the product processor of the created parameter.
Value	Displays the value for the created parameter.

1.45 Strategy Configuration

This topic describes the information about the strategy configuration.

Decision service is used for multiple purposes such as borrowing capacity, borrowing capacity plus pricing, only pricing, only decision, logical plus decision etc. System should have an ability to configure the strategy like when the decision service is being called for borrowing capacity, should the request pass through the logical check. In addition, the product processor can configure different strategies for different product types or customer types. Strategy configuration allows the product processor to configure the strategy as per its requirements for all the modes for which decision service can be called. Separate strategy can be defined for origination, servicing or collection. In addition, multiple strategy can be defined for the same module like for origination i.e. multiple strategy can be defined. This maintenance allows the product processor to configure the strategy according to its need for all the modes for which the decision service can be called for.

This topic contains the following subtopics:

*   Create Strategy Configuration
    This topic describes the systematic instructions to create strategy configuration as per the requirement.

*   View Strategy Configuration
    This topic describes the systematic instructions to view the list of strategy configuration.

1.45.1 Create Strategy Configuration

This topic describes the systematic instructions to create strategy configuration as per the requirement.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Strategy Configuration**.

3. Under **Strategy Configuration**, click **Create Strategy Configuration**.

    The **Create Strategy Configuration** screen displays.

Figure 1-162   Create Strategy Configuration

4. On **Create Strategy Configuration** screen, specify the fields.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-114   Create Strategy Configuration - Field Description

Field	Description
Strategy Code	Specify the unique strategy code.
Strategy Code Description	Specify the short description for the strategy code.
Product Processor	Specify the product processor for which the strategy is being configured.
Product Processor Description	Displays the product processor description.
Industry	Select the industry type from the drop-down list . The values are configurable based on the lookup values maintained. The available options are: • **Banking Industry** • **Insurance** • **Trade Finance**
Line Of Business	Select the line of business type from the drop-down list . The values are configurable based on the lookup values maintained. The available options are: • **Corporate** • **Retail** • **SMEnt**
Account Category	Indicates whether the strategy created is for asset or Liabilities.

Table 1-114   (Cont.) Create Strategy Configuration - Field Description

Field	Description
Module	Select the module from the drop-down list . The values are configurable based on the lookup values maintained. The available options are: • **Collection** • **Origination** • **Servicing**
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
+ button	Click to add a new facts.
- button	Click to delete a row that is already added.
Type	Select the fact type from the drop-down list.
Value	Select the value configured for the fact type from the drop-down list. The values are configurable based on the lookup values maintained.
Modes	Select the modes from the drop-down list. The available options are: • **Borrowing Capacity** • **decision & Grade** • **Pricing** • **Qualitative Score** • **Quantitative Score** • **Score** • **Score and Decision** • **Score, Decision & Pricing** If the **Module** is selected as **Collection**, then below options are available. • **Decision & Grade** • **Qualitative Score** • **Quantitative Score** • **Score** • **Score and Decision**
Steps	Steps are defined based on the modes selected. Example: If **Borrowing Capacity** mode is selected, the check box for borrowing capacity is by default selected and disabled. You can select the other steps.

5. Click **Save** to save the details.

   The strategy configuration is successfully created and can be viewed using the View Strategy Configuration screen.

1.45.2 View Strategy Configuration

This topic describes the systematic instructions to view the list of strategy configuration.

The user can create the strategy configuration using the Create Strategy Configuration screen. The status of the created strategy configuration is displayed as **Unauthorized** and **Open**. Once the checker authorizes the strategy configuration, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision** , click **Maintenance**. Under **Maintenance**, click **Strategy Configuration**.

3. Under **Strategy Configuration** , click **View Strategy Configuration**.

   The **View Strategy Configuration** screen displays.

   Figure 1-163   View Strategy Configuration
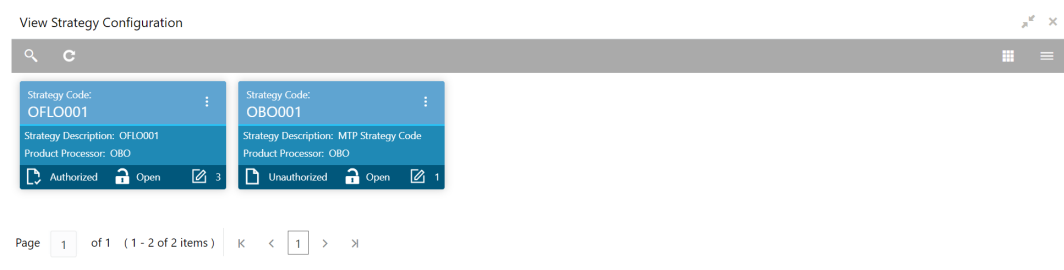
   For more information on fields, refer to the field description table.

   Table 1-115   View Strategy Configuration - Field Description

Field	Description
Strategy Code	Displays the strategy code.
Strategy Description	Displays the description of the strategy.
Product Processor	Displays the product processor of the strategy.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

5. Specify the search criteria to fetch the required strategy configuration.

   The **View Strategy Configuration - Search** screen displays.

   Figure 1-164   View Strategy Configuration - Search
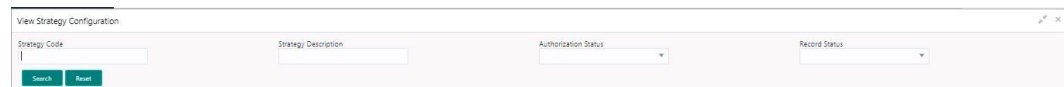
For more information on fields, refer to the field description table.

Table 1-116   View Strategy Configuration - Search – Field Description

Field	Description
Strategy Code	Specify the strategy code.
Strategy Description	Specify the description of the strategy.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

6. Click **Search**.

7. Click **three-dot** icon, to unlock delete, authorize or view the created strategy configuration.

8. To authorize the strategy configuration, see the Authorization process.

9. Click **Unlock** icon to modify the fields.

    The **Strategy Configuration Maintenance - Unlock** screen displays.

Figure 1-165   Strategy Configuration Maintenance - Unlock
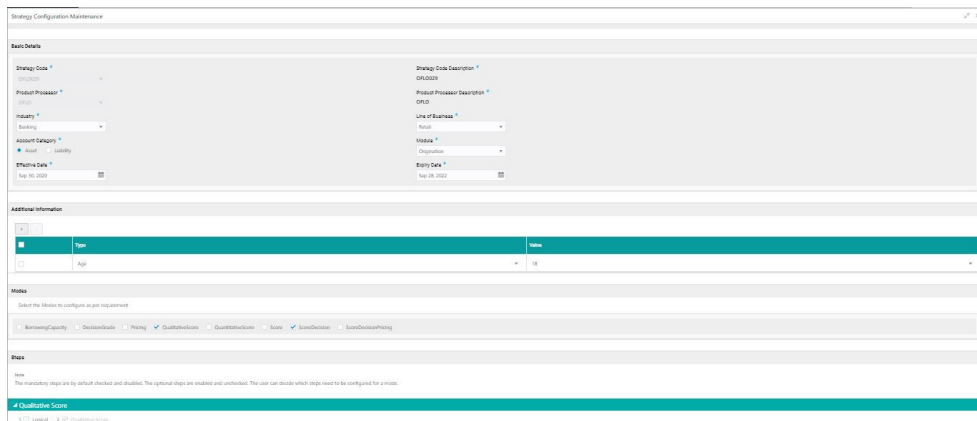
For more information on fields, refer to the field description table.

Table 1-117   Strategy Configuration Maintenance - Unlock - Field Description

Field	Description
Strategy Code	Displays the created strategy code.

Table 1-117   (Cont.) Strategy Configuration Maintenance - Unlock - Field Description

Field	Description
Strategy Code Description	Displays the created strategy code description.
Product Processor	Displays the product processor for the created strategy configuration.
Product Processor Description	Displays the product processor description for the created strategy configuration.
Account Category	Displays the account category for the created strategy configuration.
Module	Displays the module for the created strategy configuration.
Effective Date	Displays the effective date for the created strategy configuration.
Expiry Date	Select the expiry date for the created strategy configuration.
Type	Displays the fact type for the created strategy configuration.
Value	Displays the fact value for the created strategy configuration.
Steps	Specify the steps defined for the created strategy configuration.

10. Click **Save** to update the modified fields.

11. Click **View** icon to view the created strategy configuration.

    The **Strategy Configuration Maintenance - View** screen displays.

Figure 1-166   Strategy Configuration Maintenance - View
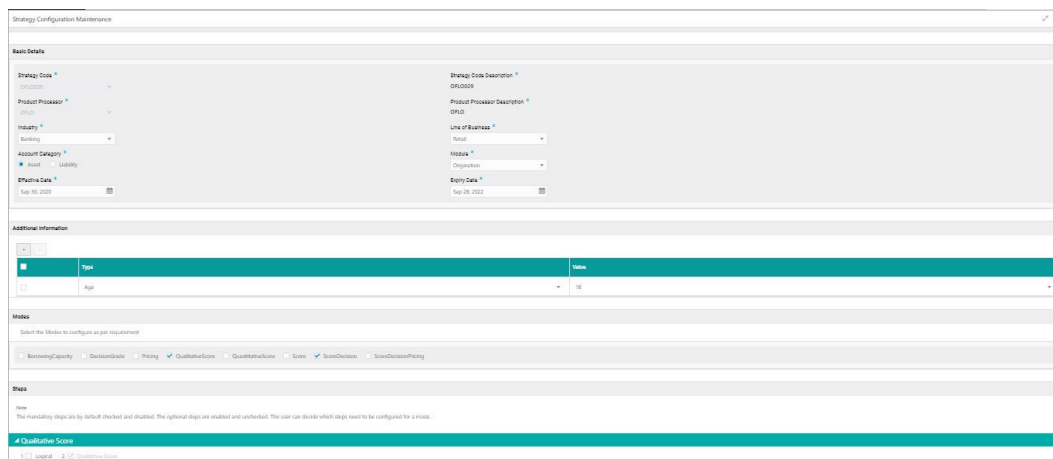
For more information on fields, refer to the field description table.

Table 1-118   Strategy Configuration Maintenance - View - Field Description

Field	Description
Strategy Code	Displays the created strategy code.
Strategy Code Description	Displays the created strategy code description.

Table 1-118   (Cont.) Strategy Configuration Maintenance - View - Field Description

Field	Description
Product Processor	Displays the product processor for the created strategy configuration.
Product Processor Description	Displays the product processor description for the created strategy configuration.
Account Category	Displays the account category for the created strategy configuration.
Module	Displays the module for the created strategy configuration.
Effective Date	Displays the effective date for the created strategy configuration.
Expiry Date	Displays the expiry date for the created strategy configuration.
Type	Displays the fact type for the created strategy configuration.
Value	Displays the fact value for the created strategy configuration.
Steps	Displays the steps defined for the created strategy configuration.

1.46 Validation Model

This topic describes the information about the Validation model.

During credit decision, system evaluates a credit score that represents the creditworthiness of an individual. Banks also do an initial evaluation by using some rules to decide whether to proceed with credit decisioning process or not. A bank can perform this evaluation by maintaining a Validation model. Multiple levels of rule can be setup in Validation model. The system will process the next step of credit decisioning only if all the rules are satisfied. If any rule fails, then system will stop the processing and decline the request.

This topic contains the following subtopics:

- Create Validation Model
  This topic describes the systematic instructions to create Validation model based on the various input.

- View Validation Model
  This topic describes the systematic instructions to view the list of configured validation model.

1.46.1 Create Validation Model

This topic describes the systematic instructions to create Validation model based on the various input.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Validation Model**.

3. Under **Validation Model**, click **Create Validation Model**.

   The **Create Validation Model** screen displays.

Figure 1-167   Create Validation Model

4. On **Create Validation Model** screen, specify the fields.

> ✏ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-119   Create Validation Model - Field Description

Field	Description
Validation Model Code	Specify the unique Validation model code.
Validation Model Description	Specify a short description for the Validation model.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the Validation model is being created.
Priority	Specify the priority of the pricing.

5. Click the **Selection Criteria** to define selection criteria rules for Validation model.

Table 1-120   Create Validation Scoring Model - Selection Criteria - Field Description

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rule Code	Select the rule code from the drop down list.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code.
Create New Rule	Select this option to create new rule.
Code	Specify the rule code.
Description	Specify the rule description.
+ icon	Click this icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once the user selects the fact/rules, one more field opens adjacent to the output, update the same based on the selected output option.
Operator	Select the comparison operator from the drop-down list. The available options are: • **<** • **>** • **+** • **=** • **%** • **!=** • **-** • **>=** • **<=** • ***** • **/** • **Contains** • **In** • **Like** • **Matches** • **NotMatches** • **NotContains** • **Notin**

Table 1-120 (Cont.) Create Validation Scoring Model - Selection Criteria - Field Description

Field	Description
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option displays if the **Data Type** is selected as **Boolean**. • **True** • **False**
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Expression	Displays the expression updated in the expression builder.

6. Click the **Validation Model** to define the pricing.

   The **Create Validation Model – Validation Model** screen displays.

Figure 1-168   Create Validation Model – Validation Model

For more information on fields, refer to the field description table.

Table 1-121   Create Validation Model – Validation Model - Field Description

Field	Description
+ icon	Click this icon to add a new row.
- icon	Click this icon to delete a row, which is already added.
Rule ID	Select the rule ID from the drop down list. All rules configured in the rule engine for the selected product processor are obtained.
	Click this icon to get the information about the rule.
Sequence	Specify the sequence of execution of rules.
Reason	Select the reason from the drop down list.
Comments	Specify the comments.

7. Click **Save** to save the details.

   The Validation model is successfully created and can be viewed using the View Validation Model screen.

1.46.2 View Validation Model

This topic describes the systematic instructions to view the list of configured validation model.

The user can configure the validation model using the Create Validation Model screen. The status of the created validation model is displayed as **Unauthorized** and **Open**. Once the checker authorizes the model, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Validation Model**.

3. Under **Validation Model**, click **View Validation Model**.

   The **View Validation Model** screen displays.

Figure 1-169   View Validation Model
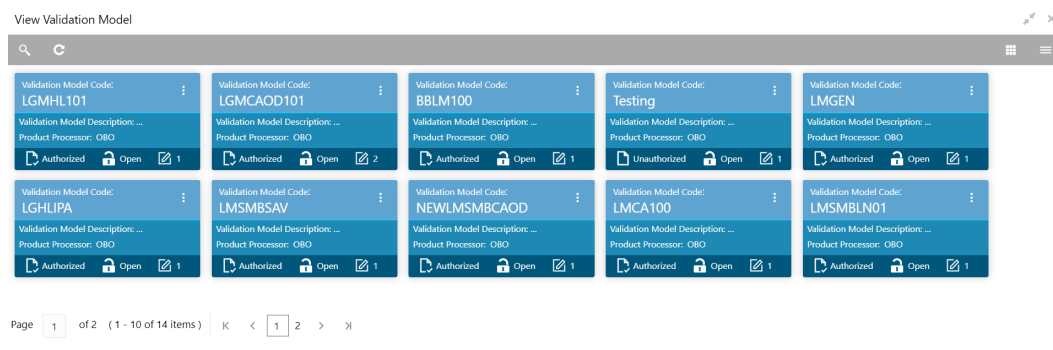
For more information on fields, refer to the field description table.

Table 1-122   View Validation Model – Field Description

Field	Description
Validation Model Code	Displays the validation model code.
Validation Model Description	Displays the description of the validation model.
Product Processor Code	Displays the product processor code.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Close**

4. Click **Search** icon.

   The **View Validation Model - Search** screen displays.

Figure 1-170   View Validation Model - Search
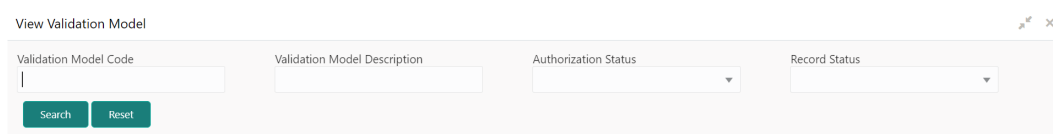
For more information on fields, refer to the field description table.

Table 1-123   View Validation Model - Search – Field Description

Field	Description
Validation Model Code	Specify the validation model code.
Validation Model Description	Specify the description of the validation model.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

5. Click **three-dots** icon to unlock, delete, authorize or view the created Validation model.

6. Click **Unlock** icon to modify the fields.

   The **Validation Model Maintenance - Unlock** screen displays.

Figure 1-171   Validation Model Maintenance - Unlock

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-124   Validation Model Maintenance - Unlock - Field Description

Field	Description
Validation Model Code	Displays the created validation model code.
Validation Model Description	The user can modify the description for the created validation model.
Effective Date	The user can modify effective date for the created validation model.
Expiry Date	The user can modify expiry date for the created validation model.
Product Processor	Displays the product processor for the created validation model.
Priority	The user can modify the priority of the created validation model.
Use Existing Rule	The user can modify the existing rule if linked.
Rule Code	The user can modify the rule code for the created validation model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	The user can modify the new rule linked to the validation model.
Code	Specify the new rule code for the created validation model.
Description	Specify the rule description for the created validation model.
+ icon	This icon can add new expression.
Fact / Rules	Displays the fact or rule of the created validation model.
Operator	Displays the comparison operator of the created validation model.
Data Type	Displays the data type for the fact or rule for the created validation model.
Output	Displays the output for the created validation model.
Expression	Displays the expression updated in the expression builder for the created validation model.
Rule ID	The user can modify the rule ID of the created validation model.
	Click this icon to get the information about the rule.
Sequence	Displays the sequence of the created validation model.
Reason	The user can modify the reason of the created validation model.
Comments	The user can modify the comments of the created validation model.

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7. Click **Save** to update the modified fields.

8. Click **View** icon to view the created quantitative scoring model.

    The **Validation Model Maintenance – View** screen displays.

Figure 1-172   Validation Model Maintenance - View
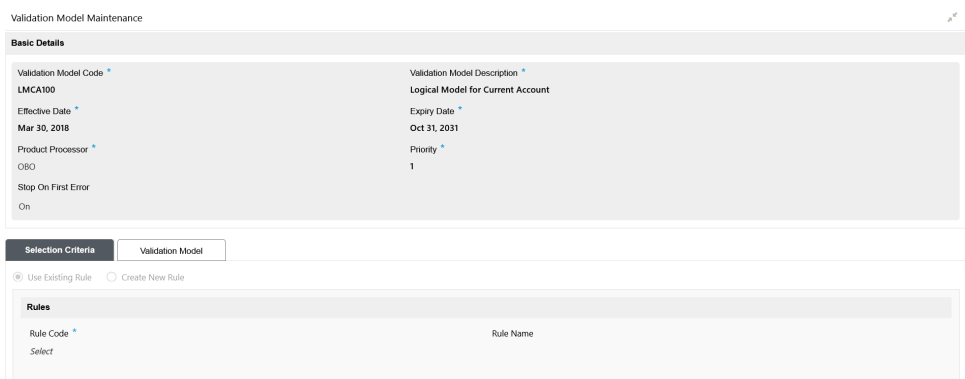
For more information on fields, refer to the field description table.

Table 1-125   Validation Model Maintenance - View - Field Description

Field	Description
Validation Model Code	Displays the created validation model code.
Validation Model Description	Displays the description for the created validation model.
Effective Date	Displays the effective date for the created validation model.
Expiry Date	Displays the expiry date for the created validation model.
Product Processor	Displays the product processor for the created validation model.
Priority	Displays the priority of the created validation model.
Use Existing Rule	Displays the existing rule if linked.
Rule Code	Displays the rule code for the created validation model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Displays the new rule linked to the validation model.
Code	Displays the new rule code for the created validation model.
Description	Displays the rule description for the created validation model.
+ icon	This icon can add new expression.

Table 1-125   (Cont.) Validation Model Maintenance - View - Field Description

Field	Description
Fact / Rules	Displays the fact or rule of the created validation model.
Operator	Displays the comparison operator of the created validation model.
Data Type	Displays the data type for the fact or rule for the created validation model.
Output	Displays the output for the created validation model.
Expression	Displays the expression updated in the expression builder for the created validation model.
Rule ID	Displays the rule ID of the created validation model.
	Click this icon to get the information about the rule.
Sequence	Displays the sequence of the created validation model.
Reason	Displays the reason of the created validation model.
Comments	Displays the comments of the created validation model.

1.47 Borrowing Capacity

This topic describes the information about the total amount the applicant is eligible to borrow.

Maximum loan amount are used for loans, credit cards, and line of credit accounts. The maximum credit amount depends on a number of factors including the borrower's credit worthiness, that is, financial profile and debt to income, loan term, loan purpose, whether the loan is supported by a collateral etc.

Using this screen, the user can link a rule for calculating borrowing capacity. The user can calculate the maximum lendable amount based on the various criteria of the lender such as debt to income ratio, credit score, credit history, etc.

A sample rule to calculate borrowing capacity is given below:

Scenario: Based on Income and FICO score

Rule 1:

IF MIN(FICO_SCORE) >= 500 AND MIN(EMPLOYMENT_PERIOD)< 1 YEAR

THEN MULTIPLIER = 5

ELSEIF MIN(FICO_SCORE) < 500 AND MIN(EMPLOYMENT_PERIOD) > 1 YEAR

THEN MULTIPLIER = 4

Rule2: Max Lendable Amount

MIN(Income) * Rule1

This topic contains the following subtopics:

- Create Borrowing Capacity
  This topic describes the systematic instructions to define the borrowing capacity based on the various input.

- View Borrowing Capacity
  This topic describes the systematic instructions to view the borrowing capacity.

1.47.1 Create Borrowing Capacity

This topic describes the systematic instructions to define the borrowing capacity based on the various input.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Borrowing Capacity**.

3. Under **Borrowing Capacity**, click **Create Borrowing Capacity**.

   The **Create Borrowing Capacity** screen displays.

   Figure 1-173   Create Borrowing Capacity

4. On **Create Borrowing Capacity** screen, specify the fields.

   > **✎ Note:**
   >
   > The fields, which are marked with an asterisk, are mandatory.

   For more information on fields, refer to the field description table.

   Table 1-126   Create Borrowing Capacity - Field Description

Field	Description
Eligibility Code	Specify the unique eligibility code.
Eligibility Description	Specify a short description for the eligibility.

Table 1-126   (Cont.) Create Borrowing Capacity - Field Description

Field	Description
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the borrowing capacity is being defined.
Execution Stage	Select the required option for execution stage from the drop-down list. The available options are: • **Before Decision**: If this option is selected, amount is calculated before scoring model resolution. Loan amount is replaced with the minimum of requested loan amount and maximum lendable amount for scoring and pricing. • **After Decision**: If this option is selected, Amount is calculated after decision and before pricing. Loan amount is replaced with the minimum of requested loan amount and maximum lendable amount for pricing.

5. Click **Selection Criteria** tab to define selection criteria rules.

   The **Create Borrowing Capacity - Selection Criteria** screen displays.

Figure 1-174   Create Borrowing Capacity - Selection Criteria
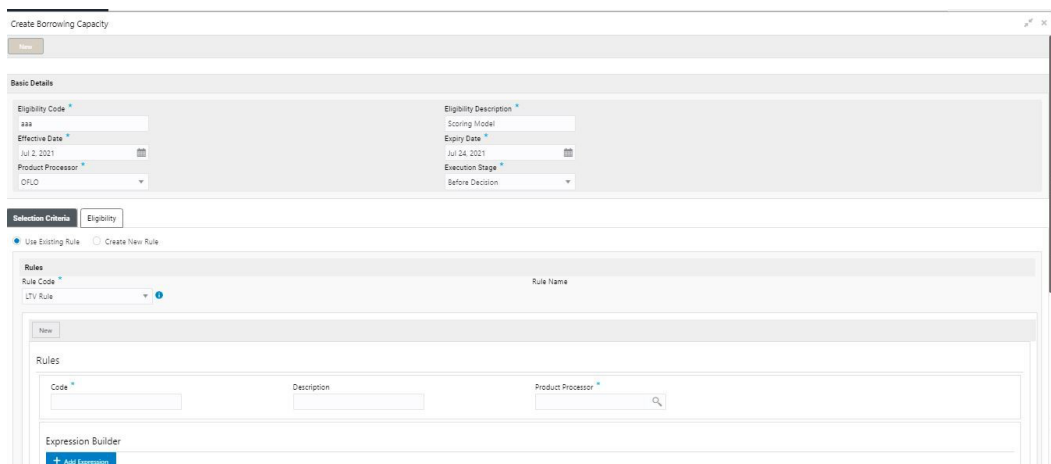
For more information on fields, refer to the field description table.

Table 1-127   Create Borrowing Capacity - Selection Criteria - Field Description

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rule Code	Select the rule code from the drop down list.

Table 1-127   (Cont.) Create Borrowing Capacity - Selection Criteria - Field Description

Field	Description
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name for the selected rule code.
New	Select this option to create new rule.
Code	Specify the rule code.
Description	Specify the rule description.
+ icon	Click this icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once the user selects the fact/rules, one more field opens adjacent to the output, update the same based on the selected output option.
Operator	Select the comparison operator from the drop-down list. The available options are: • **<** • **>** • **+** • **=** • **%** • **!=** • **-** • **>=** • **<=** • ***** • **/** • **Contains** • **In** • **Matches** • **NotMatches** • **NotContains** • **Notin**
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**

Table 1-127   (Cont.) Create Borrowing Capacity - Selection Criteria - Field Description

Field	Description
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Expression	Displays the expression updated in the expression builder.

6. Click the **Eligibility** to define eligibility.

   The **Create Borrowing Capacity - Eligibility** screen displays.

Figure 1-175   Create Borrowing Capacity - Eligibility
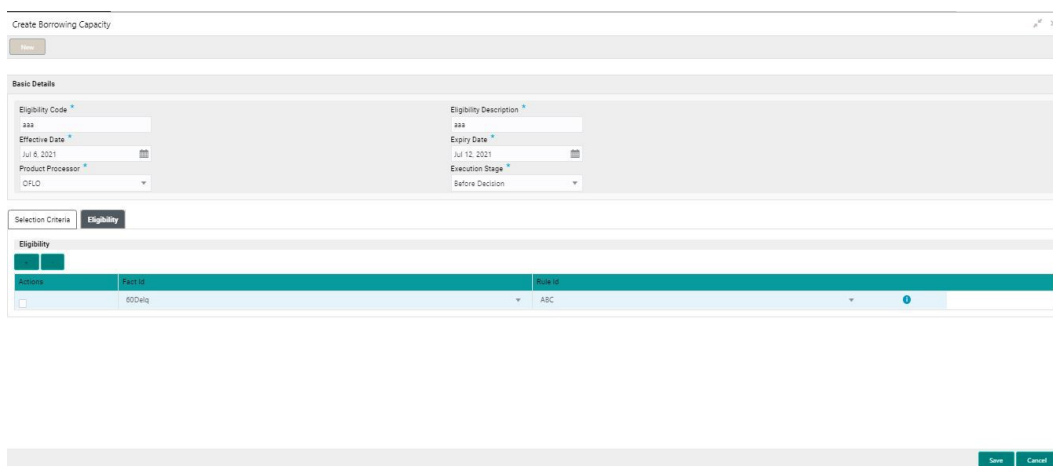
For more information on fields, refer to the field description table.

Table 1-128   Create Borrowing Capacity - Eligibility - Field Description

Field	Description
+ icon	Click this icon to add a new row.
- icon	Click this icon to delete a row, which is already added.
Actions	Select this checkbox corresponding to the row to be deleted.
Fact ID	Select the fact ID from the drop-down list.
Rule ID	Select the rule ID from the drop-down list.

Table 1-128   (Cont.) Create Borrowing Capacity - Eligibility - Field Description

Field	Description
	Click this icon to get the information about the rule.

7. Click **Save** to save the details.

   The borrowing capacity is successfully created and can be viewed using the View Borrowing Capacity screen.

1.47.2 View Borrowing Capacity

This topic describes the systematic instructions to view the borrowing capacity.

The user can configure the borrowing capacity using the Create Borrowing Capacity screen. The status of the created capacity is displayed as **Unauthorized** and **Open**. Once the checker authorizes the capacity, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Borrowing Capacity**.

3. Under **Borrowing Capacity**, click **View Borrowing Capacity**.

   The **View Borrowing Capacity** screen displays.

Figure 1-176   View Borrowing Capacity
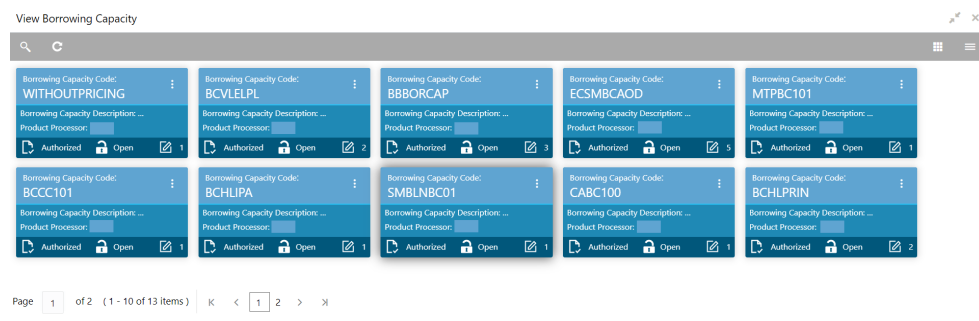
For more information on fields, refer to the field description table.

Table 1-129   View Borrowing Capacity – Field Description

Field	Description
Borrowing Capacity Code	Displays the borrowing capacity code.
Borrowing Capacity Description	Displays the borrowing capacity description.
Product Processor	Displays the product processor.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

   The **View Borrowing Capacity - Search** screen displays.

Figure 1-177   View Borrowing Capacity - Search

For more information on fields, refer to the field description table.

Table 1-130   View Borrowing Capacity - Search – Field Description

Field	Description
Borrowing Capacity Code	Specify the borrowing capacity code.
Borrowing Capacity Description	Specify the borrowing capacity description.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

5. Click **three-dots** icon to unlock, delete, authorize or view the created borrowing capacity.

6. Click **Unlock** icon to modify the fields.

   The **Borrowing Capacity Maintenance** screen displays.

Figure 1-178   Borrowing Capacity Maintenance

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-131   Borrowing Capacity Maintenance - Field Description

Field	Description
Eligibility Code	Displays the model code for the created borrowing capacity.
Eligibility Description	The user can modify the model description for the created borrowing capacity.
Effective Date	The user can modify effective date for the borrowing capacity.
Expiry Date	The user can modify date of the created borrowing capacity.
Product Processor	Displays the product processor for the borrowing capacity.
Execution Stage	Displays execution stage for the borrowing capacity.
Use Existing Rule	Indicates if the existing rule is linked.
Rule Code	The user can modify the rule code for the created borrowing capacity.
	Click this icon to get the information about the rule.

Table 1-131   (Cont.) Borrowing Capacity Maintenance - Field Description

Field	Description
Rule Name	Displays the rule name of the rule code for the created borrowing capacity.
Create New Rule	The user can modify the rule code for the created borrowing capacity.
Code	Specify the new rule code for borrowing capacity.
Description	Specify the rule description for the borrowing capacity.
Fact / Rules	Displays the fact or rule for the created borrowing capacity.
Operator	Displays the comparison operator for the created borrowing capacity.
Data Type	Displays the data type for the fact or rule for the created borrowing capacity.
Output	Displays the output for the created borrowing capacity.
Expression	Displays the expression updated in the expression builder for the created borrowing capacity.
Fact ID	The user can modify the fact ID of the created borrowing capacity.
Rule ID	The user can modify the rule ID of the created borrowing capacity.
![info icon]	Click this icon to get the information about the rule.

7. Click **Save** to update the modified fields.

8. Click **View** icon to view the borrowing capacity.

   The **Borrowing Capacity Maintenance – View** screen displays.

Figure 1-179   Borrowing Capacity Maintenance – View
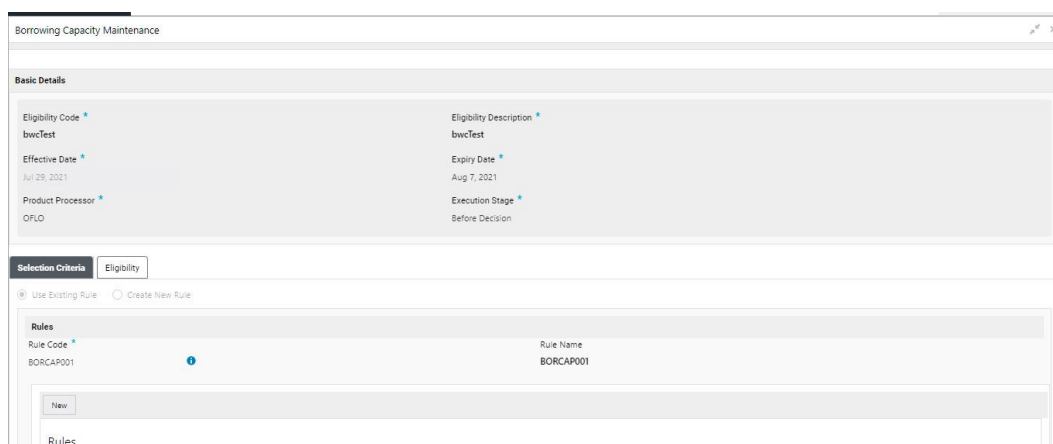
For more information on fields, refer to the field description table.

Table 1-132   Borrowing Capacity Maintenance - View - Field Description

Field	Description
Eligibility Code	Displays the model code for the created borrowing capacity.
Eligibility Description	Displays the model description for the created borrowing capacity.
Effective Date	Displays effective date for the borrowing capacity.
Expiry Date	Displays date of the created borrowing capacity.
Product Processor	Displays the product processor for the borrowing capacity.
Execution Stage	Displays execution stage for the borrowing capacity.
Use Existing Rule	Indicates if the existing rule is linked.
Rule Code	Displays the rule code for the created borrowing capacity.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created borrowing capacity.
Create New Rule	Displays the rule code for the created borrowing capacity.
Code	Displays the rule code for borrowing capacity.
Description	Displays the rule description for the borrowing capacity.
Fact / Rules	Displays the fact or rule for the created borrowing capacity.
Operator	Displays the comparison operator for the created borrowing capacity.
Data Type	Displays the data type for the fact or rule for the created borrowing capacity.
Output	Displays the output for the created borrowing capacity.
Expression	Displays the expression updated in the expression builder for the created borrowing capacity.
Fact ID	Displays the fact ID of the created borrowing capacity.
Rule ID	Displays the rule ID of the created borrowing capacity.
	Click this icon to get the information about the rule.

1.48 Questionnaire

This topic describes the information about the questionnaire used for credit analysis.

Credit analysis includes analysis of more information and data. Considering that, some of them have quantitative character and others qualitative, credit analysis are viewed from two aspects such as:

Quantitative analysis involves, an assessment of the financial position based on the customer's income and monthly expenses. It may also include a cash flow analysis of the customer's accounts and credit history.

While qualitative assessment, among others takes into account marital status, education or employment form.

Banks usually grant loan based on a credit scoring model that combines quantitative and qualitative analysis.

This topic contains the following subtopics:

- Create Questionnaire
  This topic describes the systematic instructions to configure the qualitative questionnaire based on the various parameters.

- View Questionnaire
  This topic describes the systematic instructions to view the list of configured questionnaire.

1.48.1 Create Questionnaire

This topic describes the systematic instructions to configure the qualitative questionnaire based on the various parameters.

This questionnaire can be further linked to define qualitative scoring model.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Questionnaire**.

3. Under **Questionnaire**, click **Create Questionnaire**.

   The **Create Questionnaire** screen displays.

   Figure 1-180   Create Questionnaire

4. On **Create Questionnaire** screen, specify the fields.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-133   Create Questionnaire - Field Description

Field	Description
Questionnaire Code	Specify the questionnaire code.
Questionnaire Description	Specify a short description for the questionnaire.
Product Processor	Specify the product processor for which the questionnaire is being created.
Category	Specify the category of the questionnaire.
Create	Click **Create** to configure the questions.
Question Code	Specify the unique question code.
Question Description	Specify the description for the question.
Select-Type	Select the type of response option from the drop-down list. The available options are: • Select-Single-Choice
Short Name	Specify the short name of the question. This will be displayed in the Execution Summary.
Answer Code	Displays the answer code.
Answer Option	Specify all the expected response for the question configured.
Add	Click **Add** to add the expected response to the question.
Update	Click **Update** to edit the response.
Remove	Click remove to remove the response.
Required	By default, this option is enabled. Indicates whether the question is mandatory or optional.
Done	Click **Done** to save the data.
Preview	Click **Preview** to view the questions configured for the questionnaire along with the response choice.
◢	Click this icon to view the responses configured for the questionnaire.
≡	Click this icon to move the position of the questions.
⋮ ▼	Click this icon to expand, copy or remove question.

Table 1-133   (Cont.) Create Questionnaire - Field Description

Field	Description
Copy	Click this icon to copy the question.
Remove Question	Click this icon to remove the question.
Add Question	By Clicking **Add Question**, the user can add another question.

5. Click **Save** to save the details.

   The Questionnaire is successfully created and can be viewed using View Questionnaire screen.

1.48.2 View Questionnaire

This topic describes the systematic instructions to view the list of configured questionnaire.

The user can create the questionnaire using the Create Questionnaire screen. The status of the created questionnaire is displayed as **Unauthorized** and **Open**. Once the checker authorizes the questionnaire, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Questionnaire**.

3. Under **Questionnaire**, click **View Questionnaire**.

   The **View Questionnaire** screen displays.

Figure 1-181   View Questionnaire
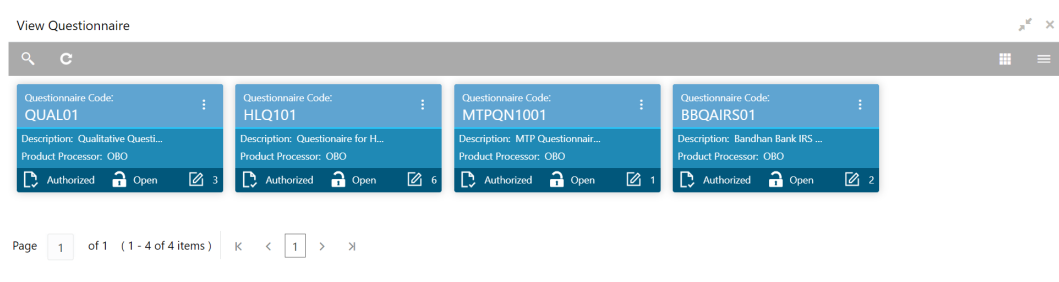
For more information on fields, refer to the field description table.

Table 1-134   View Questionnaire – Field Description

Field	Description
Questionnaire Code	Displays the questionnaire code.
Questionnaire Description	Displays the description of the questionnaire.
Product Processor Code	Displays the product processor code for which the questionnaire is created.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

   The **View Questionnaire - Search** screen displays.

Figure 1-182   View Questionnaire - Search

For more information on fields, refer to the field description table.

Table 1-135   View Questionnaire - Search – Field Description

Field	Description
Questionnaire Code	Specify the questionnaire code.
Questionnaire Description	Specify the questionnaire description.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

5. Click **three-dots** icon to unlock, delete, authorize or view the created questionnaire.

6. Click **Unlock** icon to modify the fields.

The **Questionnaire Maintenance - Unlock** screen displays.

Figure 1-183   Questionnaire Maintenance - Unlock
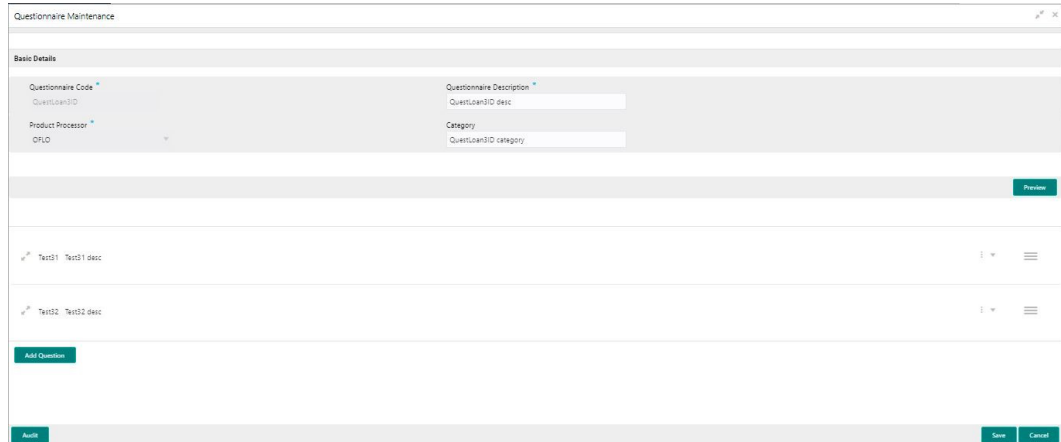
> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-136   Questionnaire Maintenance - Unlock - Field Description

Field	Description
Questionnaire Code	Displays the questionnaire code.
Questionnaire Description	The user can modify the questionnaire description.
Product Processor	Displays the product processor for the created questionnaire.
Category	The user can modify the category of the created questionnaire.
Preview	Click **Preview** to display the questions configured for the questionnaire along with the response choice.
⋮ ▼	Click this icon to expand copy or remove question.
☰	Click this icon to move the position of the questions.
⤢	Click this icon to see the question details.
Question Code	Displays the question code for the created questionnaire.

Table 1-136   (Cont.) Questionnaire Maintenance - Unlock - Field Description

Field	Description
Question Description	The user can modify the question code for the created questionnaire.
Select-Type	Displays the type of questionnaire.
Short Name	The user can modify the short name of the created questionnaire.
Answer Code	Displays the answer code.
Answer Option	The user can modify all the expected response for the question configured.
Required	The user can modify if the question is mandatory or optional.

7. Click **Save** to update the modified fields.

8. Click **View** icon to view the created logical model.

   The **Questionnaire Maintenance – View** screen displays.

Figure 1-184   Questionnaire Maintenance – View

For more information on fields, refer to the field description table.

Table 1-137   Questionnaire Maintenance - View - Field Description

Field	Description
Questionnaire Code	Displays the questionnaire code.
Questionnaire Description	Displays the questionnaire description.
Product Processor	Displays the product processor for the created questionnaire.
Category	Displays the category of the created questionnaire.
Preview	Click **Preview** to display the questions configured for the questionnaire along with the response choice.
Question Code	Displays the question code for the created questionnaire.
Question Description	Displays the question code for the created questionnaire.
Select Type	Displays the type of questionnaire.
Short Name	Displays the short name of the created questionnaire.

Table 1-137   (Cont.) Questionnaire Maintenance - View - Field Description

Field	Description
Answer Code	Displays the answer code.
Answer Option	Displays all the expected response for the question configured.
Required	Displays if the question is mandatory or optional.

1.49 Qualitative Scoring Model

This topic describes the information about the Qualitative scoring model for the Decision service.

Financial institution use different models for different product or use case. The qualitative scoring model used for home loan would be different then the personal loan. Banks usually grant loan based on a credit scoring model that combines quantitative and qualitative analysis.

This topic contains the following subtopics:

- Create Qualitative Scoring Model
  This topic describes the systematic instructions to configure the qualitative scoring model based on the various scoring parameters.

- View Qualitative Scoring Model
  This topic describes the systematic instructions to view the list of configured qualitative scoring model.

1.49.1 Create Qualitative Scoring Model

This topic describes the systematic instructions to configure the qualitative scoring model based on the various scoring parameters.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Qualitative Scoring** .

3. Under **Qualitative Scoring** , click **Create Qualitative Scoring Model**.

   The **Create Qualitative Scoring Model** screen displays.

Figure 1-185   Create Qualitative Scoring Model

4. On **Create Qualitative Scoring Model** screen, specify the fields.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-138   Create Qualitative Scoring Model - Field Description

Field	Description
Scoring Model	Select the scoring model from the drop-sown list. The available options are: • **Application Scoring Model** • **Applicant Scoring Model**
Qualitative Scoring Model Code	Specify the unique scoring model code.
Qualitative Scoring Model Description	Specify a short description for the scoring model.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the model is being created.
Priority	Specify the priority of the model.

5. Click the **Selection Criteria** to define qualitative scoring model.

Figure 1-186   Create Qualitative Scoring Model - Selection Criteria

For more information on fields, refer to the field description table.

Table 1-139   Create Qualitative Scoring Model - Selection Criteria - Field Description

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rule Code	Select the rule code from the drop down list.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code.
Create New Rule	Select this option to create new rule.
Code	Specify the rule code.
Description	Specify the rule description.
+ icon	Click this icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once the user selects the fact/rules, one more field opens adjacent to the output, update the same based on the selected output option.

Table 1-139 (Cont.) Create Qualitative Scoring Model - Selection Criteria - Field Description

Field	Description
Operator	Select the comparison operator from the drop-down list. The available options are: • **<** • **>** • **+** • **=** • **%** • **!=** • **-** • **>=** • **<=** • ***** • **/** • **Contains** • **In** • **Matches** • **NotMatches** • **NotContains** • **Notin**
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Expression	Displays the expression updated in the expression builder.

6. Click the **Scoring Rule** to define the rules. This tab is enabled if **Application Scoring Model** is selected.

The **Create Qualitative Scoring Model - Scoring Rule** screen displays.

Figure 1-187   Create Qualitative Scoring Model - Scoring Rule

For more information on fields, refer to the field description table.

Table 1-140   Create Qualitative Scoring Model - Scoring Rule - Field Description

Field	Description
Rule Code	Select the rule code from the drop-down list.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code.

7. Click the **Questionnaire** tab to define the scoring model based on the various questionnaires. This tab is enabled if **Applicant Scoring Model** is selected.

The **Create Qualitative Scoring Model - Questionnaire** screen displays.

Figure 1-188   Create Qualitative Scoring Model - Questionnaire

For more information on fields, refer to the field description table.

Table 1-141   Create Qualitative Scoring Model - Questionnaire - Field Description

Field	Description
Questionnaire Code	Select the questionnaire code from the drop-down list. It will list down all the questionnaire created as a part of create questionnaire.
Questionnaire Name	Displays the questionnaire name of the selected questionnaire code.
Question ID	Displays the question ID in the questionnaire.
Question	Displays the question description linked to the question ID.
Define Range/ Value	Click the **Define** link to define the score for the expected response.
Enable	By default, this option is enabled. Indicates if the question ID is enabled or not.

8. Click the define link to define a range or absolute values for questions.

   The **Create Qualitative Scoring Model - Define Link** screen displays.

Figure 1-189   Create Qualitative Scoring Model - Define Link

For more information on fields, refer to the field description table.

Table 1-142   Create Qualitative Scoring Model - Define Link – Numeric Feature - Field Description

Field	Description
Value	Displays the options available for a questionnaire.
Score	Specify the score to be assigned to each value.
Category	Specify the category for each range or value from the drop-down list. The values are configurable based on the lookup values maintained. The available options are: • **Strong** • **Medium** • **Weak**

9. Click **Done** to save the data and close the range panel.

10. Click **Save** to save the details.

The qualitative scoring model is successfully created and can be viewed using the View Qualitative Scoring Model screen.

1.49.2 View Qualitative Scoring Model

This topic describes the systematic instructions to view the list of configured qualitative scoring model.

The user can configure the qualitative scoring model using the **Create Qualitative Scoring Model** screen. The status of the uploaded model is displayed as **Unauthorized** and **Open**. Once the checker authorizes the model, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Qualitative Scoring** .

3. Under **Qualitative Scoring** , click **View Qualitative Scoring Model**.

The **View Qualitative Scoring Model** screen displays.

Figure 1-190   View Qualitative Scoring Model
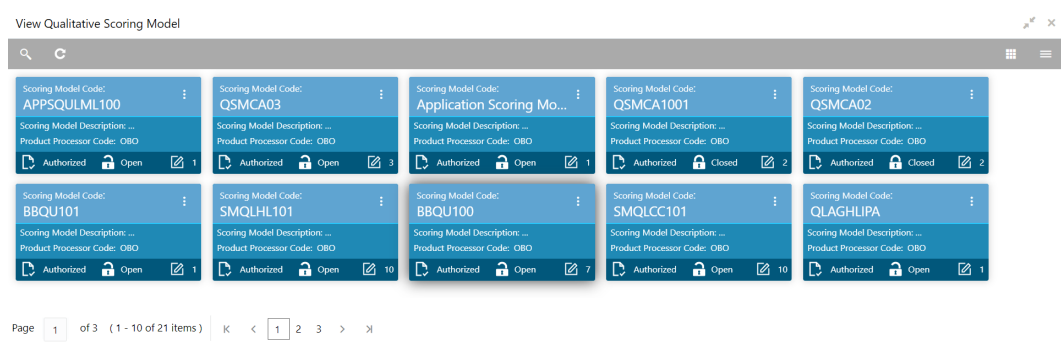
For more information on fields, refer to the field description table.

Table 1-143   View Qualitative Scoring Model – Field Description

Field	Description
Scoring Model Code	Displays the scoring model code.
Scoring Model Description	Displays the description of the scoring model.
Product Processor Code	Displays the product processor code
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

   The **View Qualitative Scoring Model - Search** screen displays.

Figure 1-191   View Qualitative Scoring Model - Search

For more information on fields, refer to the field description table.

Table 1-144   View Qualitative Scoring Model - Search – Field Description

Field	Description
Scoring Model Code	Specify the scoring model code.
Scoring Model Description	Specify the description of the scoring model.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

5. Click **three-dots** icon to unlock, delete, authorize or view the created pricing model.

6. Click **Unlock** icon to modify the fields.

   The **Qualitative Scoring Model Maintenance - Unlock** screen displays.

Figure 1-192   Qualitative Scoring Model Maintenance - Unlock

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

**Table 1-145   Qualitative Scoring Model Maintenance - Unlock - Field Description**

Field	Description
Scoring Model	Displays the scoring model for the created qualitative scoring model.
Qualitative Scoring Model Code	Displays the qualitative scoring model code for the created qualitative scoring model.
Qualitative Scoring Model Description	The user can modify the qualitative scoring model description for the created qualitative scoring model.
Effective Date	Displays the effective date of the created qualitative scoring model. The user can modify the same before authorization.
Expiry Date	Displays the expiry date of the created qualitative scoring model. The user can modify the same before authorization.
Product Processor	Displays the product processor for the created qualitative scoring model.
Priority	The user can modify the priority of the created qualitative scoring model.
Use Existing Rule	The user can modify the existing rule if linked.
Rule Code	Displays the rule code for the created qualitative scoring model.

Table 1-145 (Cont.) Qualitative Scoring Model Maintenance - Unlock - Field Description

Field	Description
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created qualitative scoring model.
Code	Displays the rule code.
Description	Displays the rule description.
+ icon	This icon can add new expression.
Fact / Rules	Displays the fact or rule of the created qualitative scoring model.
Operator	Displays the comparison operator of the created qualitative scoring model.
Data Type	Displays the data type for the fact or rule for the created qualitative scoring model.
Output	Displays the output for the created qualitative scoring model.
Expression	Displays the expression updated in the expression builder for the created qualitative scoring model.
Rule Code	The user can modify the rule code for the created qualitative scoring model.
Rule Name	Displays the name for the created qualitative scoring model.
Questionnaire	This tab is applicable for **Applicant Scoring Model**.
Questionnaire Code	The user can modify the questionnaire code for the created qualitative scoring model.
Questionnaire Name	View the questionnaire name for the created qualitative scoring model.
Question ID	Displays the question ID for the created qualitative scoring model.
Question	Displays the question for the created qualitative scoring model.
Define Range/Value	The user can modify the defined range or value.
Value	Displays the defined value for the created qualitative scoring model.
Score	The user can modify the score for the created qualitative scoring model.
Category	The user can modify the category for the created qualitative scoring model.
Enable	Displays if the question ID is enabled or not.

7. Click **Save** to update the modified fields.

8. Click **View** icon to view the created qualitative scoring model.

   The **Qualitative Scoring Model Maintenance – View** screen displays.

Figure 1-193   Qualitative Scoring Model Maintenance – View

For more information on fields, refer to the field description table.

Table 1-146   Qualitative Scoring Model Maintenance - View - Field Description

Field	Description
Scoring Model	Displays the scoring model for the created qualitative scoring model.
Qualitative Scoring Model Code	Displays the qualitative scoring model code for the created qualitative scoring model.
Qualitative Scoring Model Description	Displays the qualitative scoring model description for the created qualitative scoring model.
Effective Date	Displays the effective date of the created qualitative scoring model. The user can modify the same before authorization.
Expiry Date	Displays the expiry date of the created qualitative scoring model. The user can modify the same before authorization.
Product Processor	Displays the product processor for the created qualitative scoring model.
Priority	The user can modify the priority of the created qualitative scoring model.
Use Existing Rule	Displays the existing rule if linked.
Rule Code	Displays the rule code for the created qualitative scoring model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created qualitative scoring model.
Code	Displays the rule code.
Description	Displays the rule description.
+ icon	This icon can add new expression.
Fact / Rules	Displays the fact or rule of the created qualitative scoring model.

Table 1-146   (Cont.) Qualitative Scoring Model Maintenance - View - Field Description

Field	Description
Operator	Displays the comparison operator of the created qualitative scoring model.
Data Type	Displays the data type for the fact or rule for the created qualitative scoring model.
Output	Displays the output for the created qualitative scoring model.
Expression	Displays the expression updated in the expression builder for the created qualitative scoring model.
Rule Code	Displays the rule code for the created qualitative scoring model.
Rule Name	Displays the name for the created qualitative scoring model.
Questionnaire	This tab is applicable for **Applicant Scoring Model**.
Questionnaire Code	Displays the questionnaire code for the created qualitative scoring model.
Questionnaire Name	View the questionnaire name for the created qualitative scoring model.
Question ID	Displays the question ID for the created qualitative scoring model.
Question	Displays the question for the created qualitative scoring model.
Define Range/Value	Displays the defined range or value.
Value	Displays the defined value for the created qualitative scoring model.
Score	Displays the score for the created qualitative scoring model.
Category	Displays the category for the created qualitative scoring model.
Enable	Displays if the question ID is enabled or not.

1.50 Scoring Feature

This topic describes the information about the scoring feature in Decision service.

Lending institution have complex credit scoring models. The model uses the information contained in an application such as salary, credit commitments, and past loan performances to determine a credit score of an application or an existing customer. The model generates a score and based on that score, system takes the decision like approve, referred or to reject the application. To achieve these, in the decision service, you need to define maintenances of scoring feature. A feature can be either fact based or rule based. The features created in this maintenance can be linked in quantitative score model and decision grade matrix screen.

This topic contains the following subtopics:

* Create Scoring Feature
  This topic describes the systematic instructions to configure the scoring feature for determining the credit score.

* View Scoring Feature
  This topic describes the systematic instructions to view the list of scoring feature.

1.50.1 Create Scoring Feature

This topic describes the systematic instructions to configure the scoring feature for determining the credit score.

This score applies to applications during origination and based on the information received from the product processor.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Scoring Feature**.

3. Under **Scoring Feature**, click **Create Scoring Feature**.

   The **Create Scoring Feature** screen displays.

Figure 1-194   Create Scoring Feature

4. On **Create Scoring Feature** screen, specify the fields.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-147   Create Scoring Feature - Field Description

Field	Description
Feature Code	Specify the unique feature code.
Feature Description	Specify a short description for the feature.
Product Processor	Specify the product processor for which the feature is being created.

Table 1-147   (Cont.) Create Scoring Feature - Field Description

Field	Description
Rule	Select the rule, if it is required to define the feature. This option is used to decide whether the feature is rule based or fact based. The available options are: • **Yes** • **No**
Fact Code	Select the fact code to be mapped to the feature from the drop-down list. This field is enabled if the **Rule** is selected as **No**.
Fact Name	View the fact name of the feature. This field is enabled if the **Rule** is selected as **No**.
Rule Code	Select the rule code to be mapped to the feature from the drop-down list. This field is enabled if the **Rule** is selected as **Yes**.
	Click this icon to get the information about the rule.
Rule Name	View the rule name for the selected rule. This field is enabled if the **Rule** is selected as **Yes**.

5. Click **Save** to save the details.

   The scoring feature is successfully created and can be viewed using the View Scoring Feature screen.

1.50.2 View Scoring Feature

This topic describes the systematic instructions to view the list of scoring feature.

The user can configure the scoring feature using the Create Scoring Feature screen. The status of the created scoring feature is displayed as **Unauthorized** and **Open**. Once the checker authorizes the model, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Scoring Feature**.

3. Under **Scoring Feature**, click **View Scoring Feature**.

   The **View Scoring Feature** screen displays.

Figure 1-195   View Scoring Feature
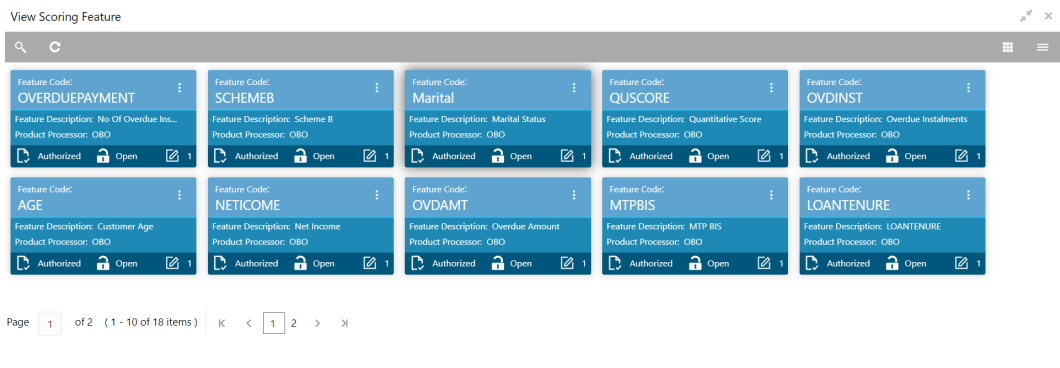
For more information on fields, refer to the field description table.

Table 1-148   View Scoring Feature – Field Description

Field	Description
Feature Code	Displays the feature code.
Feature Description	Displays the description of the feature.
Product Processor	Displays the product processor for which the feature is created.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

   The **View Scoring Feature - Search** screen displays.

Figure 1-196   View Scoring Feature - Search
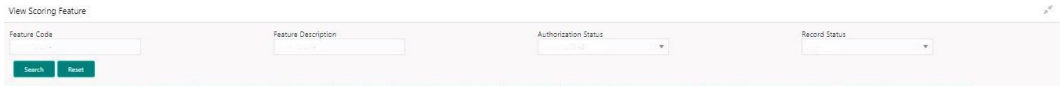
For more information on fields, refer to the field description table.

Table 1-149   View Scoring Feature - Search – Field Description

Field	Description
Feature Code	Specify the feature code.
Feature Description	Specify the feature description.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

5. Click **three-dots** icon to unlock, delete, authorize or view the created scoring feature.

6. Click **Unlock** icon to modify the fields.

   The **Scoring Feature Maintenance - Unlock** screen displays.

Figure 1-197   Scoring Feature Maintenance - Unlock

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-150   Scoring Feature Maintenance - Unlock - Field Description

Field	Description
Feature Code	Displays the feature code.
Feature Description	The user can modify the feature description.

Table 1-150   (Cont.) Scoring Feature Maintenance - Unlock - Field Description

Field	Description
Product Processor	View the product processor for the created scoring feature.
Rule	The user can modify the rule defined to the feature.
Rule Code	The user can modify the rule code of the feature. This field is displayed, if the **Rule** is selected as **Yes**.
	Click this icon to get the information about the rule.
Rule Name	View the rule name of the feature. This field is displayed, if the **Rule** is selected as **Yes**.
Fact Code	The user can modify the fact code of the feature. This field is displayed, if the **Rule** is selected as **No**.
Fact Name	View the fact name of the feature. This field is displayed, if the **Rule** is selected as **No**.

7. Click **Save** to update the modified fields.

1.51 Quantitative Scoring Model

This topic describes the information about the Quantitative scoring model for the Decision service.

Quantitative analysis involves, an assessment of the financial position based on the customer's income and monthly expenses. It may also include a cash flow analysis of the customer's accounts and credit history.

Banks usually grant loan based on a credit scoring model that combines quantitative and qualitative analysis.

This topic contains the following subtopics:

* Create Quantitative Scoring Model
  This topic describes the systematic instructions to configure the quantitative scoring model based on the various scoring parameters.

* View Quantitative Scoring Model
  This topic describes the systematic instructions to view the list of configured quantitative scoring model.

1.51.1 Create Quantitative Scoring Model

This topic describes the systematic instructions to configure the quantitative scoring model based on the various scoring parameters.

The parameters driving the scoring models are configurable. The user can create quantitative scoring model by updating various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Quantitative Scoring Model**.

3. Under **Quantitative Scoring Model**, click **Create Quantitative Scoring Model**.

   The **Create Quantitative Scoring Model** screen displays.

Figure 1-198   Create Quantitative Scoring Model

4. On **Create Quantitative Scoring Model** screen, specify the fields.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-151   Create Quantitative Scoring Model - Field Description

Field	Description
Scoring Model	Select the scoring model from the drop-sown list. The available options are: • **Application Scoring Model** • **Applicant Scoring Model** • **Multi-Applicant Scoring Model**
Scoring Model Code	Specify the unique scoring model code.
Scoring Model Description	Specify a short description for the scoring model.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the model is being created.
Priority	Specify the priority of the model.

5. Click the **Selection Criteria** to define quantitative scoring model.

Figure 1-199   Create Quantitative Scoring Model - Selection Criteria

For more information on fields, refer to the field description table.

Table 1-152   Create Quantitative Scoring Model - Selection Criteria - Field Description

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rule Code	Select the rule code from the drop down list.
	Click this icon to get the information about the existing rule.
Rule Name	Displays the rule name of the selected rule code.
Create New Rule	Select this option to create new rule.
Code	Specify the rule code.
Description	Specify the rule description.
+ icon	Click this icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once the user selects the fact/rules, one more field opens adjacent to the output, update the same based on the selected output option.

Table 1-152   (Cont.) Create Quantitative Scoring Model - Selection Criteria - Field Description

Field	Description
Operator	Select the comparison operator from the drop-down list. The available options are: • **<** • **>** • **+** • **=** • **%** • **!=** • **-** • **>=** • **<=** • ***** • **/** • **Contains** • **In** • **Matches** • **NotMatches** • **NotContains** • **Notin**
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Expression	Displays the expression updated in the expression builder.

6. Click the **Scoring Rule** to define the rules. This tab is enabled if **Application Scoring Model** is selected.

The **Create Quantitative Scoring Model - Scoring Rule** screen displays.

Figure 1-200   Create Quantitative Scoring Model - Scoring Rule

For more information on fields, refer to the field description table.

Table 1-153   Create Quantitative Scoring Model - Scoring Rule - Field Description

Field	Description
Rule Code	Select the rule code from the drop-down list.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code.

7. Click the **Feature** tab to define the feature. This tab is enabled if **Applicant Scoring Model** and **Multiple Applicant Scoring Model** is selected.

The **Create Quantitative Scoring Model - Feature** screen displays.

Figure 1-201   Create Quantitative Scoring Model - Feature

For more information on fields, refer to the field description table.

Table 1-154   Create Quantitative Scoring Model - Feature - Field Description

Field	Description
+ icon	Click this icon to add a new row.
- icon	Click this icon to delete a row, which is already added.
Feature	Select the feature from the drop-down list.
Weightage (%)	Specify the weightage to be assigned to each feature code.
Range Type	Select the range type from the drop down list. The available options are: • **Max Value** • **Param Percent%** • **Value** For **Applicant Scoring Model**, this field is editable.
Define Range/Value	Click the **Define** link to define the score for the expected response.
Enable	By default, this option is enabled. Indicates if the scoring parameter is enabled or not.

8. Click the define link to define a range or absolute values for each scoring feature to be considered for scoring model and score for that range or value.

In case the data type of feature is numeric such as Bureau score, the **Create Quantitative Scoring Model - Define Link - Numeric Feature** screen displays.

Figure 1-202   Create Quantitative Scoring Model - Define Link - Numeric Feature

For more information on fields, refer to the field description table.

Table 1-155   Create Quantitative Scoring Model - Define Link – Numeric Feature - Field Description

Field	Description
Range Type	Displays the range type selected.
Max Value	Specify the maximum value on which scoring has to be done, if range type ID is Max Value % or Param %.
+ icon	Click this icon to add a new row.
- icon	Click this icon to delete a row, which is already added.
Range From	Specify the minimum range of value based on which scoring is to be done.
Range To	Specify the maximum range of value based on which scoring is to be done.
Score/Percentage	Specify the percentage to be assigned for each range or value, if range type is Max value % or Param %. Specify the score to be assigned for each range or value, if range type is Value.
Category	Specify the category for each range or value from the drop-down list. The values are configurable based on the lookup values maintained. The available options are: • **Strong** • **Medium** • **Weak**

If the data type of feature is alphanumeric such as Employment Category, the below screen appears.

Figure 1-203   Create Quantitative Scoring Model - Define Link – Alphanumeric Feature

For more information on fields, refer to the field description table.

Table 1-156   Create Quantitative Scoring Model - Define Link – Alphanumeric Feature - Field Description

Field	Description
Range Type	Displays the range type selected. The default value for the same is **Value**.
Max Value	Specify the maximum value for the range type.
+ icon	Click this icon to add a new row.
- icon	Click this icon to delete a row, which is already added.
Value	Specify the value of the feature.
Score	Specify the score assigned for each range value.
Category	Specify the category for each range or value from the drop-down list. The available options are: • **Strong** • **Medium** • **Weak**

9. Click **Done** to save the data and close the range panel.

10. Click **Save** to save the details.

   The quantitative scoring model is successfully created and can be viewed using the View Quantitative Scoring Model screen.

1.51.2 View Quantitative Scoring Model

This topic describes the systematic instructions to view the list of configured quantitative scoring model.

The user can configure the qualitative scoring model using the Create Quantitative Scoring Model screen. The status of the uploaded model is displayed as **Unauthorized** and **Open**. Once the checker authorizes the model, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Quantitative Scoring** .

3. Under **Quantitative Scoring** , click **View Quantitative Scoring Model**.

   The **View Quantitative Scoring Model** screen displays.

   Figure 1-204   View Quantitative Scoring Model
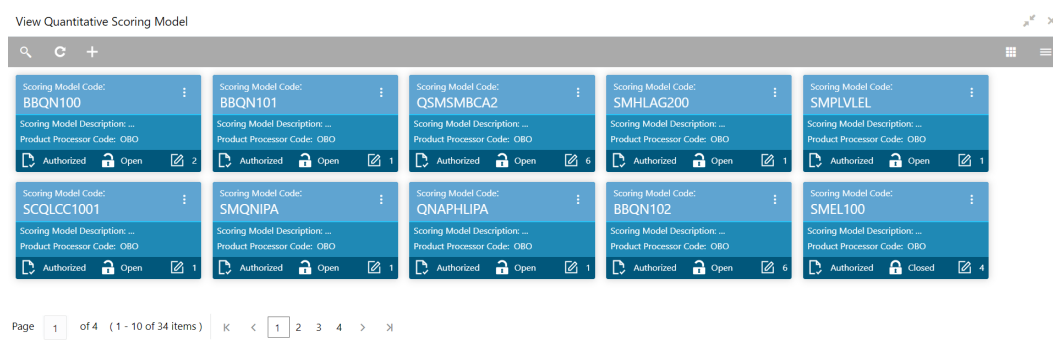
For more information on fields, refer to the field description table.

Table 1-157   View Quantitative Scoring Model – Field Description

Field	Description
Scoring Model Code	Displays the scoring model code.
Scoring Model Description	Displays the description of the scoring model.
Product Processor Code	Displays the product processor code
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

   The **View Quantitative Scoring Model - Search** screen displays.

   Figure 1-205   View Quantitative Scoring Model - Search
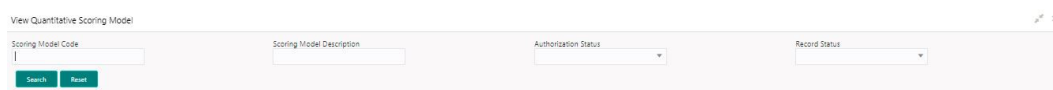
For more information on fields, refer to the field description table.

Table 1-158   View Quantitative Scoring Model - Search – Field Description

Field	Description
Scoring Model Code	Specify the scoring model code.
Scoring Model Description	Specify the description of the scoring model.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Close**

5. Click **three-dots** icon to unlock, delete, authorize or view the created pricing model.

6. Click **Unlock** icon to modify the fields.

    The **Quantitative Scoring Model Maintenance - Unlock** screen displays.

Figure 1-206   Quantitative Scoring Model Maintenance - Unlock

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-159   Quantitative Scoring Model Maintenance - Unlock - Field Description

Field	Description
Application Scoring Model	Displays the application scoring model.
Scoring Model Code	Displays the qualitative scoring model code for the created quantitative scoring model.
Scoring Model Description	The user can modify the quantitative scoring model description for the created quantitative scoring model.
Effective Date	Displays the effective date of the created quantitative scoring model. The user can modify the same before authorization.
Expiry Date	Displays the expiry date of the created quantitative scoring model. The user can modify the same before authorization.
Product Processor	Displays the product processor for the created quantitative scoring model.
Priority	The user can modify the priority of the created quantitative scoring model.
Use Existing Rule	The user can modify the existing rule if linked.
Rule Code	Displays the rule code for the created quantitative scoring model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created quantitative scoring model.
Code	Displays the rule code.
Description	Displays the rule description.
+ icon	This icon can add new expression.
Fact / Rules	Displays the fact or rule of the created quantitative scoring model.
Operator	Displays the comparison operator of the created quantitative scoring model.
Data Type	Displays the data type for the fact or rule for the created quantitative scoring model.
Output	Displays the output for the created quantitative scoring model.
Expression	Displays the expression updated in the expression builder for the created quantitative scoring model.
Feature	This tab is enabled for the **Applicant Scoring Model**.
+ icon	This icon adds new row.
- icon	This icon deletes a row, which is already added.
Feature	Displays the feature for the created quantitative scoring model.
Weightage (%)	The user can modify the weightage assigned to each feature for the created quantitative scoring model.
Range Type	Displays the range type for the created quantitative scoring model.
Define Range/Value	Displays the range/value defined for the created quantitative scoring model.

Table 1-159   (Cont.) Quantitative Scoring Model Maintenance - Unlock - Field Description

Field	Description
Range From	The user can modify the minimum range of value based on which scoring is done.
Range To	The user can modify the maximum range of value based on which scoring is done
Score	The user can modify the score for each range or value.
Category	The user can modify the category for the created quantitative scoring model.
Enable	Displays parameter for the created quantitative scoring model.
Scoring Rule	This tab is enabled for the **Application Scoring Model**.
Rule Code	Displays the rule code for the created quantitative scoring model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created quantitative scoring model.

7. Click **Save** to update the modified fields.

8. Click **View** icon to view the created quantitative scoring model.

   The **Quantitative Scoring Model Maintenance – View** screen displays.

Figure 1-207   Quantitative Scoring Model Maintenance – View
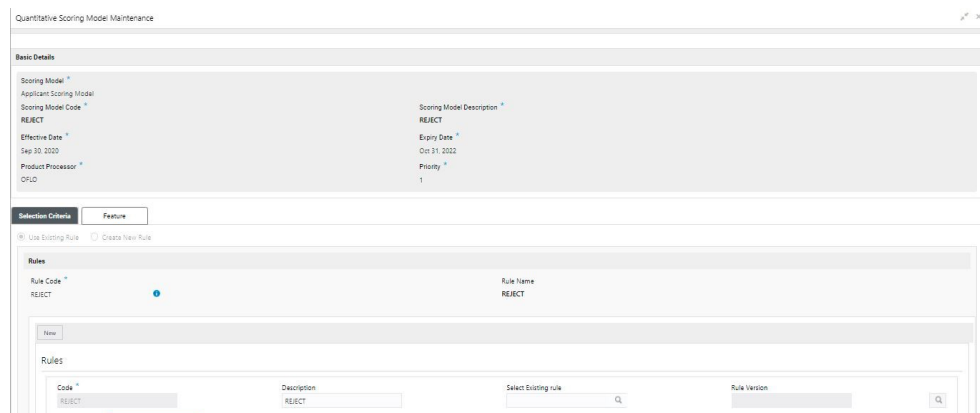
For more information on fields, refer to the field description table.

Table 1-160   Quantitative Scoring Model Maintenance - View - Field Description

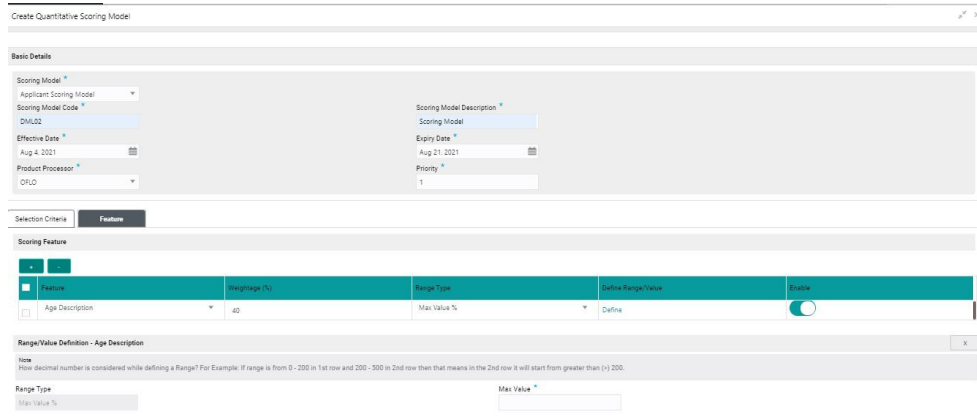| Field	Description
Scoring Model	Displays the application scoring model.
Scoring Model Code	Displays the qualitative scoring model code for the created quantitative scoring model.
Scoring Model Description	Displays the quantitative scoring model description for the created quantitative scoring model.
Effective Date	Displays the effective date of the created quantitative scoring model. The user can modify the same before authorization.
Expiry Date	Displays the expiry date of the created quantitative scoring model. The user can modify the same before authorization.
Product Processor	Displays the product processor for the created quantitative scoring model.
Priority	The user can modify the priority of the created quantitative scoring model.
Use Existing Rule	The user can modify the existing rule if linked.
Rule Code	Displays the rule code for the created quantitative scoring model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created quantitative scoring model.
Create New Rule	Displays the rule code for the created quantitative scoring model.
Code	Displays the rule code.
Description	Displays the rule description.
+ icon	This icon can add new expression.
Fact / Rules	Displays the fact or rule of the created quantitative scoring model.
Operator	Displays the comparison operator of the created quantitative scoring model.
Data Type	Displays the data type for the fact or rule for the created quantitative scoring model.
Output	Displays the output for the created quantitative scoring model.
Expression	Displays the expression updated in the expression builder for the created quantitative scoring model.
Feature	This tab is enabled for the **Applicant Scoring Model**.
+ icon	This icon adds new row.
- icon	This icon deletes a row, which is already added.
Feature	Displays the feature for the created quantitative scoring model.
Weightage (%)	Displays the weightage assigned to each feature for the created quantitative scoring model.
Range Type	Displays the range type for the created quantitative scoring model.
Define Range/ Value	Displays the range/value defined for the created quantitative scoring model.
Range From	The user can modify the minimum range of value based on which scoring is done.

Table 1-160   (Cont.) Quantitative Scoring Model Maintenance - View - Field Description

Field	Description
Range To	The user can modify the maximum range of value based on which scoring is done
Score	Displays the score for each range or value.
Category	Displays the category for the created quantitative scoring model.
Enable	Displays parameter for the created quantitative scoring model.
Scoring Rule	This tab is enabled for the **Application Scoring Model**.
Rule Code	Displays the rule code for the created quantitative scoring model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created quantitative scoring model.

1.52 Decision Grade Matrix

This topic describes the information about the decision grade matrix feature.

The Decision Grade Matrix can define the decision and grade based on the score calculated by the scoring model.

This topic contains the following subtopics:

- Create Decision Grade Matrix
  This topic describes the systematic instructions to create decision and grade matrix by updating various details.

- View Decision Grade Matrix
  This topic describes the systematic instructions to view the decision grade matrix.

1.52.1 Create Decision Grade Matrix

This topic describes the systematic instructions to create decision and grade matrix by updating various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Decision Grade Matrix**.

3. Under **Decision Grade Matrix**, click **Create Decision Grade Matrix**.

   The **Create Decision Grade Matrix** screen displays.

Figure 1-208   Create Decision Grade Matrix

4. On **Create Decision Grade Matrix** screen, specify the fields.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-161   Create Decision Grade Matrix - Field Description

Field	Description
Model Code	Specify the unique model code.
Model Description	Specify a short description for the model.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the decision and grade matrix is being created.
Priority	Specify the priority of the model.

5. Click the **Selection Criteria** to configure the parameters based on which decision model is to be resolved.

Figure 1-209   Create Decision Grade Matrix - Selection Criteria

For more information on fields, refer to the field description table.

Table 1-162   Create Decision Grade Matrix - Selection Criteria - Field Description

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rule Code	Select the rule code from the drop down list.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code.
Create New Rule	Select this option to create new rule.
+ icon	Click this icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once the user selects the fact/rules, one more field opens adjacent to the output, update the same based on the selected output option.

Table 1-162 (Cont.) Create Decision Grade Matrix - Selection Criteria - Field Description

Field	Description
Operator	Select the comparison operator from the drop-down list. The available options are: • **<** • **>** • **+** • **=** • **%** • **!=** • **-** • **>=** • **<=** • ***** • **/** • **Contains** • **In** • **Matches** • **NotMatches** • **NotContains** • **Notin**
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Expression	Displays the expression updated in the expression builder.

6. Click the **Decision Matrix** to define decision on the application. The user can select the feature for which the decision needs to be maintained like Quantitative/Qualitative.

The **Create Decision Grade Matrix - Decision Matrix** screen displays.

Figure 1-210   Create Decision Grade Matrix - Decision Matrix
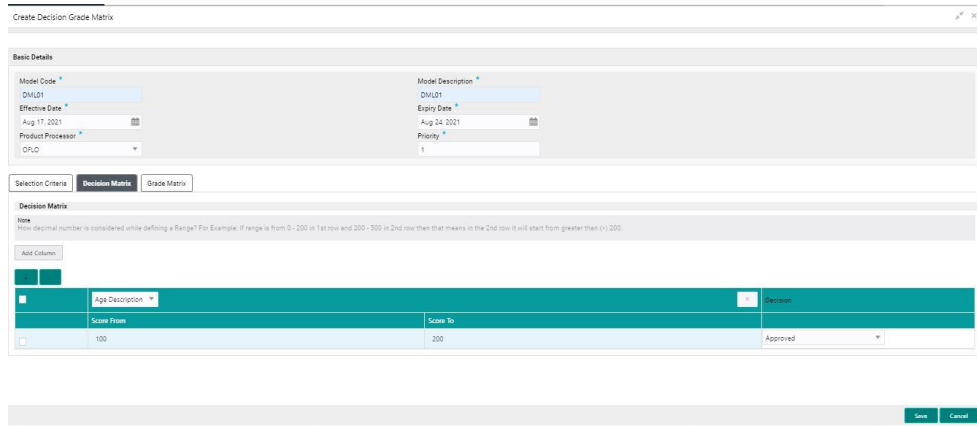
For more information on fields, refer to the field description table.

Table 1-163   Create Decision Grade Matrix - Decision Matrix - Field Description

Field	Description
Add Column	Click this button to add features for which decision has to be maintained. On click of **Add Column**, all the features are shown in the drop down list. Select the feature to be added. Click save to add the feature. If the feature is numeric type, two columns gets added in the table From and To. If the feature is character/alphanumeric type one column Value gets added. System should not save, if no feature have been added. User can click Cancel to close the window.
Link a Rule?	Select the appropriate radio button to link a rule to the features. The options are: • **Yes** - If this option is selected, the system displays the list of rules. Based on the rule mapped, the decision is provided. • **No** - If this option is selected, the system displays the list of decision lookup values.
![x]	Click this icon to delete a column, which is already added.
+ icon	Click this icon to add a new row.
- icon	Click this icon to delete a row, which is already added.
Score From	Specify the minimum range of score for the decision.
Score To	Specify the maximum range of score for the decision.

Table 1-163   (Cont.) Create Decision Grade Matrix - Decision Matrix - Field Description

Field	Description
Decision	Specify the decision of an application from the drop-down list. The values are configurable based on the look up values maintained The available options are: • **Approved** • **Manual** • **Rejected**
Rule	Displays the rules based on which decision is to be made. This field is enabled if **Link a Rule?** option is updated as **Yes**.

7. Click the **Grade Matrix** to assign the grade to the application that is used during the pricing of the application. You can select the feature for which the grade needs to be maintained like Quantitative/Qualitative.

   The **Create Decision Grade Matrix - Grade Matrix** screen displays.

Figure 1-211   Create Decision Grade Matrix - Grade Matrix

For more information on fields, refer to the field description table.

Table 1-164   Create Decision Grade Matrix - Grade Matrix - Field Description

Field	Description
Add Column	Click **Add Column**, for addition of features for which decision has to be maintained.
Link a Rule?	Select the appropriate radio button to link a rule to the features. The options are: • **Yes** - If this option is selected, the system displays the list of rules. Based on the rule mapped, the decision is provided. • **No** - If this option is selected, the system displays the list of decision lookup values.

Table 1-164 (Cont.) Create Decision Grade Matrix - Grade Matrix - Field Description

Field	Description
✕	Click this icon to delete a column, which is already added.
+ icon	Click this icon to add a new row.
- icon	Click this icon to delete a row, which is already added.
Score From	Specify the minimum range of score for the grade.
Score To	Specify the maximum range of score for the grade.
Grade	Specify the grade of the application based on the score scored. The values are configurable based on the look up values maintained. The available options are: • A • B • C
Value	Specify the value for which the grade has to be maintained. This field appears only if the data type of feature is Numeric such as Age, FICO score.
Rule	Displays the rules based on which decision is to be made. This field is enabled if **Link a Rule?** option is updated as **Yes**.

8. Click **Save** to save the details.

The Decision Grade Matrix is successfully created and can be viewed using the View Decision and Grade Matrix screen.

1.52.2 View Decision Grade Matrix

This topic describes the systematic instructions to view the decision grade matrix.

The user can create the decision grade matrix using the Create Decision Grade Matrix screen. The status of the uploaded model is displayed as **Unauthorized** and **Open**. Once the checker authorizes the matrix, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Decision Grade Matrix**.

3. Under **Decision Grade Matrix**, click **View Decision Grade Matrix**.

The **View Decision Grade Matrix** screen displays.

Figure 1-212   View Decision Grade Matrix
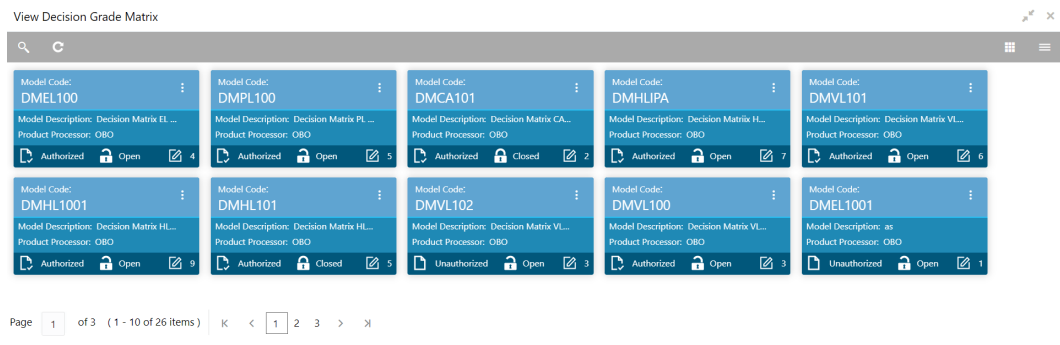
For more information on fields, refer to the field description table.

Table 1-165   View Decision Grade Matrix – Field Description

Field	Description
Model Code	Displays the model code.
Model Description	Displays the model description.
Product Processor	Displays the product processor for which the model is created.
Record Status	Displays the status of the record.
Modification Number	Displays the number of modification performed on the record.

4. Click **Search** icon.

The **View Decision Grade Matrix - Search** screen displays.

Figure 1-213   View Decision Grade Matrix - Search
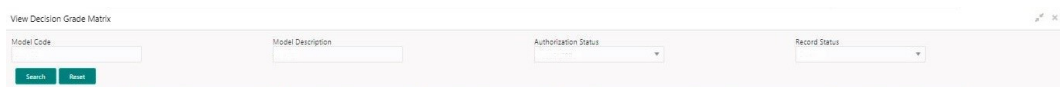
For more information on fields, refer to the field description table.

Table 1-166   View Decision Grade Matrix - Search – Field Description

Field	Description
Model Code	Specify the model code.
Model Description	Specify the model description.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**

Table 1-166   (Cont.) View Decision Grade Matrix - Search – Field Description

Field	Description
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

5. Click **three-dots** icon to unlock, delete, authorize or view the created decision grade matrix.

6. Click **Unlock** icon to modify the fields.

   The **Decision Grade Maintenance** screen displays.

Figure 1-214   Decision Grade Maintenance
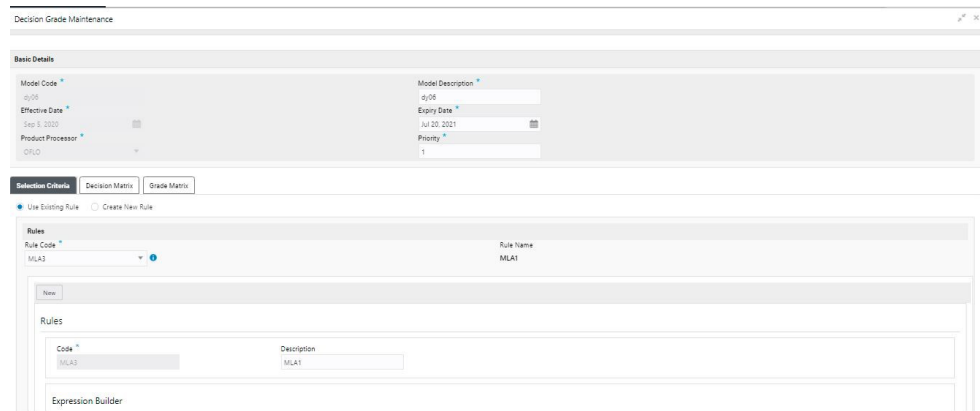
> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-167   Decision Grade Maintenance - Field Description

Field	Description
Model Code	Displays the model code for the created decision grade matrix.
Model Description	The user can modify the model description for the created decision grade matrix.
Effective Date	The user can modify effective date for the decision grade matrix.
Expiry Date	The user can modify date of the created decision grade matrix.
Product Processor	Displays the product processor for the decision grade matrix.
Priority	The user can modify the priority of the created decision grade matrix.

Table 1-168   Selection Criteria - Field Description

Field	Description
Use Existing Rule	Indicates if the existing rule is linked.
Rule Code	The user can modify the rule code for the created decision grade matrix.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created decision grade matrix.
Create New Rule	The user can modify the rule code for the created decision grade matrix.
Description	Specify the rule description for the decision grade matrix.
Code	Specify the new rule code for decision grade matrix.

Table 1-169   Expression Builder - Field Description

Field	Description
+ icon	This icon can add new expression.
Fact / Rules	Displays the fact or rule for the created decision grade matrix.
Operator	Displays the comparison operator for the created decision grade matrix.
Data Type	Displays the data type for the fact or rule for the created decision grade matrix.
Output	Displays the output for the created decision grade matrix.
Expression	Displays the expression updated in the expression builder for the created decision grade matrix.

Table 1-170   Decision Matrix - Field Description

Field	Description
Add Column	Click this button to add features for which decision has to be maintained.
Link a Rule?	Select the appropriate radio button to link a rule to the features. The options are: • **Yes** - If this option is selected, the system displays the list of rules. Based on the rule mapped, the decision is provided. • **No** - If this option is selected, the system displays the list of decision lookup values.
	Click this icon to delete a column, which is already added.
+ icon	Click this icon to add new row.
- icon	Click this icon to delete a row, which is already added.

Table 1-170 (Cont.) Decision Matrix - Field Description

Field	Description
Score From	Specify the minimum range of score for the decision.
Score To	Specify the maximum range of score for the decision.
Decision	Specify the decision of an application. The values configurable based on the look up values maintained. The available options are: • Approved • Manual • Rejected
Rule	Displays the rules based on which decision is to be made. This field is enabled if **Link a Rule?** option is updated as **Yes**.

Table 1-171 Grade Matrix - Field Description

Field	Description
Add Column	Click this button to add features for which grade has to be maintained.
	Click this icon to delete a column, which is already added.
+ icon	Click this icon to add new row.
- icon	Click this icon delete a row, which is already added.
Score From	Specify the minimum range of score for the grade.
Score To	Specify the maximum range of score for the grade.
Grade	Specify the grade of an application based on the score scored. The values configurable based on the look up values maintained. The available options are: • **A** • **B** • **C**

7. Click **Save** to update the modified fields.

8. Click **three-dots** icon to unlock, delete, authorize or view the created decision grade matrix.

9. Click **View** icon to view the decision grade matrix.

   The **Decision Grade Maintenance – View** screen displays.

Figure 1-215   Decision Grade Maintenance – View

For more information on fields, refer to the field description table.

**Table 1-172   Decision Grade Maintenance - View - Field Description**

Field	Description
Model Code	Displays the model code for the created decision grade matrix.
Model Description	Displays the model description for the created decision grade matrix.
Effective Date	Displays the effective date for the decision grade matrix.
Expiry Date	Displays the expiry date of the created decision grade matrix.
Product Processor	Displays the product processor for the decision grade matrix.
Priority	Displays the priority of the created decision grade matrix.

Table 1-173   Selection Criteria - Field Description

Field	Description
Use Existing Rule	Indicates if the existing rule is linked.
Rule Code	Displays the rule code for the created decision grade matrix.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created decision grade matrix.
Create New Rule	Displays the rule code for the created decision grade matrix.
Code	Specify the new rule code for decision grade matrix.
Description	Specify the rule description for the decision grade matrix.

Table 1-174   Expression Builder - Field Description

Field	Description
+ icon	Click this icon to add new expression.
Fact / Rules	Displays the fact or rule for the created decision grade matrix.
Operator	Displays the comparison operator for the created decision grade matrix.
Data Type	Displays the data type for the fact or rule for the created decision grade matrix.
Output	Displays the output for the created decision grade matrix.
Expression	Displays the expression updated in the expression builder for the created decision grade matrix.

Table 1-175   Decision Matrix - Field Description

Field	Description
Add Column	Click this button to add features for which decision has to be maintained.
❌	Click this icon to delete a column, which is already added.
+ icon	Click this icon to add new row.
- icon	Click this icon to delete a row, which is already added.
Score From	Displays the minimum range of score for the decision.
Score To	Displays the maximum range of score for the decision.
Decision	Displays the decision of an application. The values configurable based on the look up values maintained. The available options are: • **Approved** • **Manual** • **Rejected**
Rule	Displays the rules based on which decision is to be made. This field is enabled if **Link a Rule?** option is updated as **Yes**.

Table 1-176   Grade Matrix - Field Description

Field	Description
Add Column	Click this button to add features for which grade has to be maintained.
❌	Click this icon to delete a column, which is already added.
+ icon	Click this icon to add new row.
- icon	Click this icon to delete a row, which is already added.
Score From	Displays the minimum range of score for the grade.
Score To	Displays the maximum range of score for the grade.

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Table 1-176   (Cont.) Grade Matrix - Field Description

Field	Description
Grade	Displays the grade of an application based on the score scored. The values configurable based on the look up values maintained. The available options are: • **A** • **B** • **C**
Rule	Displays the rules based on which grade is to be made. This field is enabled if **Link a Rule?** option is updated as **Yes**.

1.53 Pricing

This topic describes the information about the pricing feature in Decision service.

Risk-based pricing refers to the offering of different interest rates to different customers depending on their credit worthiness. Thus, not all borrowers for the same product receives the same interest rate and credit terms. This means that high-risk borrowers who are less likely to repay their loans in full and on time will be charged higher rate of interest. While the low risk borrowers, having greater capacity to make payments will be charged lower rate of interest.

This topic contains the following subtopics:

- Create Pricing Model
  This topic describes the systematic instructions to create pricing model based on various pricing parameter by updating various details.

- View Pricing Model
  This topic describes the systematic instructions to view the list of pricing model.

1.53.1 Create Pricing Model

This topic describes the systematic instructions to create pricing model based on various pricing parameter by updating various details.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Pricing Model**.

3. Under **Pricing Model**, click **Create Pricing Model**.

   The **Create Pricing Model** screen displays.

Figure 1-216   Create Pricing Model

4. On **Create Pricing Model** screen, specify the fields.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-177   Create Pricing Model - Field Description

Field	Description
Pricing Code	Specify the unique pricing code.
Pricing Description	Specify a short description for the pricing.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the pricing is being created.
Priority	Specify the priority of the pricing.

5. Click the **Selection Criteria** to define pricing model.

Figure 1-217   Create Pricing Model – Selection Criteria

For more information on fields, refer to the field description table.

Table 1-178   Create Pricing Model – Selection Criteria - Field Description

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rule Code	Select the rule code from the drop-down list.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name of the rule code.
Create New Rule	Select this option to create new rule.
Code	Specify the rule code.
Description	Specify the rule description.
+ icon	Click this icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once the user selects the fact/rules, one more field opens adjacent to the output, update the same based on the selected output option.

Table 1-178   (Cont.) Create Pricing Model – Selection Criteria - Field Description

Field	Description
Operator	Select the comparison operator from the drop-down list. The available options are: • **<** • **>** • **+** • **=** • **%** • **!=** • **-** • **>=** • **<=** • ***** • **/** • **Contains** • **In** • **Matches** • **NotMatches** • **NotContains** • **Notin**
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** • **Rules** The below option appears if the **Data Type** is selected as **Boolean**. • **True** • **False**
Expression	Displays the expression updated in the expression builder.

6. Click **Price Definition** to define the pricing.

7. Select the **Rate Type** options as **Flat** to specify the flat rate.

The **Create Pricing Model – Price Definition (Flat)** screen displays.

Figure 1-218   Create Pricing Model – Price Definition (Flat)

For more information on fields, refer to the field description table.

Table 1-179   Create Pricing Model – Price Definition (Flat) - Field Description

Field	Description
Minimum Rate	Specify the minimum rate applicable for the defined pricing code.
Maximum Rate	Specify the maximum rate applicable for the defined pricing code.
Rate Type	Select the rate type from the drop-down list as **Flat**.
Link a Rule?	Select the option whether to link a rule to derive the price. The options are: • **Yes** • **No**
Rate %	Specify the interest rate application for the defined pricing. This field displays once you select the **Rate Type** option as **Flat**and **Link a Rule?** option as **No**.
Rule	Select the rule for the defined pricing from the drop-down list. This field appears once you select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.

8. Select the **Rate Type** options as **Tiered** to link the list of features.

9. Click **Add Columns** to select and link the features.

   The **Add Features** popup screen displays.

Figure 1-219   Add Features

10. Select the feature names from the list. ('n' number of features can be selected)

11. Select the option whether to link a rule for defining the interest rate.

12. Click **Save** to link the list of features for defining the tiered interest rate.

    The **Create Pricing Model – Price Definition (Tiered)** screen displays.

Figure 1-220   Create Pricing Model – Price Definition (Tiered)

For more information on fields, refer to the field description table.

Table 1-180   Create Pricing Model – Price Definition (Tiered) - Field Description

Field	Description
Minimum Rate	Specify the minimum rate applicable for the defined pricing code.

Table 1-180   (Cont.) Create Pricing Model – Price Definition (Tiered) - Field Description

Field	Description
Maximum Rate	Specify the maximum rate applicable for the defined pricing code.
Rate Type	Select the rate type from the drop-down list as **Tiered**.
<Numeric Feature> From	Specify the minimum numeric value of feature to which the interest rate is applicable.
<Numeric Feature> To	Specify the maximum numeric value of feature to which the interest rate is applicable.
<Character Feature> Value	Specify the alphabetic value for which the interest rate is applicable.
Rate %	Specify the interest rate applicable for the defined tier. This field appears once you select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **No**.
Rule	Select the rule for the defined tier from the drop-down list. This field appears once you select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **Yes**.

13. Click **Save** to save the details.

   The Pricing model is successfully created and can be viewed using View Pricing Model screen.

1.53.2 View Pricing Model

This topic describes the systematic instructions to view the list of pricing model.

The user can create the pricing model using the Create Pricing Model screen. The status of the uploaded model is displayed as **Unauthorized** and **Open**. Once the checker authorizes the model, the status is updated to **Authorized** and **Open**.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Pricing**.

3. Under **Pricing** , click **View Pricing Model**.

   The **View Pricing Model** screen displays.

Figure 1-221   View Pricing Model
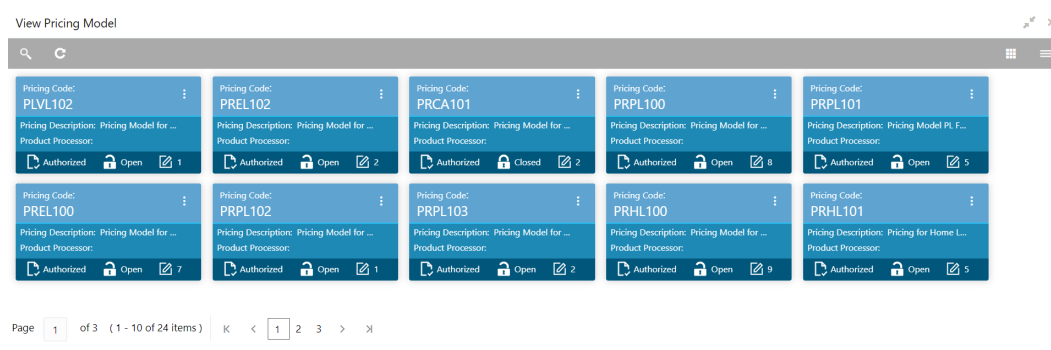
For more information on fields, refer to the field description table.

Table 1-181　View Pricing Model – Field Description

Field	Description
Pricing Code	Displays the pricing code.
Pricing Description	Displays the description of the pricing model.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modifications performed on the record.

4. Click **Search** icon.

   The **View Pricing Model - Search** screen displays.

Figure 1-222　View Pricing Model - Search

For more information on fields, refer to the field description table.

Table 1-182　View Pricing Model - Search – Field Description

Field	Description
Pricing Code	Specify the pricing code.
Pricing Description	Specify the description of the pricing model.
Authorization Status	Select the authorization status from the drop-down list. The available options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Select the record status from the drop-down list. The available options are: • **Open** • **Closed**

5. Click **three-dots** icon to unlock, delete, authorize or view the created pricing model.

6. Click **Unlock** icon to modify the fields.

   The **Pricing Model Maintenance - Unlock** screen displays.

Figure 1-223   Pricing Model Maintenance - Unlock

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 1-183   Pricing Model Maintenance - Unlock - Field Description

Field	Description
Pricing Code	Displays the pricing code for the created quantitative pricing model.
Pricing Description	Specify the pricing description for the created pricing model.
Effective Date	Specify the effective date for the created pricing model.
Expiry Date	Specify the expiry date for the created pricing model.
Product Processor	Displays the product processor for the created pricing model.
Priority	Specify the priority of the created pricing model.
Use Existing Rule	Specify the existing rule if linked.
Rule Code	Specify the rule code for the created pricing model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Specify the new rule linked to the pricing model.
Code	Specify the new rule code for the created pricing model.
Description	Specify the rule description for the created pricing model.
+ icon	Click this icon can add new expression.
Fact / Rules	Displays the fact or rule of the created pricing model.
Operator	Displays the comparison operator of the created pricing model.

Table 1-183   (Cont.) Pricing Model Maintenance - Unlock - Field Description

Field	Description
Data Type	Displays the data type for the fact or rule for the created pricing model.
Output	Displays the output for the created pricing model.
Expression	Displays the expression updated in the expression builder for the created pricing model.
Pricing Definition	The below listed fields appear in **Pricing Definition** tab.
Minimum Rate	Specify the minimum rate applicable for the defined pricing model.
Maximum Rate	Specify the maximum rate applicable for the defined pricing model.
Rate Type	Select the range type for the created pricing model from the drop-down list. The available options are: • **Flat** • **Tiered**
Rate%	Specify the interest rate application for the defined pricing. **✎ Note:** This field appears once the user select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.
Rule	Select the rule for the defined pricing. **✎ Note:** This field appears once the user select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.
<Numeric Feature> From	Specify the minimum numeric value of feature to which the interest rate is applicable. **✎ Note:** This field displays if the **Rate Type** is selected as **Tiered**.
<Numeric Feature> To	Specify the maximum numeric value of feature to which the interest rate is applicable. **✎ Note:** This field displays if the **Rate Type** is selected as **Tiered**.

Table 1-183   (Cont.) Pricing Model Maintenance - Unlock - Field Description

Field	Description
<Character Feature> Value	Specify the alphabetic value for which the interest rate is applicable. ✏️ **Note:** This field displays if the **Rate Type** is selected as **Tiered**.
Rate%	Specify the interest rate applicable for the defined tier. ✏️ **Note:** This field appears once you select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **No**.
Rule	Select the rule for the defined tier. ✏️ **Note:** This field appears once the user select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **Yes**.

7. Click **Save** to update the modified fields.

8. Click **View** icon to view the created quantitative scoring model.

   The **Pricing Model Maintenance – View** screen displays.

Figure 1-224   Pricing Model Maintenance - View

For more information on fields, refer to the field description table.

Table 1-184   Pricing Model Maintenance - View - Field Description

Field	Description
Pricing Code	Displays the pricing code for the created quantitative pricing model.
Pricing Description	Displays the pricing description for the created pricing model.
Effective Date	Displays effective date for the created pricing model.
Expiry Date	Displays date for the created pricing model.
Product Processor	Displays the product processor for the created pricing model.
Priority	Displays the priority of the created pricing model.
Use Existing Rule	Displays the existing rule if linked.
Rule Code	Displays the rule code for the created pricing model.
	Click this icon to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Displays the new rule linked to the pricing model.
Code	Specify the new rule code for the created pricing model.
Description	Specify the rule description for the created pricing model.

Table 1-184   (Cont.) Pricing Model Maintenance - View - Field Description

Field	Description
+ icon	This icon can add new expression.
Fact / Rules	Displays the fact or rule of the created pricing model.
Operator	Displays the comparison operator of the created pricing model.
Data Type	Displays the data type for the fact or rule for the created pricing model.
Output	Displays the output for the created pricing model.
Expression	Displays the expression updated in the expression builder for the created pricing model.
Pricing Definition	The below fields appears in the **Pricing Definition** tab.
Minimum Rate	Displays the minimum rate applicable for the defined pricing model.
Maximum Rate	Displays the maximum rate applicable for the defined pricing model.
Rate Type	Displays the range type for the created pricing model from the drop-down list. The available options are: • **Flat** • **Tiered**
Rate%	Displays the interest rate application for the defined pricing. **Note:** This field appears once the user select the **Rate Type** as **Flat** and **Link a Rule?** option as **Yes**.
Rule	Displays the rule for the defined pricing. **Note:** This field appears once you select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.
<Numeric Feature> From	Displays the minimum numeric value of feature to which the interest rate is applicable. **Note:** This field displays if the **Rate Type** is selected as **Tiered**.

Table 1-184   (Cont.) Pricing Model Maintenance - View - Field Description

Field	Description
<Numeric Feature> To	Displays the maximum numeric value of feature to which the interest rate is applicable. **Note:** This field displays if the **Rate Type** is selected as **Tiered**.
<Character Feature> Value	Displays the alphabetic value for which the interest rate is applicable. **Note:** This field displays if the **Rate Type** is selected as **Tiered**.
Rate%	Displays the interest rate applicable for the defined tier. **Note:** This field appears once you select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **No**.
Rule	Displays the rule for the defined tier. **Note:** This field appears once you select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **Yes**.

1.54 Execution Summary

This topic describes the information to view the decisions, credit score and pricing for the processed application.

This topic contains the following subtopics:

- View Execution Summary
  This topic describes the systematic instructions to view the execution summary based on the various filter options provided.

1.54.1 View Execution Summary

This topic describes the systematic instructions to view the execution summary based on the various filter options provided.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Credit Decision**.

2. Under **Credit Decision**, click **Operations**. Under **Operations**, click **Execution Summary**.

   The **View Execution Summary** screen displays.

Figure 1-225   View Execution Summary

For more information on fields, refer to the field description table.

Table 1-185   View Execution Summary - Field Description

Field	Description
+ icon	Click the icon to add a new row.
- icon	Click the icon to delete a row, which is already added.
Filter	Select the required option to search for the execution summary. The available options are: • Reference Number • Internal Reference Number • Decision • Batch/Online • Product Processor • Status • Request Type • Execution Date • Contract ID

Table 1-185   (Cont.) View Execution Summary - Field Description

Field	Description
Value	Specify the required details or select an appropriate option for the selected filter option.
	This field appears once you select an option from the **Filter** list.
From Date	Select the start date of the period during which the execution summary is generated.
	This field appears if you select the filter option as **Execution Date** and value as **Date Range.**
To Date	Select the end date of the period during which the execution summary is generated.
	This field appears if you select the filter option as **Execution Date** and value as **Date Range.**

3. In the **Search Criteria** section, specify the details and click **Search**.

   The search results displays with the list of records based on the specified criteria.

4. Click **Reset** to reset the search criteria.

Figure 1-226   Scoring Decision Summary

For more information on fields, refer to the field description table.

Table 1-186   Scoring Decision Summary - Field Description

Field	Description
Product Processor	View the name of the product processor that sent the request.
Request Type	View the request type sent by product processor.
Contract ID	View the contract ID sent by the product processor.
Reference Number	View the request reference number sent by product processor.
Internal Reference Number	View the internal reference number of the application.
Execution Date	View the execution date of the processing application.
Mode	View the mode of execution of the application.

Table 1-186   (Cont.) Scoring Decision Summary - Field Description

Field	Description
Status	View the status of the processed application.

5. Click the corresponding ▶ icon to the required record to view the decision related details on each widget. Only one record can be viewed at a time. To view another record, close the previous record and then the next record can be viewed. The widgets are arranged in a flow in which the execution is done. These are indicated by showing the sequence 1, 2, 3 numbers at the top right corner. The widgets are selectable, on mouseover, the color of the widget changes to indicate that the widget is selectable.

6. When the status of the processed application **Fails**, a click on the ▶ failure message displays the step that is failed. For example, in case of the **Qualitative Score Model** is not resolved, then an error message is displayed in the **Qualitative Score Model** widget. The previous widget will show the data which was processed. If the validation processing fails, then the **Fail** status is shown in the **Validation Model** widget, and the reason for failure is displayed by a click on the widget.

Figure 1-227   View Execution Summary

For more information on fields, refer to the field description table.

Table 1-187   View Execution Summary - Field Description

Field	Description
Validation Model Widget	Displays the status of the validation model processed.
Validation Model Code	Displays the validation model code, resolved for credit decision.
Description	Displays the validation model description, resolved for the credit decision.
Status	Displays the status of the validation model processed. • For status **Pass**, the color is shown as **Green**. • For status **Fail**, the color is shown as **Red**.
Borrowing Capacity Widget	Displays the maximum lendable amount that can be given for an application.
Eligibility Code	Displays the eligibility model code, resolved for calculating the borrowing capacity.
Description	Displays the eligibility model description, resolved for calculating the borrowing capacity.
Requested Amount	Displays the requested amount for the lending application.
Borrowing Capacity	Displays the maximum lendable amount that can be given for the application.
Qualitative Score Widget	Displays the qualitative credit score, post credit decision of the application.
Scoring Model Code	Displays the scoring model code, resolved for credit decision. • When **Is Application Decision Required** is **Yes**, the application level decision scoring code is displayed. • When **Is Application Decision Required** is **No**, the applicant level decision scoring code is displayed. • When **Is Application Decision Required** is **No**, and **Is Primary Applicant** is **No**, the application level decision scoring code is displayed.
Description	Displays the scoring model description, resolved for credit decision.
Score	Displays the qualitative credit score post credit decision of the application. • When **Is Application Decision Required** is **Yes**, the system performs the aggregation, which can be minimum, maximum or average of all applicant's score. The aggregation performed is defined as rules and linked at the application level scoring model and this aggregated score is displayed. • When **Is Application Decision Required** is **No**, the score is displayed by resolving the applicant level scoring model. • When **Is Application Decision Required** is **No**, and **Is Primary Applicant** is **No**, the system performs the aggregation, which can be minimum, maximum or average of all applicant's score. The aggregation performed is defined as rule and linked at the application level scoring model and this aggregated score is displayed.
Quantitative Score Widget	Displays the quantitative credit score post credit decision of the application.

Table 1-187   (Cont.) View Execution Summary - Field Description

Field	Description
Scoring Model Code	Displays the scoring model code, resolved for credit decision. • When **Is Application Decision Required** is **Yes**, the applicationlevel decision scoring code is displayed. • When **Is Application Decision Required** is **No**, the applicant level decision scoring code is displayed. • When **Is Application Decision Required** is **No**, and **Is Primary Applicant** is **No**, the multi applicant level scoring code is displayed.
Description	Displays the scoring model description, resolved for credit decision.
Score	Displays the quantitative credit score, post credit decision of the application. • When **Is Application Decision Required** is **Yes**, the system performs the aggregation, which can be minimum, maximum or average of all applicant's score. The aggregation performed is defined as rules and linked at the application level scoring model and this aggregated score is displayed. • When **Is Application Decision Required** is **No**, the score is displayed by resolving the applicant level scoring model. • When **Is Application Decision Required** is **No**, and **Is Primary Applicant** is **No**, the score is displayed by resolving the multi applicant level scoring model.
Decision and Grade Widget	Displays the credit decision and scoring grade, taken for the application.
Model Code	Displays the model code, resolved for credit decision and grade.
Description	Displays the model description, resolved for credit decision and grade.
Decision	Displays the credit decision, taken for the application.
Grade	Displays the scoring grade, post credit decision of the application.
Pricing Widget	Displays the rate applicable post credit decision.
Pricing Model Code	Displays the pricing model code, resolved for credit decision.
Description	Displays the pricing model description, resolved for credit decision.
Rate Type	Displays the rate type applicable post credit decision.
Rate %	Displays the rate applicable post credit decision.

Click on the **Validation Model** widget, the following fields are displayed. The details for the request which was clicked on the landing page is displayed.

Figure 1-228   Validation Model Widget

For more information on fields, refer to the field description table.

Table 1-188   Validation Model Widget - Field Description

Field	Description
Product Processor	Displays the name of the product processor that sent the request. This field will be shown on click of each widget.
Request Type	Displays the request type sent by the product processor. This field will be shown on click of each widget.
Contract ID	Displays the contract ID sent by the product processor. This field will be shown on click of each widget.
Request Reference Number	Displays the request reference number sent by product processor. This field will be shown on click of each widget.
Internal Reference Number	Displays the internal reference number of the application. This field will be shown on click of each widget.
Execution Date	Displays the execution date of the processing application. This field will be shown on click of each widget.
Mode	Displays the mode of execution of the application. This field will be shown on click of each widget.
<Validation Model Code>	Displays the validation model code that is resolved for credit decision. Click the hyper link to view the rule executed to resolve the model.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Description	Displays the description of the validation model.
Status	Displays the status of validation model.
Rule ID	Displays the rule ID executed for validation model processing. Click the hyperlink to view the rule executed.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Sequence	Displays the sequence in which the rules are executed for validation model processing.

Table 1-188   (Cont.) Validation Model Widget - Field Description

Field	Description
Status	Displays the status of the rule execution. In case the status is failed, the reason for failure is displayed as **Reason <>**. The options are: • **Pass** • **Not Executed** - This status is displayed against a rule if the **Stop on Failure** is set as **ON** and previous rule sequence has failed.

The following fields are displayed once the user click the **Borrowing Capacity** widget.

Figure 1-229   Borrowing Capacity Widget

For more information on fields, refer to the field description table.

Table 1-189   Borrowing Capacity Widget - Field Description

Field	Description
<Eligibility Code>	Displays the eligibility code resolved for calculating the borrowing capacity. Click the hyperlink to view the rule executed to resolve the borrowing capacity.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Eligibility Description	Displays the eligibility description resolved for calculating the borrowing capacity.
Requested Amount	Displays the requested amount for the lending application.
Borrowing Capacity	Displays the maximum lendable amount that can be given for an application.

Table 1-189   (Cont.) Borrowing Capacity Widget - Field Description

Field	Description
Fact	Displays the fact using which the maximum lendable amount was calculated.
Rule ID	Displays the rule ID executed for calculating the maximum lendable amount.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.

The following fields are displayed once you click the **Qualitative Score** widget.

Figure 1-230   Qualitative Score Widget – Bar Graph View
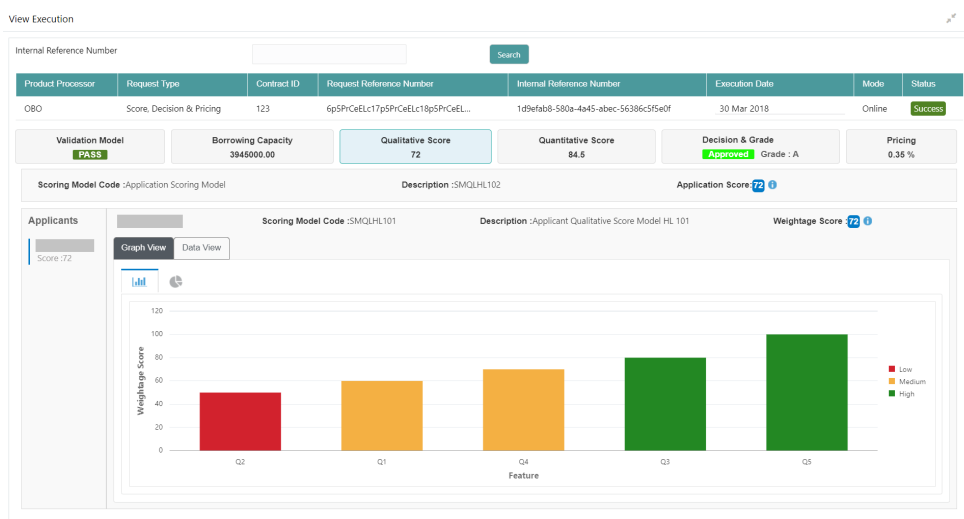
Figure 1-231   Qualitative Score Widget – Pie Graph View
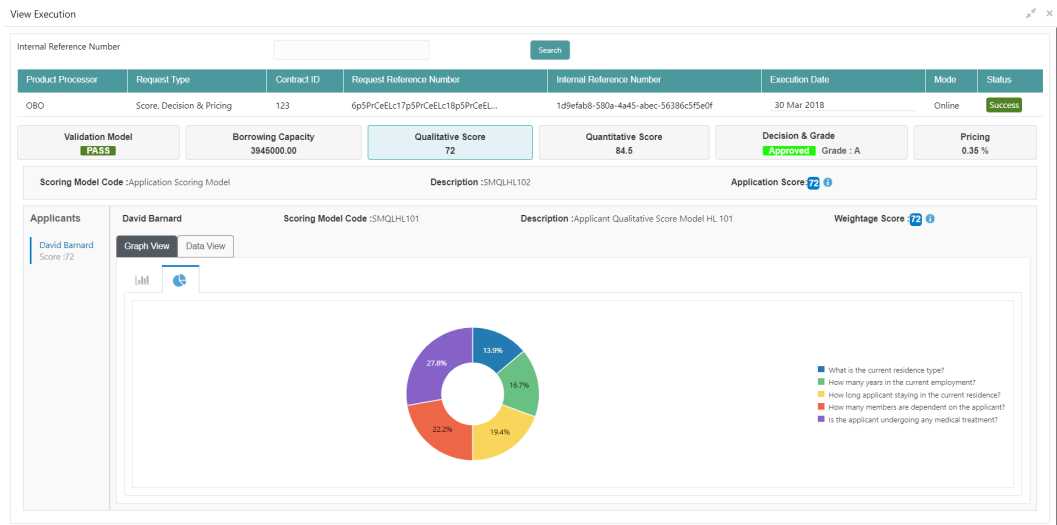
Figure 1-232   Qualitative Score Widget – Data View
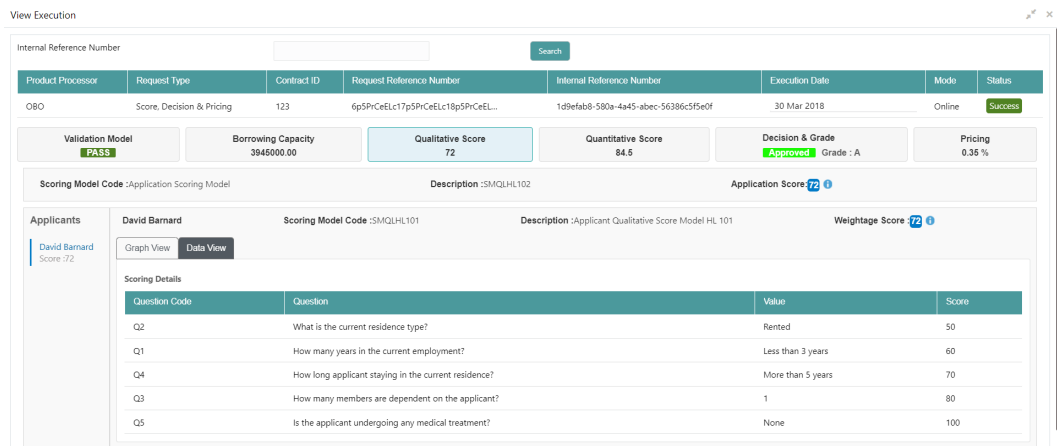
For more information on fields, refer to the field description table.

Table 1-190   Qualitative Score Widget - Field Description

Field	Description
<Scoring Model Code>	Displays the scoring model code resolved for credit decision.
	• When **Is Application Decision Required** is **Yes**, the application level decision scoring code is displayed.
	• When **Is Application Decision Required** is **No**, the applicant level decision scoring code is displayed.
	• When **Is Application Decision Required** is **No** and **Is Primary Applicant** is **No**, the application level scoring code is displayed.
Description	Displays the scoring model description resolved for credit decision.

Table 1-190   (Cont.) Qualitative Score Widget - Field Description

Field	Description
Weightage Score/ Application Score	Displays the qualitative credit score post credit decision of the application. • When **Is Application Decision Required** is **Yes,** the field name is displayed as **Application Score.** The system performs the aggregation, which can be minimum, maximum or average of all applicant's score. The aggregation performed is defined as rules and linked at the application level scoring model and this aggregated score is displayed. • When **Is Application Decision Required** is **No,** the field name is displayed as **Weightage Score**. The score is displayed by resolving the applicant level scoring model. • When **Is Application Decision Required** is **No,** and **Is Primary Applicant** is **No,** the field name is displayed as **Application Score**. The system performs the aggregation, which can be minimum, maximum or average of all applicant's score. The aggregation performed is defined as rules and linked at the application level scoring model and this aggregated score is displayed.
	Hover this icon to get the information about the formula for calculation of score.
<Applicant Name>	Displays the applicant names present in the application.
<Score>	Displays the weighted credit score post credit decision of the application. The score is calculated for each applicant by resolving the applicant level scoring model.
<Applicant Name>	Displays the applicant names present in the application.
Scoring Model Code	Displays the applicant level scoring model code resolved for credit decision.
Description	Displays the applicant scoring model description.
Weightage Score	Displays the weighted credit score post credit decision of the application.
	Hover this icon to get the information about the formula for calculation of score.
Graph View	Two graphical views are available. • **Bar Graphs** The details are shown as a graphical representation as bar charts. • List of question ID on the **X**-axis • Score on the **Y**-axis. Based on the evaluation of the category, the questions are shown in a particular color based on the maintenance done in the lookups screen. • **Pie Charts** The details are shown as a graphical representation as pie charts. The calculation logic for the question is (Score of the question/ Weightage score of the applicant)*100. The pis is shown from a pool of colors available/defined in the code.
Data View	The scoring details are shown as mentioned below in data view.

Table 1-190   (Cont.) Qualitative Score Widget - Field Description

Field	Description
Question Code	Displays the question code resolved for the applicant in the scoring model.
Question	Displays the question description resolved for the applicant in the scoring model.
Value	Displays the response received for the question in the payload.
Score	Displays the score calculated for the question based on the range and the response. In case any question was optional for which the response was not received, **NA** will be displayed.

The following fields are displayed once you click the **Quantitative Score** widget.

Figure 1-233   Quantitative Score Widget – Bar Graph View
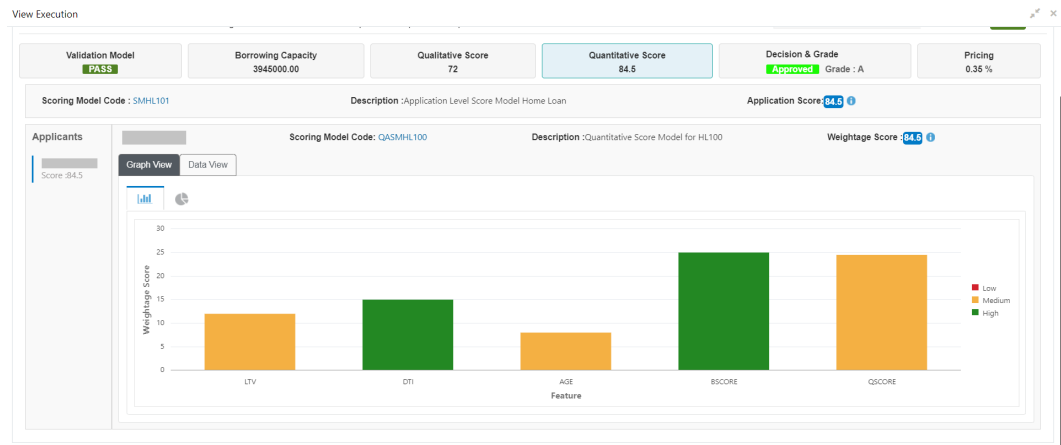
Figure 1-234   Quantitative Score Widget – Pie Graph View
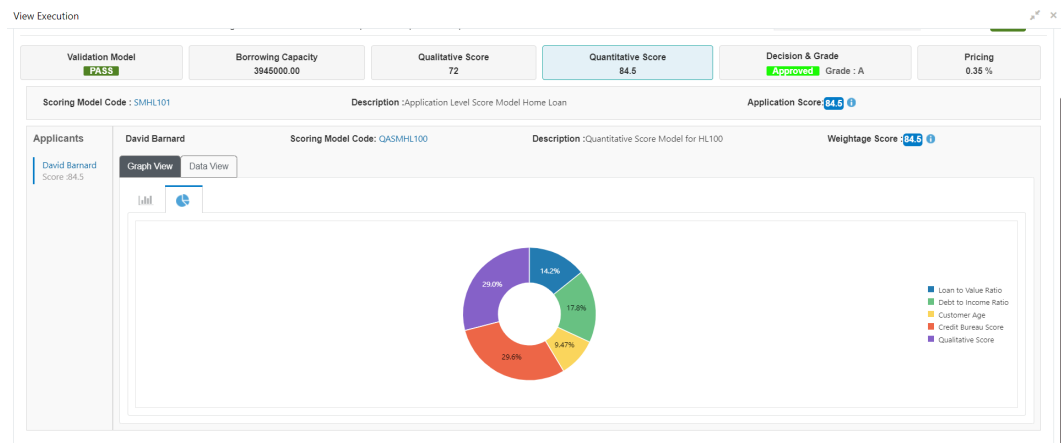
Figure 1-235   Quantitative Score Widget – Data View
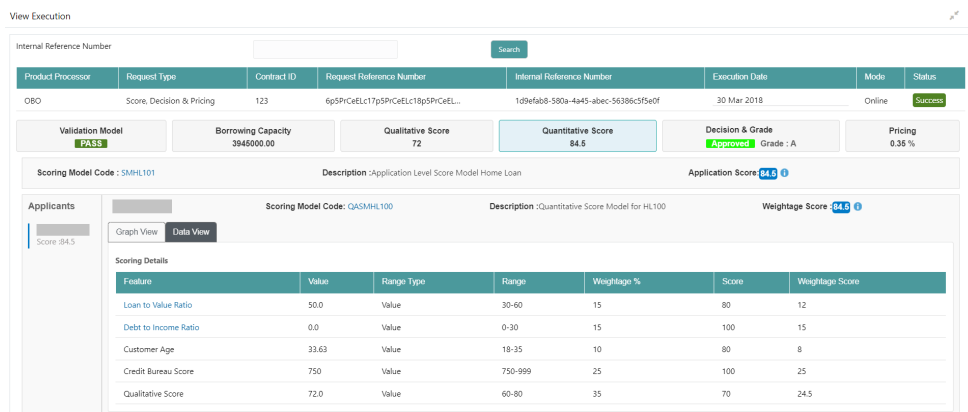
For more information on fields, refer to the field description table.

Table 1-191   Quantitative Score Widget - Field Description

Field	Description
<Scoring Model Code>	Displays the scoring model code resolved for credit decision. • When **Is Application Decision Required** is **Yes,** the applicationlevel decision scoring code is displayed. • When **Is Application Decision Required** is **No,** the applicant level decision scoring code is displayed. • When **Is Application Decision Required** is **No** and **Is Primary Applicant** is **No,** the multi applicant level scoring code is displayed. Click the hyperlink to view the rule executed to resolve the quantitative score.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Description	Displays the scoring model description resolved for credit decision.

Table 1-191   (Cont.) Quantitative Score Widget - Field Description

Field	Description
Weightage Score	Displays the weightage score post credit decision of the application. • When **Is Application Decision Required** is **Yes**, the system performs the aggregation, which can be minimum, maximum or average of all applicant's score. The aggregation performed is defined as rules and linked at the application level scoring model and this aggregated score is displayed. • When **Is Application Decision Required** is **No**, the score is displayed by resolving the applicant level scoring model. • When **Is Application Decision Required** is **No** and **Is Primary Applicant** is **No**, the score is displayed by resolving multi applicant level scoring model. In case of **Is Application Decision Required** is **Yes**, the system displays the hyperlink on the weightage score value. It shows the aggregate rule details.
<Applicant Name>	Displays the applicant names present in the application.
<Score>	Displays the weighted credit score post credit decision of the application. The score is calculated for each applicant by resolving the applicant level scoring model. In case of multi applicant scenario, weightage score per applicant is not shown.
<Applicant Name>	Displays the applicant names present in the application.
Scoring Model Code	Displays the applicant level scoring model code resolved for credit decision. Applicant level scoring model is applicable for the below case. • If **Is Application Decision required** is **Yes** • If **Is Application Decision Required** is **No,** and **Is Primary Applicant** is **Yes** Multi applicant level scoring model is applicable in the below case. If **Is Application Decision Required** is **No,** and **Is Primary Applicant** is **No**. Click the hyperlink to view the rule executed to resolve the quantitative score.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Description	Displays the applicant scoring model description.
Weightage Score	Displays the weighted credit score post credit decision of the application. The weightage score is calculated for each applicant by resolving the applicant scoring model. In case of multi applicant scoring model, for both the applicant the same score is shown since the score is not calculated per applicant.

Table 1-191   (Cont.) Quantitative Score Widget - Field Description

Field	Description
	Hover this icon to get the information about the formula for calculation of score.
Graph View	Two graphical views are available. • **Bar Graphs** The details are shown as a graphical representation as bar charts. • List of features on the **X**-axis • Weightage Score on the **Y**-axis. Based on the evaluation of the category, the feature are shown in a particular color based on the maintenance done in the lookups screen. **Note:** For Multi Applicant scoring model all graphs is shown in the same color, as category evaluation is not applicable. • **Pie Charts** The details are shown as a graphical representation as pie charts. The calculation logic for the feature is (Weighted score of the feature/ Weightage score of the applicant)*100. The pie is shown from a pool of colors available/defined in the code.
Data View	The scoring details are shown as mentioned below in data view.
Feature	Displays the features resolved for the applicant in the scoring model. Click the hyperlink to view the rule executed to resolve the quantitative score.
Show Rule Log	Click to see the rule log.
	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Value	Displays the value of the feature.
Range Type	Displays the range type for the feature.
Range	Displays the range resolved for the feature value for score resolution.
Weightage %	Displays the weightage defined for the feature in the scoring model.
Score	Displays the score calculated for the feature based on the range and feature value.

Table 1-191   (Cont.) Quantitative Score Widget - Field Description

Field	Description
Weightage Score	Displays the weighed credit score post credit decision of the application.

The following fields are displayed once you click the **Decision and Grade** widget.

Figure 1-236   Decision and Grade Widget
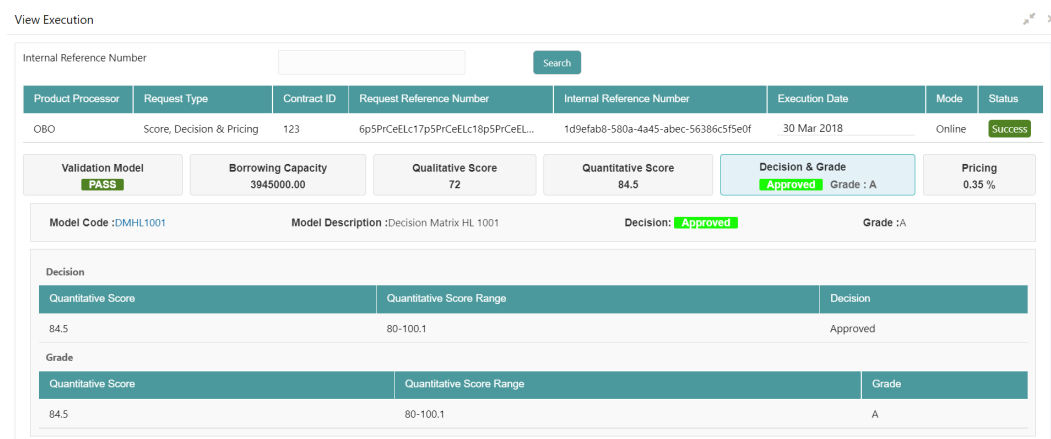
For more information on fields, refer to the field description table.

Table 1-192   Decision and Grade Widget - Field Description
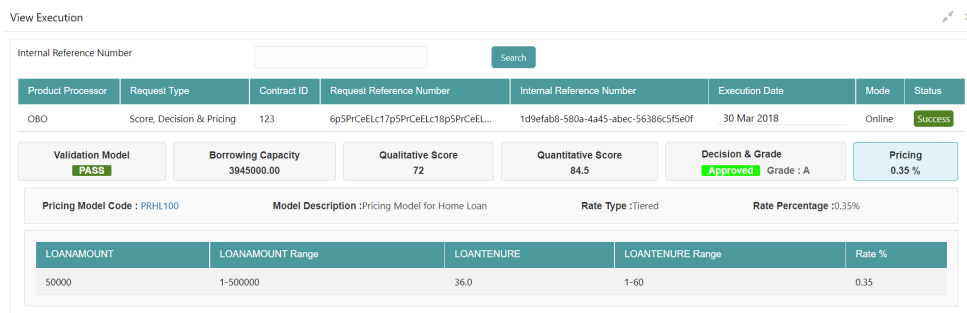
Field	Description
<Model Code>	Displays the model code resolved for credit decision and grade.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Model Description	Displays the model description resolved for credit decision and grade.
Decision	Displays the credit decision taken for the application.
Grade	Displays the scoring grade post credit decision of the application.
Quantitative Score	Displays the quantitative score calculated for the application. If the feature is rule based, system displays the hyperlink.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.

Table 1-192   (Cont.) Decision and Grade Widget - Field Description

Field	Description
Value	Displays the value of the rule.
Quantitative Score Range	Displays the range resolved for the quantitative score value for score resolution.
Qualitative Score	Displays the qualitative score calculated for the application.
Qualitative Score Range	Displays the range resolved for the qualitative score value for score resolution.
Decision	Displays the credit decision taken for the application.
Rule ID	Displays the decision taken for the application. Click the hyperlink to view the rule executed.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Qualitative Score	Displays the qualitative score calculated for the application. If the feature is rule based, system displays the hyperlink.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Qualitative Score Range	Displays the range resolved for the qualitative score value for score resolution.
Quantitative Score	Displays the quantitative score calculated for the application.
Quantitative Score Range	Displays the range resolved for the quantitative score value for score resolution.
Grade	Displays the scoring grade taken for the application.

The following fields are displayed once you click the **Pricing** widget.

Figure 1-237   Pricing Widget

For more information on fields, refer to the field description table.

Table 1-193　Pricing Widget - Field Description

Field	Description
<Pricing Model Code>	Displays the pricing model code resolved for credit decision. Click the hyperlink to view the rule executed to resolve the pricing model.
Show Rule Log	Click to see the rule log.
▶	Click to expand the rule.
Expression	Displays the expression of the rule.
Input	Displays the input of the rule.
Value	Displays the value of the rule.
Model Description	View the pricing model description resolved for credit decision.
Rate Type	View the rate type applicable post credit decision.
Rate Percentage	View the rate applicable post credit decision.
Loan Amount	View the eligible loan amount for the application.
Loan Tenure	View the loan tenure for the application.
Loan Amount Range	View the range resolved for the loan amount value.
Loan Tenure Range	View the range resolved for the loan tenure value.
Rate %	View the rate applicable post credit decision.

2

NLP Framework

This topic describes about the NLP Framework provided in common core.

- **Toolkit**
  This topic describes the information about the toolkit used to design and train NLP / NER Model(s).

- **Operation**
  This topic describes the information about the trained models that are consumed for business processing.

- **3P Service Integration**
  This topic provides description about the integration of third party services.

2.1 Toolkit

This topic describes the information about the toolkit used to design and train NLP / NER Model(s).

This topic contains the following subtopics:

- **Use Case Definition**
  This topic describes the information about the use case definition.

- **Annotator**
  This topic describes the information about the annotator.

- **Model Training**
  This topic describes the systematic instructions to train the model on the annoted training corpus.

- **Model Management**
  This topic describes the information about the Model Management.

2.1.1 Use Case Definition

This topic describes the information about the use case definition.

The user cases are defined by the business domain. The required information to be extracted from the documents is driven by business consideration against the context of use case being defined.

The tags or entities are required for annotating or tagging the information in a source document to create training files for use case model training. These tags or entities are always driven by business considerations for a particular usage case.

The use case definition maintenance screen allows the user to define use case(s) and maintain specific list of tags for the use case.

This topic contains the following subtopics:

- View Use Case Definition
  This topic describes the systematic instructions to view the list of defined use cases.

- Tag Maintenance
  This topic describes the systematic instructions to define use cases and maintain entities or tags for the use case.

2.1.1.1 View Use Case Definition

This topic describes the systematic instructions to view the list of defined use cases.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **NLP Toolkit**.

2. Under **NLP Toolkit**, click **Use Case Definition**.

   The **Use Case Definition** screen displays.

Figure 2-1   Use Case Definition
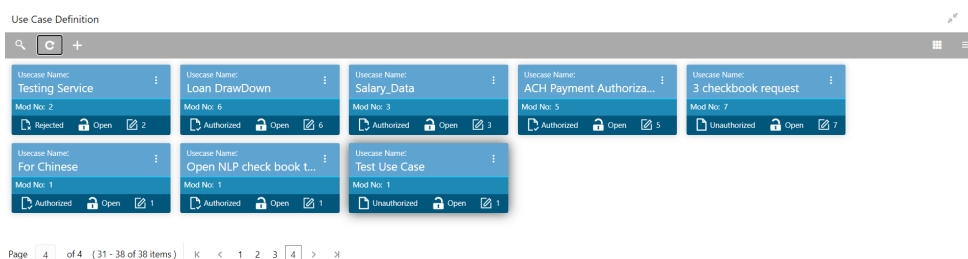
For more information on fields, refer to the field description table.

Table 2-1   Use Case Definition – Field Description

Field	Description
Usecase Name	Displays the name of the use case.
Mod No	Displays the modification number.
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

2.1.1.2 Tag Maintenance

This topic describes the systematic instructions to define use cases and maintain entities or tags for the use case.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **NLP Toolkit**.

2. Under **NLP Toolkit**, click **Use Case Definition**.

3. Click **+** to add tag maintenance.

   The **Tag Maintenance** screen displays.

Figure 2-2   Tag Maintenance

4. specify the fields on **Tag Maintenance** screen.

> ✏️ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 2-2   Tag Maintenance – Field Description

Field	Description
Use Case Name	Specify unique use case name. It gets populated on **Save**, from the last folder name from the Training Corpus Path (DOC).
Description	Specify use case description.
Mod No	Displays modification number.
Straight Through Processing	Select one the options. • **Yes** = Unattended • **No** = Attended

Table 2-2 (Cont.) Tag Maintenance – Field Description

Field	Description
Use Case Tags/ Entities	Specifies the use case tags entities.
Tag Display Sequence	Displays the sequence of tags.
Tag Screen Display	Displays the business name of the tag.
Tag Name	Displays the technical name of the tag.
Annotation Tag	Used to identify tags to be used in training.
Default Value	Default value for tags not used for training.

2.1.2 Annotator

This topic describes the information about the annotator.

Annotation is the process of identifying information within a documented content and tagging them as a specific type of information. Each use case defined, have their own relevant maintained list of tags/entities, which is used to annotate source documents for a use case.

Figure 2-3 Loan Draw Down
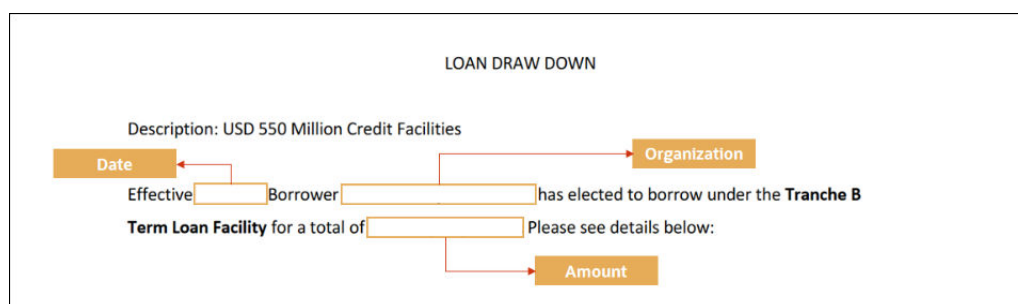
- Annotator
  This topic describes the systematic instructions to perform the annotations on a source document for a use case.

2.1.2.1 Annotator

This topic describes the systematic instructions to perform the annotations on a source document for a use case.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **NLP Toolkit**.

2. Under **NLP Toolkit**, click **Annotator**.

   The **Annotator** screen displays.

Figure 2-4   Annotator

3. Specify the fields on **Annotator** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 2-3   Annotator – Field Description

Field	Description
Action Type	Select the action type. The available options are: • **Create New Annotated File** • **Edit Created Annotated File**
Source File Definition	Select the source document from local windows explorer based on the **Action Type** selected.
Document Type	Displays the list of all the use cases defined under use case definition.
Get Labels	Displays the maintained Tags/entities for the selected **Document Type**.
Create Annotated File	Once annotations of all the Tags are completed, this performs two outcomes as below, • Create annotated text file in the defined NER train path as maintained under use case definition. • Create text file in the defined DOC train path as maintained under use case definition.

Annotate the Source Files:

4. Select the **Action Type** as **Create New Annotated File**.

5. Select the **Document Type** from drop-down list.

6. Click **Select File** button next to **Source File** field.

   The **Windows Explorer** popup screen displays.

7. Navigate and select the source document to be annotated.

The **Original File** section displays the source document and the **Text Form** section displays the text version of the document.

8. Click **Get Labels**.

The **Annotations** section displays all the maintained tags for the selected Document Type.

Figure 2-5   Annotator - List of Tags
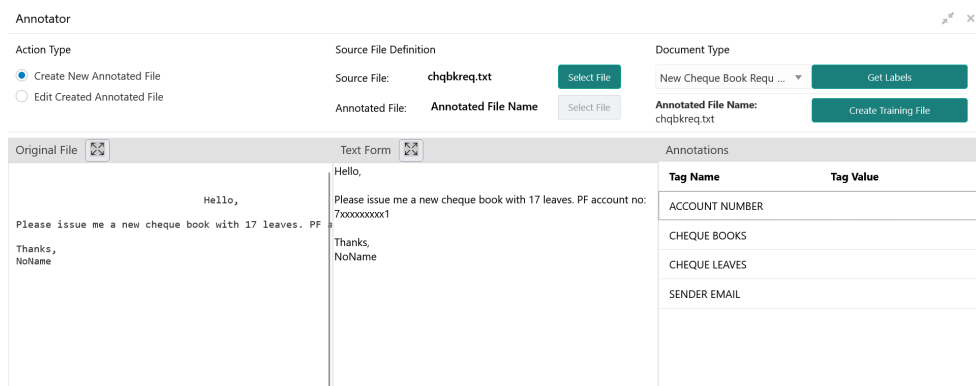
9. Identify and select the information within the **Text Form** section.

10. Right-click to display the list of tags.

Figure 2-6   Annotator - Select Annotation Label
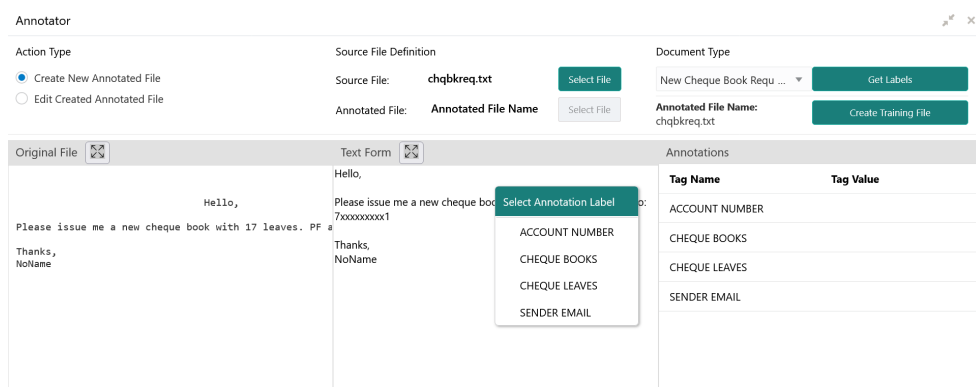
11. Select the relevant tag.

The **Annotations** section displays the information under Tag Name and Tag Value fields.

Figure 2-7   Annotator - Annotations

12. Repeat the above steps for all the displayed tags as per availability of information in the source document.

13. Select a **Tag Name** from the **Annotations** section and Right-click to delete the **Tag Value**.

14. Once all the tags are assigned the relevant information, click **Create Training File** to create the annotated file and end the process.

2.1.3 Model Training

This topic describes the systematic instructions to train the model on the annoted training corpus.

The annotated training corpus is a collection of annotated training files created using the annotator.

Model training is iterative and is carried out over increasing corpus size depending on the model parameters.

Each defined use case have its own training corpus available in the path set up in the use case definition.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **NLP Toolkit**.

2. Under **NLP Toolkit**, click **Model Training**.

The **Model Training** screen displays.

Figure 2-8   Model Training

For Training NER Models:

3. Select the **Model Type** as **NLP(NER)**.

4. Select the type of **Use Case Name** from the drop-down list.

5. Click **Train Model**.

For Training Document Classifier Model:

6. Select the **Model Type** as **Document Classification**.

7. Select the type of **Use Case Name** from the drop-down list.

8. Click **Train Model**.

    If the model parameters acceptable, the user can save the model by clicking **Save Model**. The alternative is to add more annotated training files for the use case and repeat model training, till satisfactory parameters are achieved.

2.1.4 Model Management

This topic describes the information about the Model Management.

Model Management shows all the run reference of models saved from model training for a use case. For each model run reference, view the parameters for the model as well as individual tag/entities.

The user can choose the active model run reference to use as part of business processing.

*   Model Management Maintenance
    This topic describes the systematic instructions to maintain the model management.

*   View Model Management
    This topic describes the systematic instructions to view the list of use case models.

2.1.4.1 Model Management Maintenance

This topic describes the systematic instructions to maintain the model management.

The user can unlock and choose the active model run reference to use as part of business processing.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **NLP Toolkit**.

2. Under **NLP Toolkit**, click **Model Management**.

   The **Model Management** screen displays.

Figure 2-9   Model Management

3. Specify the fields on **Model Management** screen.

> ✏ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 2-4   Model Management – Field Description

Field	Description
Use Case Name	Displays the name of the Use Case.
Model Type	Displays the NER or Classification type of Model.
Run Reference	Displays unique model version identifier.
Precision	Specify the value between 0 to 1. Closer to 1 is better.
Recall	Specify the value between 0 to 1. Closer to 1 is better.
F1 Score	Specify the value between 0 to 1. Closer to 1 is better.
Active	Displays the status of model run reference.

4. Click **Tag Parameters** to view the individual tag parameters for each model run reference.

   The **Tag Parameters Details** screen displays.

Figure 2-10   Tag Parameters Detail
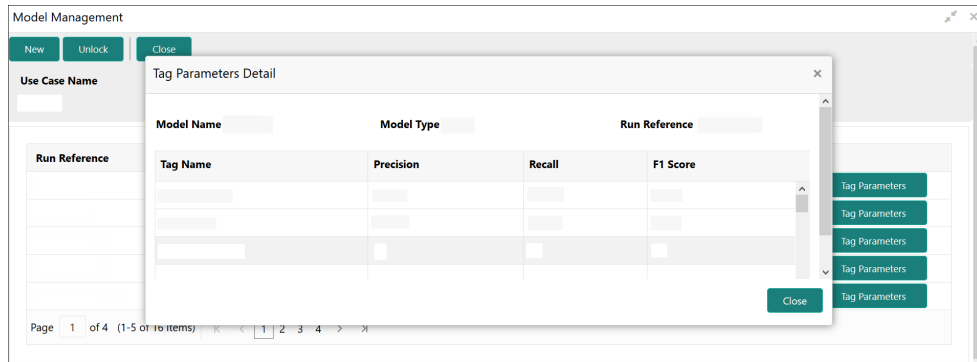
At this stage, user have defined a new use case with the tags/entities to be recognized by the model and trained and exported the use case model to be used by business.

2.1.4.2 View Model Management

This topic describes the systematic instructions to view the list of use case models.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **NLP Toolkit**.

2. Under **NLP Toolkit**, click **Model Management**.

   The **Model Management** screen displays.

Figure 2-11   Model Management
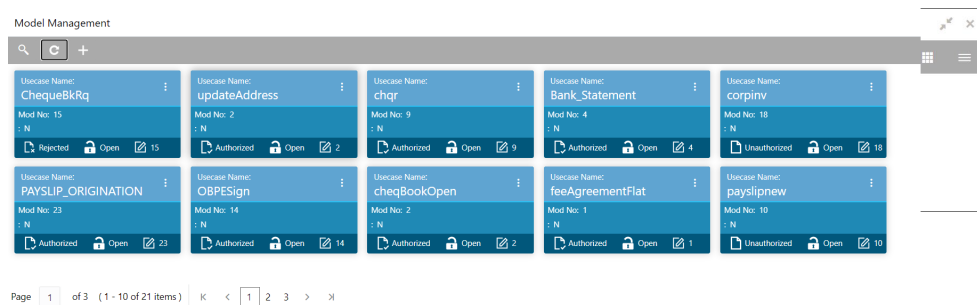
For more information on fields, refer to the field description table.

Table 2-5   Model Management – Field Description

Field	Description
Use Case Name	Displays the name of the Use Case.
Mod No	Displays the number of modifications.

Table 2-5   (Cont.) Model Management – Field Description

Field	Description
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

2.2 Operation

This topic describes the information about the trained models that are consumed for business processing.

This topic contains the following subtopics:

- Upload Document
  This topic describes the systematic instructions to upload a document.

- Transaction Log
  This topic describes the systematic instructions to view all the uploaded transactions that are interpreted by the NLP models.

2.2.1 Upload Document

This topic describes the systematic instructions to upload a document.

The user can upload the source document which is consumed by the NLP model and defined tags/entities are recognized. The information collected by this model is used in further business processing.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **Operation**.

2. Under **Operation**, click **Document Upload**.

   The **Document Upload** screen displays.

Figure 2-12   Document Upload

3. Click **Select File** to select the source document.

4. Select the **Document Type** from the drop-down list.

5. Click **Upload** to initiate business process.

    The uploaded document displays on **Original Document**.

2.2.2 Transaction Log

This topic describes the systematic instructions to view all the uploaded transactions that are interpreted by the NLP models.

The user can filter the displayed transactions based on the Document Type and Status.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **Operation**.

2. Under **Operation**, click **Transaction Log**.

    The **Transaction Log** screen displays.

Figure 2-13   Transaction Log

3.   Specify the fields on **Transaction Log** screen.

For more information on fields, refer to the field description table.

Table 2-6   Transaction Log – Field Description

Field	Description
Document Type	Select the document type from drop-down list.
Status	Select the type of status from drop-down list.
Document ID	Displays the Document Management System Unique Identifier.
Document Type	Displays the document type - Use Case Definition.
Model Ref	Displays the Unique Model Version Identifier.
Processing Date	Displays the document processed date.
Status	Displays the status of the transaction.
Failure Reason	Displays the reason for failed status.
Train. Reqd	Displays train required status.
Tag Values	Displays the tag values for the processed transactions and allow the correction for transactions with errors.

4.   To check the execution flow, click on **Document ID** to view details and flow.

The **Process Log** screen displays.

Figure 2-14   Process Log

5. To check the processed status, select **Processed** in **Status** drop-down list.

The document ID page displays that contains model tag values used to process the transactions.

Figure 2-15   Processed Status

The displayed information reflects both the original retrieved values by the model from the document and also the values which are corrected manually.

6. To check the error status, select **Error** in **Status** drop-down list.

All the failed transactions displays.

Figure 2-16   Error Status

7. For the failed transactions, click on the **Tag Value(s)** to invoke the toolkit annotator in the error correction mode to create a new annotated training file for future model training.

The **Annotator** screen displays.

Figure 2-17   Annotator

2.3 3P Service Integration

This topic provides description about the integration of third party services.

Any model execution or training service(s) built using any 3P NLP library can be integrated in the NLP framework. The only requirement is, the REST services must confirm to the payload definition. Building model training and execution services using other 3P NLP libraries would involve consulting effort.

This topic contains the following subtopics:

- **Classification Training Service**
  This topic describes about the payload details for document classification model training service.

- **NER Training Service**
  This topic describes the payload details for NER model training service.

- **Classification Processing Service**
  This topic describes about the payload details for the document classification model processing service.

- **NER Processing Service**
  This topic describes the payload details for NER model processing service

- **Service Mapping**
  This topic provides information about service mapping.

- **Business Service Mapping**
  This topic describes the information about the Business Service Mapping.

2.3.1 Classification Training Service

This topic describes about the payload details for document classification model training service.

Input Payload

Table 2-7   Input Payload

Name	in	Type	Required	Remarks
trainCorpusPath	formData	string	true	Training Corpus path
modelType	formData	File	true	Type of model being trained
runRef	formData	string	true	Unique running reference number

- name: " **trainCorpusPath**"
  in: "formData"

  type: string

  required: true

- name: " **modelType**"
  in: "formData"

  type: string

  value for document classification training: "docClassification"

  required: true

- name: " **runRef** "
  in: "formData"

  type: string

  required: true

Output Payload

```
{
 "data": {
  "timeTaken": 0,
  "corpusSize": 0,
  "precision": 0,
  "recall": 0,
  "f1score": 0,
  "model_fold_performances": null,
  "tag_perfomances": null
 }
}
```

Output Payload Data Model Definition

```
ModelTrainParamsDTO:
type: object
properties:
data:
type: object
properties:
timeTaken:
type: number
corpusSize:
type: number
precision:
type: number
recall:
type: number
f1score:
type: number
model_fold_performances:
type: array
items:
$ref: "#/definitions/ModelFoldPerfromancesDTO"
tag_perfomances:
type: array
items:
$ref: "#/definitions/MltbTagPerfomancesDTO"
```

2.3.2 NER Training Service

This topic describes the payload details for NER model training service.

Input Payload

Table 2-8   Input Payload

name	in	Type	Requir ed	Remarks
trainCorpusPath	formData	string	true	Training Corpus path.

Table 2-8   (Cont.) Input Payload

name	in	Type	Required	Remarks
modelType	formData	File	true	Type of model being trained.
runRef	formData	string	true	Unique running reference number.

- name: "**trainCorpusPath**"
  in: "formData"

  type: string

  required: true

- name: "**modelType**"
  in: "formData"

  type: string

  value for NER model training: "nlpNer"

  required: true

- name: "**runRef** "
  in: "formData"

  type: string

  required: true

Output Payload

```
{
 "data": {
  "timeTaken": 0,
  "corpusSize": 0,
  "precision": 0,
  "recall": 0,
  "f1score": 0,
  "model_fold_performances": [
   {
    "fold_no": 0,
    "eval_metric": "string",
    "value": 0
   }
  ],
  "tag_perfomances": [
   {
    "name": "string",
    "precision": 0,
    "recall": 0,
    "f1score": 0
   }
  ]
 }
}
```

Output payload data model definition
ModelTrainParamsDTO:

type: object

properties:

data:

type: object

properties:

timeTaken:

type: number

corpusSize:

type: number

precision:

type: number

recall:

type: number

f1score:

type: number

model_fold_performances:

type: array

items:

$ref: "#/definitions/ModelFoldPerfromancesDTO"

tag_perfomances:

type: array

items:

$ref: "#/definitions/MltbTagPerfomancesDTO"

ModelTrainParamsDTO:

type: object

properties:

fold_no:

type: number

eval_metric:

type: string

value:

type: number

ModelTrainParamsDTO:

type: object

properties:

name:

type: string

precision:

type: number

recall:

type: number

f1score:

type: number

2.3.3 Classification Processing Service

This topic describes about the payload details for the document classification model processing service.

Input Payload

Table 2-9   Input Payload

Name	in	Type	Required	Remarks
modelPath	formData	string	true	The path to the classification model.
file	formData	File	true	The text file which must be classified.

- name: " **modelPath**"
  in: "formData"

  type: string

  required: true

- name: " **file** "
  in: "formData"

  type: file

  required: true

Output Payload

```
{
 "data": {
  "docType": "string"
 }
}
```

Output Payload Data Model Definition

```
MltbNlpDTO:
type: object
properties:
data:
properties:
docType:
type: string
```

2.3.4 NER Processing Service

This topic describes the payload details for NER model processing service

Input Payload

Table 2-10   Input Payload

name	in	Type	Required	Remarks
modelPath	formData	string	true	The path to the NER model.
file	formData	File	true	The text file which must be classified.

- name: " **modelPath**"
  in: "formData"

  type: string

  required: true

- name: " **file** "
  in: "formData"

  type: file

  required: true

Output Payload

```
{
 "data": {
  "keyvals": [
   {
    "tagName": "string",
    "value": "string",
    "start_index": 0,
    "end_index": 0
   }
  ]
 }
}
```

Output payload data model definition
ModelTrainParamsDTO:

type: object

properties:

data:

properties:

keyvals:

type: array

items:

$ref: '#/definitions/MltbNerKeyValExtractedObjDTO'

MltbNerKeyValExtractedObjDTO:

type: object

properties:

tagName:

type: string

value:

type: string

start_index:

type: number

end_index:

type: number

2.3.5 Service Mapping

This topic provides information about service mapping.

After creation of the model services, entries must be made into the table CMC_TM_ML_SERVICE_DEFN to enable the NLP framework to use these services.

Existing use case
Update the highlighted column in the table CMC_TM_ML_SERVICE_DEFN with the new service API.

Table 2-11   Existing Use Case

Column Name	Remarks	Model Training	Model Processing
ID	Unique ID	-	-
USECASE_NAME	Use Case Name	<existing use case>	<existing use case>
DESCRIPTION	Use Case Description	-	-
SERVICE_TYPE	Service Type	Training	Processing

Table 2-11   (Cont.) Existing Use Case

Column Name	Remarks	Model Training	Model Processing
SERVICE_DEFN	Mapped Service API	<New Service API>	<New Service API>
METHOD_TYPE	Method Type	POST	POST
APP_ID	Sub Domain ID	-	-
RECORD_STAT	Record Status	O	O
AUTH_STAT	Authorized Status	A	A
MOD_NO	Modification Number	1	1
ONCE_AUTH	Once Authorized	Y	Y
MAKER_ID	Maker Name	SYSTEM	SYSTEM
MAKER_DT_STAMP	Maker Date stamp	<Application Date>	<Application Date>
CHECKER_ID	Authorizer Name	SYSTEM	SYSTEM
CHECKER_DT_STAM	Authorizer Date stamp	<Application Date>	<Application Date>

New Use case

Insert a new record into the table CMC_TM_ML_SERVICE_DEFN.

Table 2-12   New Use Case

Column Name	Description	Remarks for Data
ID	Unique ID	Ensure a Unique ID.
USECASE_NAME	Use Case Name	Must be one of the usecase_name from the table CMC_TM_ML_NER_TAG_MAS
DESCRIPTION	Use Case Description	-
SERVICE_TYPE	Service Type	• 'Training' - Use this value for model Training Service. • 'Processing' - Use this value for model execution Service. • 'Business' - Use this value for business Service.
SERVICE_DEFN	Mapped Service API	<The newly created 3P NLP service API>
METHOD_TYPE	Method Type	POST
APP_ID	Sub Domain ID	NULL
RECORD_STAT	Record Status	O
AUTH_STAT	Authorized Status	A
MOD_NO	Modification Number	1
ONCE_AUTH	Once Authorized	Y
MAKER_ID	Maker Name	SYSTEM
MAKER_DT_STAMP	Maker Date stamp	<Application Date>
CHECKER_ID	Authorizer Name	SYSTEM
CHECKER_DT_STAMP	Authorizer Date stamp	<Application Date>

2.3.6 Business Service Mapping

This topic describes the information about the Business Service Mapping.

If straight through processing is enabled in use case definition, the entries must be made into the table CMC_TM_ML_BUS_SERVICE_DEFN to enable the NLP framework to call the Business Service.

Insert a new record into the table CMC_TM_ML_BUS_SERVICE_DEFN for each use-case with straight through processing enabled.

Table 2-13   Each Use Case

Column Name	Description	Remarks for Data
ID	Unique ID	Ensure a Unique ID.
USECASE_NAME	Use Case Name	Must be one of the usecase_name from the table CMC_TM_ML_NER_TAG_MAS
DESCRIPTION	Use Case Description	-
SERVICE_TYPE	Service Type	'Business' - Use this value for business Service.
ADAPTER_CLASS	Fully qualified name of the adapter class	Use oracle.fsgbu.cmc.nlp.pipeline.services.adaptor.GenericAdaptor for all the business service calls Use oracle.fsgbu.cmc.nlp.pipeline.services.adaptor.OBRHAdaptor if you want to call business service via Oracle Banking Routing Hub
SERVICE_DEFN	Mapped Service API	API, which is called for Business service execution
HEADERS	Comma separated headers key value separated by colon (:)	Example, docId:123 , branchCode : 000
METHOD_TYPE	Method Type	POST
APP_ID	Sub Domain ID	NULL
RECORD_STAT	Record Status	O
AUTH_STAT	Authorized Status	A
MOD_NO	Modification Number	1
ONCE_AUTH	Once Authorized	Y
MAKER_ID	Maker Name	SYSTEM
MAKER_DT_STAMP	Maker Date stamp	<Application Date>
CHECKER_ID	Authorizer Name	SYSTEM
CHECKER_DT_STAMP	Authorizer Date stamp	<Application Date>

If the user is integrating the Business Service through Oracle Banking Routing Hub, then, in service definition column, the user need to provide URL of Oracle Banking Routing Hub dispatch API and the additional headers in headers column.

Since there are some common headers, which are required for calling Oracle Banking Routing Hub as well (like appId, branchCode, userId) and to avoid the conflict for these

headers, the ML_ prefix is appended in header keys by Oracle Banking Routing Hub adapter. Configure transformation logic of these headers in Oracle Banking Routing Hub.

3

Machine Learning Framework

This topic describes about the Machine Learning Framework provided in common core.

- **Use Case On-Boarding**
  This topic describes the information about the Use Case On-Boarding.

- **Frameworks Supported**
  This topic describes about the Frameworks Supported for Machine Learning.

- **Partitioned Model**
  This topic describes the information about the partitioned model in Machine Learning.

- **On-Boarding Use Case**
  This topic describes the information about the On-Boarding Use Case provided in the common core.

- **Online Single Record Prediction**
  This topic describes the information about the online single record prediction supported in common core.

- **Use Case Modifications**
  This topic describes the information about the use case modifications.

- **Data Extensibility**
  This topic describes the information about Data Extensibility.

- **Model Explainability**
  This topic describes the information about the Model Explainability.

- **Time Series Forecast**
  This topic describes the information about the time series forecast.

3.1 Use Case On-Boarding

This topic describes the information about the Use Case On-Boarding.

On-boarding a new business case onto the Machine Learning framework involves two broad stages as given below.

Model Definition
One-time setup of use case definition captures the data source, target columns, and type of use case.

Model Training
Model training is use case specific and has the intelligence to evaluate multiple algorithms and discover the best fit algorithm to the data pattern.

The onset of these two stages assumes that you have already decided on the business use case that you would want to on-board.

Figure 3-1   Model Training
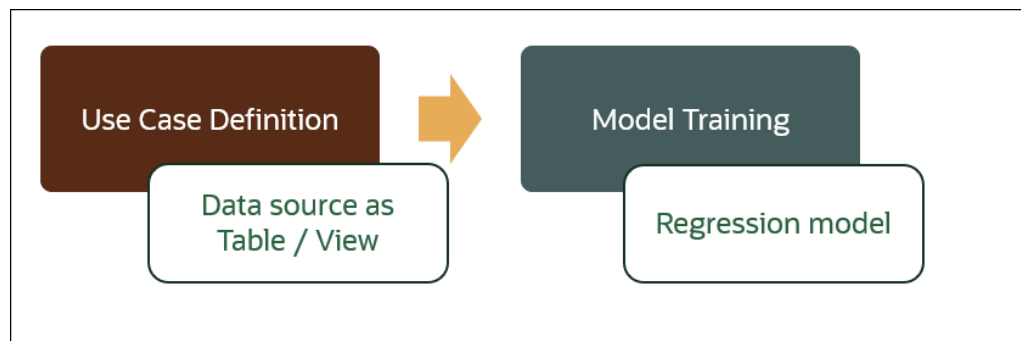
3.2 Frameworks Supported

This topic describes about the Frameworks Supported for Machine Learning.

This topic contains the following subtopics:

- Timeseries
  This topic describes the information about the timeseries.

- Timeseries Algorithms Supported
  This topic describes the information about the timeseries algorithms supported in the framework.

- Regression
  This topic describes the information about the regression in Machine Learning.

- Regression Algorithms Supported
  This topic describes the information about the regression algorithms supported in the framework.

- Classification
  This topic describes the information about the Classification.

- Classification Algorithms Supported
  This topic describes the information about the Classification Algorithms Supported.

3.2.1 Timeseries

This topic describes the information about the timeseries.

Timeseries are the use cases involving the date sequence data to forecast for future dates.

Table 3-1   Case ID Details

CASE ID	CCY	BALANCE
17-Aug	USD	6723.00
18-Aug	USD	250.00
19-Aug	USD	2654.00
20-Aug	USD	20.00

Table 3-1   (Cont.) Case ID Details

CASE ID	CCY	BALANCE
21-Aug	USD	?

> **Note:**
>
> The CASE ID can either be a DATE or a Sequence.

3.2.2 Timeseries Algorithms Supported

This topic describes the information about the timeseries algorithms supported in the framework.

By default, the framework uses Exponential Smoothing to forecast from timeseries data. It evaluates 14 different algorithmic combinations to best fit the below patterns:

- Error type (additive or multiplicative)
- Trend (additive, multiplicative, or none), including damped trends
- Seasonality (additive, multiplicative, or none)

> **Note:**
>
> The user is not required to select any algorithmic combinations. The framework evaluates and selects the best fit combination.

3.2.3 Regression

This topic describes the information about the regression in Machine Learning.

Regression is a statistical technique to discover relationships using independent variables to estimate / predict a target variable of NUMBER or INTEGER type.

For example: The user needs to predict the value of LUXURY SPEND for a new CASE ID, given the data of branch, marital status, income, and savings

Table 3-2   Example - Case Details

CASE ID	BRANCH	MARITAL STATUS	INCOME	SAVING	LUXURY SPEND
12345	BRT	Y	15000	6723	1000
12346	BRT	N	17500	250	750
12347	CSR	D	25000	2654	1900
12348	CSR	N	16567	20	2500

> **Note:**
>
> The CASE ID must uniquely identify a row.

3.2.4 Regression Algorithms Supported

This topic describes the information about the regression algorithms supported in the framework.

The following algorithm are available as part of the framework.

Table 3-3   List of Algorithm

S.No	ALGORITHM	REMARKS
1	GENRALIZED LINEAR REGRESSION	Also handles RIDGE regression depending on the underlying pattern of data.
2	SUPPORT VECTOR MACHINE	Supports both linear and gaussian kernels.
3	NEURAL NETWORK	Uses default 1 layer with number of nodes <= 50

> **Note:**
>
> The users have the flexibility to select a specific algorithm or keep it as NULL for the framework to evaluate and best fit the algorithm to the underlying data.

3.2.5 Classification

This topic describes the information about the Classification.

Classification is a statistical technique to discover relationships using independent variables to classify a target variable into a number of GROUPS or CLASSES. Mostly used for decision making.

For example: The user needs to predict if a new CASE ID will churn(1) or not (0), given the data of branch, marital status, income and savings.

Table 3-4   Sample Classification

CASE ID	BRANCH	MARITAL STATUS	INCOME	SAVING	CHURN
12345	BRT	Y	15000	6723	0
12346	BRT	N	17500	250	1
12347	CSR	D	25000	2654	1
12348	CSR	N	16567	20	0

> **Note:**
>
> CASE ID must be unique to identify a row.

3.2.6 Classification Algorithms Supported

This topic describes the information about the Classification Algorithms Supported.

The following algorithms are available as part of the framework.

Table 3-5   List of Algorithms

Serial Number	ALGORITHM	REMARKS
1	DECISION TREE	-
2	NAÏVE BAYES	-
3	RANDOM FOREST	-
4	GENRALIZED LINEAR REGRESSION	Also handles RIDGE regression depending on the underlying pattern of data
5	SUPPORT VECTOR MACHINES	Supports both linear and gaussian kernels
6	NEURAL NETWORK	Uses default 1 layer with number of nodes <= 50

> **Note:**
>
> Users have the flexibility to select a specific algorithm or keep it as NULL for the framework to evaluate and best fit the algorithm to the underlying data.

3.3 Partitioned Model

This topic describes the information about the partitioned model in Machine Learning.

Oracle in-Database machine learning allows the user to design partitioned models.

Partitioned model organizes and represents multiple models as partitions in a single model entity, enabling the user to easily build and manage models tailored to independent slices of data.

Table 3-6   Example - Customer details

CUSTO MER ID	BRANCH	MARITA L STATU S	INCOME	SAVING	LUXURY SPEND
12345	BRT	Y	15000	6723	1000
12346	BRT	N	17500	250	750
12347	CSR	D	25000	2654	1900

Table 3-6   (Cont.) Example - Customer details

CUSTO MER ID	BRANCH	MARITA L STATU S	INCOME	SAVING	LUXURY SPEND
12348	GRF	N	16567	20	2500

In this above example of data, the user could build a single partitioned model on independent slices of data based on branch code.

The user has the advantage of having a single partitioned model instead of having multiple models for each individual branch.

3.4 On-Boarding Use Case

This topic describes the information about the On-Boarding Use Case provided in the common core.

This topic contains the following subtopics:

- Model Definition
  This topic describes the information about to define the use case and configure the data source to be used for model training.

- Model Training and Scoring
  This topic describes the systematic instructions to train the model for the selected use case and use the trained model to predict and score multiple records at a time.

3.4.1 Model Definition

This topic describes the information about to define the use case and configure the data source to be used for model training.

Use cases are defined by the business domain of the product processor to which it is mapped. They are unique and machine learning models are named after the use case.

This topic contains the following subtopics:

- Model Definition Maintenance
  This topic provides the systematic instructions to maintain the use case details, define the use case type, and data source details.

- View Model Definition
  This topic describes the systematic instructions to view the list of defined use cases.

3.4.1.1 Model Definition Maintenance

This topic provides the systematic instructions to maintain the use case details, define the use case type, and data source details.

Specify **User ID** and **Password**, and login to **Home** screen.
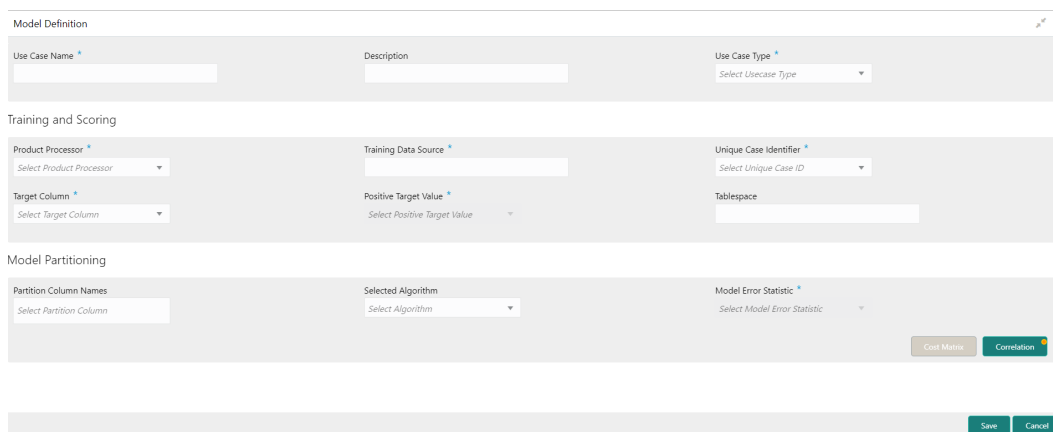
1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **Model Definition**.

2. On **View Model Definition** screen, click ⋮ button on the Use case tile to **Unlock** or click ➕ button to create the new model definition.

   The **Model Definition** screen displays.

Figure 3-2   Model Definition

3. Specify the fields on **Model Definition** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 3-7   Model Definition – Field Description

Field	Description
Use Case Name	Specify the name of the Use Case.
Description	Specify the description of the Use Case.
Use Case Type	Select the type of Use Case. Refer Frameworks Supported for details.
Product Processor	Select the product to which the use case belongs.
Training Data Source	Specify the Table or View name used as data source to train the model.

Table 3-7   (Cont.) Model Definition – Field Description

Field	Description
Unique Identifier	Select the column name to uniquely identify a record. ✏ **Note:** Column name is a function of table/view design.
Target Column	Select the value of the column which is predicted by training the model. ✏ **Note:** Column name is a function of table/view design.
Positive Target Value	If Use Case Type selected is CLASSIFICATION, then this field is enabled else disabled for REGRESSION. It will display distinct values from the target column
Tablespace	Specify the valid tablespace and all model related data will be persisted in this table space.
Partition Column Names	Specify the column names to slice data. Refer Partitioned Model for details.
Selected Algorithm	Select the algorithm from the list and build the model. For REGRESSION, this field should be null and allow the framework to select the best fit algorithm to build the model.
Model Error Statistics	Select the model error statistics. By Default, the value is selected as RMSE for REGRESSION. The user can also select MAE. ✏ **Note:** It will be disabled for CLASSIFICATION

4. Click **Save** to save the details.

    The user can view the configured details in the Model Definition screen.

Cost Matrix:
This button is enabled ONLY for CLASSIFICATION type of use cases.

Any classification model can make two kinds of error

Table 3-8   Classification Type - Error

Actual Value	Predicted Value	Error Type
1	0	False Negative
0	1	False Positive

This screen is used to bias the model into minimizing one of the error types, by adding a penalty cost.

All penalty cost has to be positive.

Table 3-9   Classification Type - Penalty

Actual Value	Predicted Value	Penalty Cost
1	0	6
0	1	2

The default is zero cost for all combinations.

Biasing the model is a trade-off with accuracy of prediction. Business determines if a classification model is required to be biased or not.

5. Click **Cost Matrix** button to launch the screen.

The **Cost Matrix** screen displays.

Figure 3-3   Cost Matrix

6. On **Cost Value** screen, specify the relevant penalty cost.

7. Click **Save** to save and close the **Cost Matrix screen** and back to the **Model Definition** screen.

Correlation:
Multicollinearity occurs when two or more independent variables are highly correlated with one another in a model.

Figure 3-4   Correlation
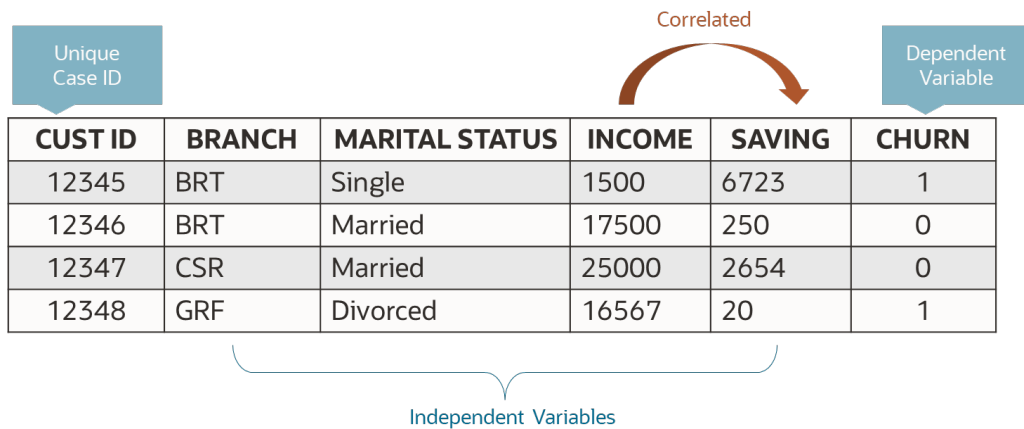
Multicollinearity may not affect the accuracy of the model as much, but we might lose reliability in model interpretation.

Irrespective of CLASSIFICATION or REGRESSION, all use cases must be evaluated for Correlation.

This button will display Orange mark if evaluation is pending.

8. Click **Correlation** button to launch the screen.

    The **Correlation Analysis** screen displays.

Figure 3-5   Correlation Analysis
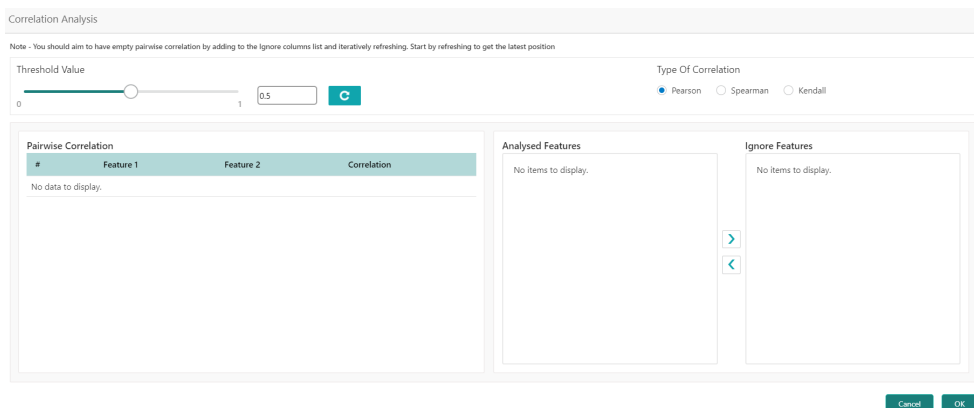
9. Select the required fields on **Correlation Analysis** screen.

    For more information on fields, refer to the field description table.
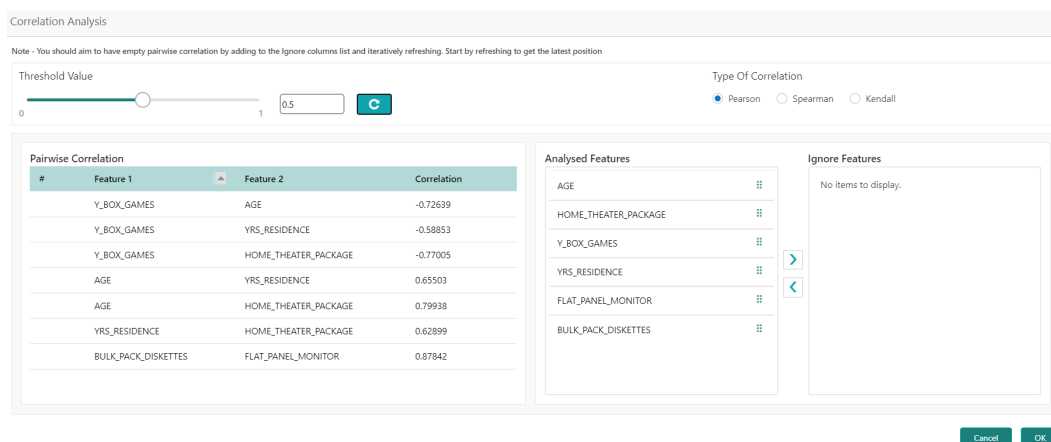
Table 3-10   Correlation Analysis – Field Description

Field	Description
Threshold Value	Select the threshold value. The Value can be set between 0.1 to 0.9. ✏ **Note:** By default, the value is set as 0.5.
Type of Correlation	Select the type of correlation. By default, the option is selected as Pearson. The formula used for calculation is different for each type
Pairwise Correlation	Displays the output of the Correlation Validation.
Analyzed Features	Displays the distinct analysed Features from Pairwise Correlation.
Ignore Features	User defined list created from Analysed Features.

10. Click to initiate the evaluation process.

The **Correlation Analysis - Pairwise Correlation** screen displays.

Figure 3-6   Correlation Analysis - Pairwise Correlation

11. Move ONE of the Analyzed Features to Ignore Features List.

12. Click and re-evaluate Correlation as mentioned in Step 8.

13. Rinse and repeat the Step 9 and 10 for each feature addition to the **Ignore feature** list, until **Pairwise Correlation** displays zero correlated pair.

14. Attempting to exit the screen midway without achieving zero Pairwise Correlation, will display the following error message.

The **Error Message** screen displays.

Figure 3-7   Error Message
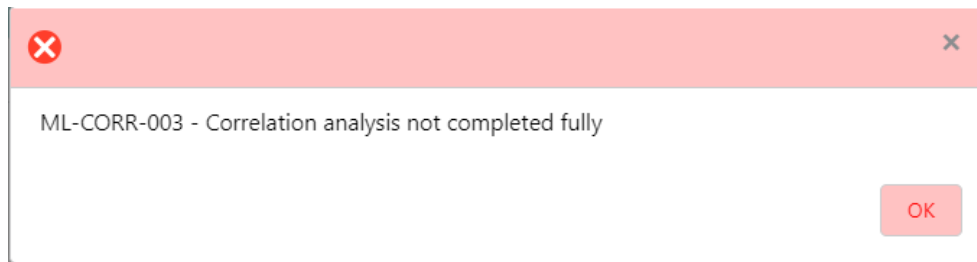
15. After successful **Correlation Evaluation**, the orange highlight on the **Correlation** button is removed.

16. After **Correlation Evaluation** and **Cost Matrix definition** (for CLASSIFICATION)

17. Click **Save** to create the new Model Definition.

    The user can view the configured details in the **View Model Definition** screen.

Model Metrices
Once the user has successfully trained Machine Learning model, the user can score/ predict the model outcomes as required by the use case. The user can view the **Model Metrices** screen only after training the model successfully. Refer to **Model Training and Scoring** section for training the model.

18. Click **Model Metrices** to view the Model Metrices details.

    The **Model Metrices** screen displays.

Figure 3-8   Model Metrices
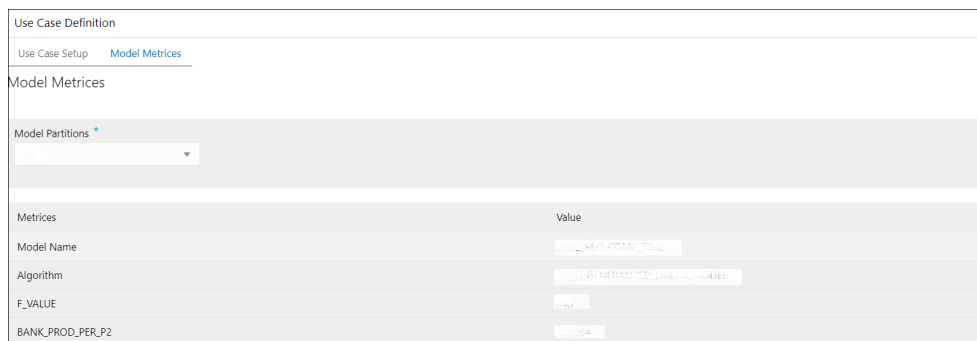
For more information on fields, refer to the field description table.

Table 3-11   Model Metrices – Field Description

Field	Description
Model Partitions	Select the model partitions from the drop-down list. If the model has been designed to have partitions, it will display the partitioned values based on underlying data of the defined partition column else display FULL MODEL.

Table 3-11   (Cont.) Model Metrices – Field Description

Field	Description
Metrices	Displays the various model attributes, as per the best model identified and trained. The number of model attributes is a function of algorithm and underlying pattern of data. Some attributes are common for all models as below.
	Model Name
	Algorithm
	INF_TIME (Inference Time)
	<Model metric>(Train)
	<Model metric>(Test)
Value	Displays the value of the attribute.

3.4.1.2 View Model Definition

This topic describes the systematic instructions to view the list of defined use cases.

Specify **User ID** and **Password**, and login to **Home** screen.

- On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **Model Definition**.

   The **Model Definition** screen displays.

Figure 3-9   Model Definition
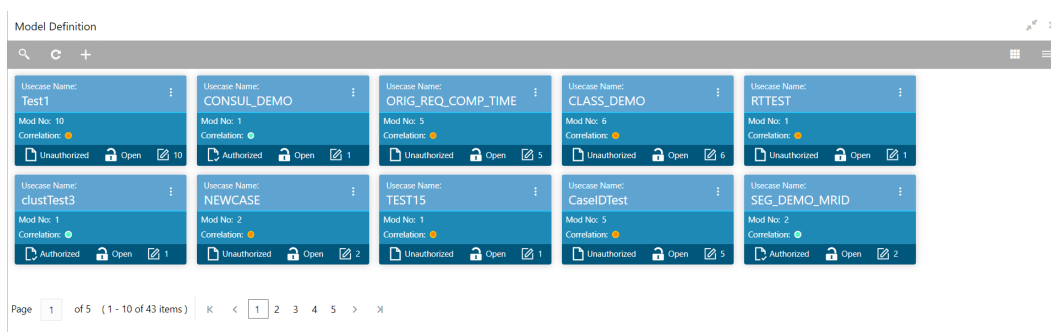
For more information on fields, refer to the field description table.

Table 3-12   Model Definition – Field Description

Field	Description
Usecase Name	Displays the name of the use case.
Mod No	Displays the modification number.
Correlation	Displays the default orange colour for New records. On correlation validation in Model definition screen, it will change to green colour.

Table 3-12   (Cont.) Model Definition – Field Description

Field	Description
Authorization Status	Displays the authorization status of the record. The options are: • **Authorized** • **Rejected** • **Unauthorized**
Record Status	Displays the status of the record. The options are: • **Open** • **Closed**
Modification Number	Displays the number of modification performed on the record.

3.4.2 Model Training and Scoring

This topic describes the systematic instructions to train the model for the selected use case and use the trained model to predict and score multiple records at a time.

The predicted values persist in the database and are available in the prediction column maintained for the user case.

Specify **User ID** and **Password**, and login to **Home** screen.

1. On **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **Model Training and Scoring.**.

   The **Model Training and Scoring** screen displays.

Figure 3-10   Model Training and Scoring

For more information on fields, refer to the field description table.

Table 3-13   Model Training and Scoring – Field Description

Field	Description
Use Case Name	Select the Use Case name from the drop-down list.
Description	Displays the description of the use case.
Use Case Type	Displays the type of use case.

Table 3-13   (Cont.) Model Training and Scoring – Field Description

Field	Description
Training Data Source	Displays the training data source.
Unique Case Identifier	Displays the unique case identifier.
Target Column	Displays the target column of the model.
Partition Column(s)	Displays the partition column of the model.
Model Name	Displays the name of the model.

2. Select the use case name from the drop-down list.

3. Click **Train Model** to train the model for the selected use case.

4. Click **Batch Scoring** to predict the score for the data source records.

    The predictions of batch scoring are now available for business consumption.

3.5 Online Single Record Prediction

This topic describes the information about the online single record prediction supported in common core.

This is made available as a REST API and allow you to predict for a single record. The predictions do not persist in the database.

These can be invoked directly from application user interface, to retrieve and display the results.

The explainability of the model outcome is also made available.

3.6 Use Case Modifications

This topic describes the information about the use case modifications.

Use case definition may undergo the following modification and would require model re-training. After each re-training run, you should review the model details discussed under Model Explainability

Table 3-14   Use Case Modifications

Use Case Modification	Model Re-training Required	Correlation Analysis Required
Data Source replaced by another data source	Yes	Yes
New column Added to existing data source	Yes	Yes
New columns Added to custom data source	Yes	Yes
Existing column removed from existing data source	Yes	Yes
Selected Algorithm Changed	Yes	No
Model Error statistic Changed	Yes	No
Partition Column Name list altered (added / removed)	Yes	Yes

3.7 Data Extensibility

This topic describes the information about Data Extensibility.

To address the requirement of banks to add new data points to the factory shipped data source, we have provided the facility of data extensibility.

Figure 3-11   Data Extensibility
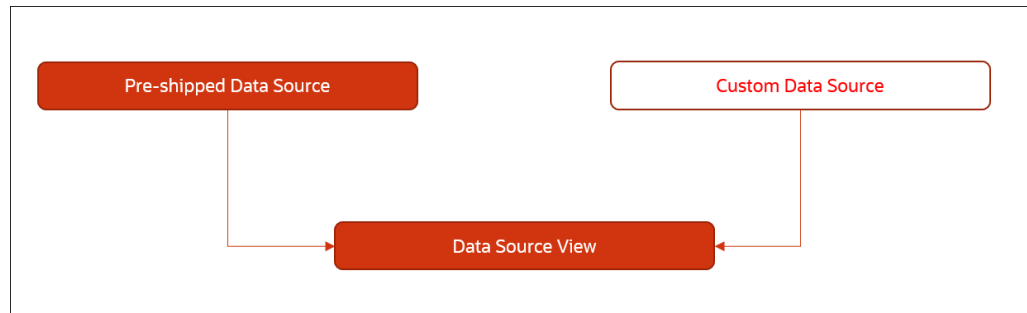
Banks can add any number of new data columns to the customer data source.

The defined data source view is mapped to a use case in the Model definition.

Machine Learning will automatically consider all the available data points in the data source View.

3.8 Model Explainability

This topic describes the information about the Model Explainability.

The details of the Regression models built using the framework is made available under the **Model Metrices** screen in **Use Case Definition** for better understanding and transparency.

The available details are below:

- Model Name
- Algorithm Name
- Inference Time
- Training Error Metric
- Testing Error Metric
- List of data attributes that make up the model depending on the framework and algorithm used.

3.9 Time Series Forecast

This topic describes the information about the time series forecast.

The timeseries forecast is unique as it consumes sequential data to forecast.

This uniqueness necessitates model training and forecast to be executed in a single processing routine. This is very unlike regression model approach where model training and model prediction are separate distinct actions.

This topic contains the following subtopics:

- Forecast REST Service
  This topic describes the information about the forecast REST service.

3.9.1 Forecast REST Service

This topic describes the information about the forecast REST service.

The timeseries framework is made available as an independent REST service to be consumed by products and use cases as required.

The following information is required to be provided.

Table 3-15   Forecast REST Service – Field Description

Field	Description
Use Case Name	Specify the Unique Use Case Name.
Data Source	Specify the Table or View name used as data source to train the model.
Target Column	Specify the model will train and forecast future values of this column. **Note:** Column name is a function of table/view design.
Unique Identifier	Specify the column name to uniquely identify a sequence. **Note:** Column name is a function of table/view design. It must be Date or a sequence.
Model Partitioning	Specify the column names to slice data. Refer Partitioned Model for details. **Note:** Column name is a function of table/view design.
Partitioned Value	Specify the actual Value of the Model Partition
Forecast Window	Specify the number of forecasts required as an outcome.
Tablespace	Specify the valid table space and all model related data will be persisted in this table space.

4

File Upload

This topics describes about the various File Upload features provided in common core.

- Country Code File Upload
  This topics describes the information to perform the bulk upload for the country code maintenance in common core.

- Bank Core Parameters File Upload
  This topics describes the information to perform the bulk upload for the bank core maintenance in common core.

- Branch Core Parameters File Upload
  This topics describes the information to perform the bulk upload for the branch core maintenance in common core.

- Currency Definition File Upload
  This topics describes the information to perform Currency Definition maintenance in common core.

- BIC Directory File Upload
  This topics describes the information to perform the bulk upload for the BIC Directory maintenance in common core.

- Local Holiday File Upload
  This topics describes the information to perform Local Holiday maintenance in common core.

- Currency Holiday File Upload
  This topics describes the information to perform Currency Holiday maintenance in common core.

- External Customer File Upload
  This topics describes the information to perform External Customer maintenance in common core.

- External Customer Account File Upload
  This topics describes the information to perform External Customer Account maintenance in common core.

- Exchange Rate File Upload
  This topics describes the information to perform Exchange Rate maintenance in common core.

4.1 Country Code File Upload

This topics describes the information to perform the bulk upload for the country code maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcCountryMaint_<UniqueName>.csv

> **Note:**
>
> Replace the <UniqueName> for each file upload.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-1   Country Code File Upload – Records

Sequence	Attribute Name	Type	Size	Description
1	Action*	String	10	Denotes file operation type. Allowed values are new/modify
2	Country Code*	String	3	Country Code
3	Description*	String	105	Name of the country
4	Alt Country Code*	String	10	Alternate Country Code
5	Region Code*	String	3	Region Code
6	Blacklisted*	String	1	Indicates the country is blacklisted
7	IBAN Check Reqd*	String	1	Indicates check required for an IBAN is mandatory
8	Intra European*	String	1	Denotes the country is an intra European country
9	Clr Code Bic*	String	1	BIC Clearing Code Indicates the National ID in the BIC plus file is the clearing code
10	Clearing Network	String	6	Indicates the Clearing Network
11	ISO Num Country Code*	String	3	Denotes the ISO Country Code
12	Gen Mt205*	String	1	Indicates the cover message 205COV or 205
13	ISD Code*	String	10	Denotes the ISD Code
14	EU Country*	String	1	Indicates the country is recognized by Swift as a part of the Intra European countries

4.2 Bank Core Parameters File Upload

This topics describes the information to perform the bulk upload for the bank core maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcBankMaint_<UniqueName>.csv

> **Note:**
>
> Replace the <UniqueName> for each file upload.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-2   Bank Core Parameters File Upload – Records

Sequence	Attribute Name	Type	Size	Description
1	Action*	String	10	Denotes file operation type. Allowed values are new/modify
2	Days To Forget Customer*	String	4	Denotes Number of Days to inactive/Forget Customer
3	HO Branch*	String	3	Head Office Branch
4	Bank Name*	String	35	Name of the bank
5	Bank Code*	String	4	Denotes code for the bank

4.3 Branch Core Parameters File Upload

This topics describes the information to perform the bulk upload for the branch core maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcBranchMaint_<UniqueName>.csv

> **Note:**
>
> Replace the <UniqueName> for each file upload.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-3   Branch Core Parameters File Upload – Master Records

Sequence	Attribute Name	Type	Size	Description
1	Discriminator*	String	1	Denotes master record type. Default value is always "P"
2	Action*	String	10	Denotes file operation type. Allowed values are new/modify
3	Source Branch Code*	String	20	Code of the Source Branch
4	Source System*	String	35	Source System
5	Week Hol2	String	1	Denotes the weekly holiday 2
6	Week Hol1	String	1	Denotes the weekly holiday 1
7	Auto Auth*	String	1	Auto Authorization

Table 4-3   (Cont.) Branch Core Parameters File Upload – Master Records

Sequence	Attribute Name	Type	Size	Description
8	Walkin Customer	String	20	Denotes Walk-in customer
9	Branch Lcy*	String	3	Branch Local Currency
10	Branch Addr3*	String	105	Denotes the branch address details - Address Line 1
11	Branch Addr2*	String	105	Denotes the branch address details - Address Line 2
12	Branch Addr1*	String	105	Denotes the branch address details - Address Line 3
13	Branch Name*	String	105	Name of the branch
14	Country Code*	String	3	Country Code
15	Host Code*	String	8	Host Code
16	Branch Code*	String	3	Denotes the Code of Branch

Table 4-4   Branch Core Parameters File Upload – Child Record 1

Sequence	Attribute Name	Type	Size	Description
1	Discriminator*	String	10	Denotes the first child record type. Default value is always "BranchPref"
2	Report DSN	String	35	Denotes the details of the report DSN
3	DSN Name	String	35	Name of the DSN
4	Host Name	String	35	Host Name
5	Branch Code*	String	3	Denotes the Branch Code

Table 4-5   Branch Core Parameters File Upload – Child Record 2

Sequence	Attribute Name	Type	Size	Description
1	Discriminator*	String	12	Denotes the second child record type. Default value is always "SwiftAddress"
2	Default BIC*	String	1	Denotes the Default BIC
3	Swift Address*	String	12	Denotes the swift address details
4	Branch Code*	String	3	Branch Code

4.4 Currency Definition File Upload

This topics describes the information to perform Currency Definition maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcCurrencyMaint_<UniqueName>.csv

> **Note:**
>
> Replace the <UniqueName> for each file upload.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-6   Currency Definition File Upload – Master Records

Sequence	Field name	Type	Size	Description
1	Discriminator*	String	1	Denotes master record type. Default value is always "P"
2	Action*	String	10	Denotes file operation type. Allowed values are new/modify
3	Currency Code*	String	3	Denotes Currency Code
4	Currency Name*	String	105	Name of the currency
5	Country*	String	3	Currency Country
6	Currency Decimals*	Number	1	Currency Decimals
7	Currency Round Rule*	String	1	Denotes Currency Round Rule
8	Currency Round Unit*	Number	7	Denotes Currency Round Unit
9	Currency Format Mask	String	1	Denotes Currency Format Mask
10	Currency Spot Days*	Number	3	Number of spot working days applicable for the currency
11	Currency Int Method*	Number	1	Currency Interest Method
12	Position Gl	String	9	Position GL
13	Position Eqvgl	String	9	Position Equivalent GL
14	Currency Eur Type*	String	1	Currency Euro Type
15	Currency Tol Limit	Number	7	Currency Tolerance Limit
16	Settlement Msg Days*	Number	3	Settlement Message Days
17	Index Flag*	String	1	Derives index rate of the currency
18	Index Base Currency	String	3	Index Base Currency
19	Cut Off Hr*	Number	2	Hour of the day for the cut off
20	Cut Off Min*	Number	2	Minute of the hour for the cut of
21	Alt Currency Code*	String	10	Code of the alternate currency
22	Eur Conversion Reqd*	String	1	Euro Conversion Required
23	Cut Off Days*	Number	2	Cut Off Days for the payment transaction involving the currency

Table 4-6   (Cont.) Currency Definition File Upload – Master Records

Sequence	Field name	Type	Size	Description
24	Cr Auto Ex Rate Lmt	Number	22	Credit Auto Exchange Rate Limit
25	Dr Auto Ex Rate Lmt	Number	22	Debit Auto Exchange Rate Limit
26	Currency Type	String	3	Denotes Currency Type
27	Gen 103p*	String	1	Generate outgoing MT 103 messages in the MT 103 + format
28	Cls Currency*	String	1	CLS Currency
29	Fx Netting Days*	Number	3	Foreign Exchange Netting Days
30	Iso Num Currency Code	String	3	International Standardization Organization numerical currency code
31	Gen Cust Cov*	String	1	New Cover Message Format Required
32	Validate 50f*	String	1	Validate Tag-50F
33	Maintenance Country*	String	3	Maintenance Country
34	Commodity Code*	String	1	Denotes Commodity Code

Table 4-7   Currency Definition File Upload – Child Records

Sequence	Field name	Type	Size	Description
1	Discriminator*	String	1	Denotes child record type. Default value is always "C"
2	Maintenance Country*	String	3	Maintenance Country
3	Country Code*	String	3	Denotes Country Code
4	Country Desc*	String	105	Name of the Country
5	Currency Code*	String	3	Denotes Currency Code

4.5 BIC Directory File Upload

This topics describes the information to perform the bulk upload for the BIC Directory maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcBICDirectory_<UniqueName>.csv

> **✎ Note:**
>
> Replace the <UniqueName> for each file upload.

> **✎ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-8   BIC Directory File Upload – Master Records

Sequence	Field Name	Type	Size	Description
1	Action*	String	10	Denotes file operation type. Allowed values are new/modify
2	BIC Code*	String	11	Indicates the unique BIC Code by which the bank is identified by SWIFT.
3	Bank Name*	String	35	Name of the bank
4	Customer No	String	20	Customer Number
5	Sk Arrangement*	String	1	Denotes the SWIFT key arrangement
6	Bank Address1*	String	35	Indicates the bank address details of the customer - Address Line 1
7	Bank Address2*	String	35	Indicates the bank address details of the customer - Address Line 2
8	Bank Address3*	String	90	Indicates the bank address details of the customer - Address Line 3
9	Relationship*	String	1	Relationship
10	Swift Key*	String	50	Denotes the swift key details
11	Telex Key*	String	50	Indicates the unique telex key for the BIC directory
12	Upload Flag*	String	1	Upload Flag for the BIC directory
13	Upload Update*	String	1	Updated the BIC directory during an upload
14	Gen Mt103*	String	1	Indicates the counter party whose BIC code details you are capturing capacitate to receive payment messages in the MT 103 format
15	Blacklisted*	String	1	Indicates the BIC entity is blacklisted
16	CUG Member*	String	1	Indicates the BIC entity is a closed user group member
17	Gen Mt103p*	String	1	Indicates the counter party whose BIC code details you are capturing capacitate to receive payment messages in the MT 103 format
18	Multi Cust Transfer*	String	1	Denotes the Multi-Customer Credit Transfer details
19	Max Size*	Number	38	Indicates the maximum size
20	Remit Member*	String	1	Indicates the customer is registered with MT 103 extended remittance information multiple user group
21	Sub Type Code	String	4	Denotes the Sub-Type Code
22	Gen Mt102p*	String	1	Generates 102+ message

Table 4-8   (Cont.) BIC Directory File Upload – Master Records

Sequence	Field Name	Type	Size	Description
23	Gen Mt101*	String	1	Indicates MT101 can be sent/received from this BIC
24	Transaction Per Msg*	Number	40	Number of Transactions Per Page
25	ADB Member*	String	1	Denotes the ADB member
26	BE Indicator*	String	1	Denotes the BEI Indicator

4.6 Local Holiday File Upload

This topics describes the information to perform Local Holiday maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcBranchLocalHoliday_<UniqueName>.csv

> **Note:**
>
> Replace the <UniqueName> for each file upload.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-9   Local Holiday File Upload - Master Records

Sequence	Field Name	Type	Size	Description
1	Discriminator*	String	1	Denotes master record type. Default value is always "P"
2	Action*	String	10	Denotes file operation type. Allowed values are new/modify
3	Branch Code*	String	3	Branch Code
4	Year*	Number	4	Indicates the year details
5	Weekly Holidays*	String	7	Defines weekly holidays
6	Unexp Hol*	String	1	Define unexpected holidays

Table 4-10   Local Holiday File Upload - Child Records

Sequence	Field Name	Type	Size	Description
1	Discriminator*	String	1	Denotes child record type. Default value is always "C"
2	Branch Code*	String	3	Branch Code

Table 4-10   (Cont.) Local Holiday File Upload - Child Records

Sequence	Field Name	Type	Size	Description
3	Year*	Number	4	Indicates the year details
4	Month*	Number	2	Indicates the month details
5	Holiday List*	String	31	Denotes the Holiday List

4.7 Currency Holiday File Upload

This topics describes the information to perform Currency Holiday maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcCurrencyHoliday_<UniqueName>.csv

> **Note:**
>
> Replace the <UniqueName> for each file upload.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-11   Currency Holiday File Upload - Master Records

Sequence	Field Name	Type	Size	Description
1	Discriminator*	String	1	Denotes master record type. Default value is always "P"
2	Action*	String	10	Denotes file operation type. Allowed values are new/modify
3	Currency*	String	3	Currency
4	Year*	Number	4	Indicates the year details
5	Weekly Holidays*	String	7	Defines weekly holidays

Table 4-12   Currency Holiday File Upload - Child Records

Sequence	Field Name	Type	Size	Description
1	Discriminator*	String	1	Denotes child record type. Default value is always "C"
2	Currency*	String	3	Currency
3	Year*	Number	4	Indicates the year details
4	Month*	Number	2	Indicates the month details
5	Holiday List*	String	31	Denotes the Holiday List

4.8 External Customer File Upload

This topics describes the information to perform External Customer maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcCustomerMaint_<UniqueName>.csv

> **Note:**
>
> Replace the <UniqueName> for each file upload.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-13   External Customer File Upload - Master Records

Sequence	Field Name	Type	Size	Description
1	Action*	String	10	Denotes file operation type. Allowed values are new/modify
2	Country*	String	3	Country of the customer
3	Language*	String	3	Denotes the Language of the customer
4	Nationality*	String	3	Denotes the Nationality of the customer
5	Locale	String	10	Indicates the Locale of the customer
6	Deceased*	String	1	Indicates the customer is deceased
7	Frozen*	String	1	Denotes the customer account is frozen
8	Whereabouts Unknown*	String	1	Indicates the customerâ€™s whereabouts are unknown
9	RmId	String	12	Relationship Manager ID
10	Sanctions Checks Required*	String	1	Indicates the sanction check is required
11	Staff*	String	1	Indicates a staff customer
12	Walkin Customer*	String	1	Indicates a walk-in customer
13	Source System*	String	35	Source System
14	Source System Cust No*	String	35	Denotes the Source System Customer Number
15	Customer No*	String	20	Number for the customer
16	Host Code	String	8	Denotes the Host Code

Table 4-13   (Cont.) External Customer File Upload - Master Records

Sequence	Field Name	Type	Size	Description
17	Customer Type*	String	1	Type of Customer
18	Customer Category	String	10	Denotes the Customer Category
19	Customer Name1*	String	105	Name of the customer
20	Short Name*	String	20	Short name of the customer
21	Address Line1*	String	105	Indicates the customer address details - Address Line 1
22	Address Line2*	String	105	Indicates the customer address details - Address Line 2
23	Address Line3*	String	105	Indicates the customer address details - Address Line 3
24	Address Line4*	String	105	Indicates the customer address details - Address Line 4
25	Pincode*	String	15	Denotes the postal code details of the customer

4.9 External Customer Account File Upload

This topics describes the information to perform External Customer Account maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcAccountMaint_<UniqueName>.csv

> **Note:**
> Replace the <UniqueName> for each file upload.

> **Note:**
> The fields, which are marked with an asterisk, are mandatory.

Table 4-14   External Customer Account File Upload - Master Records

Sequence	Field Name	Type	Size	Description
1	Action*	String	10	Denotes file operation type. Allowed values are new/modify
2	Country Code*	String	10	Country Code
3	Address4*	String	105	Denotes the address details - Address Line 4
4	Address3*	String	105	Denotes the address details - Address Line 3

Table 4-14   (Cont.) External Customer Account File Upload - Master Records

Sequence	Field Name	Type	Size	Description
5	Address2*	String	105	Denotes the address details - Address Line 2
6	Address1*	String	105	Denotes the address details - Address Line 1
7	Eca Check Req*	String	1	Indicates External Credit Approval Required check is required for the external customer account
8	Account Class*	String	6	Denotes the Account Class
9	Ac Stat Dormant*	String	1	Indicates the account status is dormant
10	Ac Stat Frozen*	String	1	Indicates the account status is frozen
11	Gl Stat Blocked*	String	1	Indicates the account status is blocked
12	Ac Stat No Dr*	String	1	Indicates the account does not have any debit facility
13	Ac Stat No Cr*	String	1	Indicates the account does not have any credit facility
14	Ac Open Date*	String	35	Denotes the Account Open Date (Date format should be yyyy-MM-dd, i.e. 2018-03-30)
15	Cust Ac Name*	String	105	Account Name of the customer
16	Cust Ac Ccy*	String	3	Account Currency of the customer
17	Customer No*	String	20	Indicates the Customer Number
18	Source System Acc Brn*	String	20	Denotes the Source Account Branch
19	Source System Acc No*	String	35	Denotes the Source Customer Account Number
20	Source System*	String	35	Source System
21	Cust Ac IBAN	String	35	Indicates the account IBAN details
22	Host Code*	String	8	Denotes the host code details
23	Cust Account No*	String	20	Indicates the Customer Account Number

4.10 Exchange Rate File Upload

This topics describes the information to perform Exchange Rate maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcCurrencyExchangeRate_<UniqueName>.csv

> ✏️ **Note:**
>
> Replace the <UniqueName> for each file upload.

> **✏ Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

Table 4-15   Exchange Rate File Upload - Master Records

Sequence	Field Name	Type	Size	Description
1	Discriminator*	String	1	Denotes master record type. Default value is always "P"
2	Action*	String	10	Denotes file operation type. Allowed values are new/modify
3	Branch Code*	String	3	Branch for which exchange rate is applicable
4	Currency1*	String	3	From currency pair
5	Currency2*	String	3	To currency pair

Table 4-16   Exchange Rate File Upload - Child Records

Sequence	Field Name	Type	Size	Description
1	Discriminator*	String	1	Denotes child record type. Default value is always "C"
2	Branch Code*	String	3	Branch for which exchange rate is applicable
3	Currency1*	String	3	From currency pair
4	Currency2*	String	3	To currency pair
5	Rate Type*	Number	8	Denotes rate type defined in the system
6	Mid Rate*	Number	25	Mid rate applicable for the current pair
7	Buy Spread*	Number	40	Buy spread applicable for the currency
8	Sale Spread*	Number	40	Sell spread applicable for the currency
9	Buy Rate*	Number	25	Buy rate applicable for the currency
10	Sale Rate*	Number	25	Sell rate applicable for the currency
11	Rate Date*	String	35	Effective date applicable for the rate

5

Rules Framework

This topic describes about the rules framework.

This Rules framework is used for creation and evaluation of business rules, creation of facts, which are the building blocks in business rules.

This topic contains the following subtopics:

- Fact
  This topic describes about the Fact.

- Rule
  This topic describes about the Rule.

5.1 Fact

This topic describes about the Fact.

Fact is the information-carrying block, used for creating the rules.

Fact can be of the following type:

- NUMBER

- TEXT

- BOOLEAN

- DATE

- ARRAY

- ENUM

This topic contains the following subtopics:

- Create Fact
  This topic describes the systematic instructions to configure fact.

- View Fact
  This topic describes the systematic instructions to view the list of fact.

5.1.1 Create Fact

This topic describes the systematic instructions to configure fact.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Fact**. Under **Fact**, click **Create Fact**.

2. Click **New** to create a single fact.

   The **Create Fact** screen displays.

Figure 5-1   Create Fact

3. Specify the fields on **Create Fact** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 5-1   Create Fact – Field Description

Field	Description
Code	Specify the alphanumeric code without space for the fact.
Description	Specify the description of the fact.
Product Processor	Select the product processor.
Tag	Specify the tag for fact.
Type	Select the type of the fact from the dropdown list. The available options are: • **Number** • **Text** • **Boolean** • **Date** • **Array** • **ENUM**

4. Click **Save** to save the details of fact.

Bulk Upload

5. 5. Click **Bulk Upload** to create a multiple fact.

   The **Bulk Upload** screen displays.

Figure 5-2   Bulk Upload
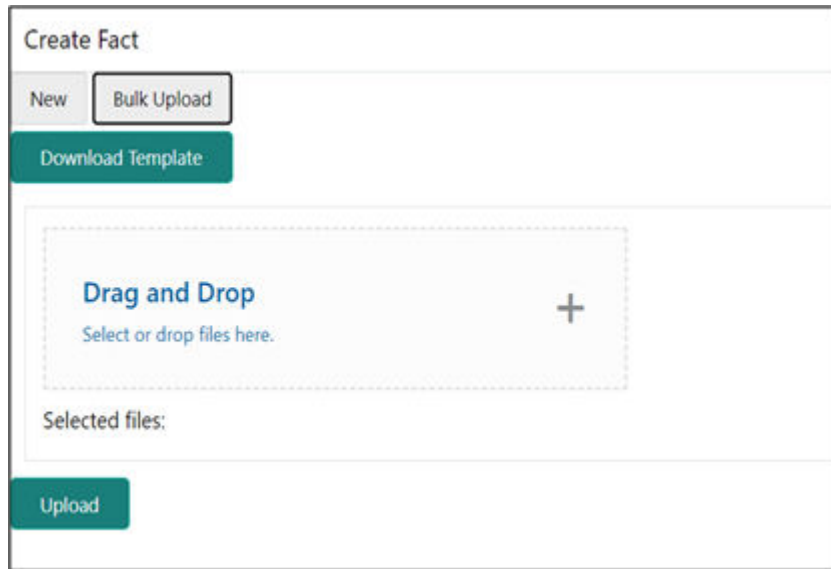
6. Click **Download Template** to download the sample file.

   Specify all the Facts details to be created in the sample file and save the file.

7. Click **Drag and Drop** and select the file from the browser.

8. Click **Upload**.

Create ENUM Type Fact

9. Select the type as **ENUM FACT** from the drop-down list.

   The **Create Fact** screen displays.
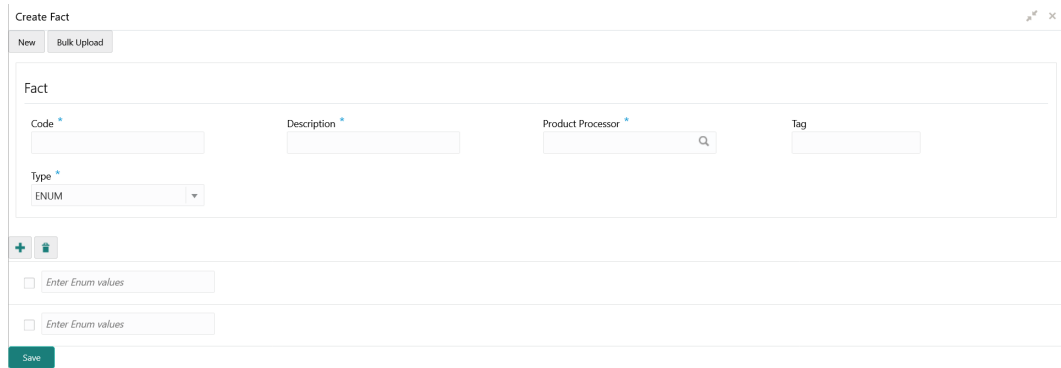
10. Specify the fields on **Create Fact** screen.

11. Click   to add the list of ENUM fact values.

12. Click   to delete the list of ENUM fact values.

13. Click **Save** to save the details the facts.

The Fact is successfully created and can be viewed using **View Fact** screen.

5.1.2 View Fact

This topic describes the systematic instructions to view the list of fact.

The user can configure fact using **Create Fact** screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Fact**.

2. Under **Fact**, click **View Fact**.

    The **View Fact** screen displays.

Figure 5-3   View Fact

For more information on fields, refer to the field description table.

Table 5-2   View Fact – Field Description

Field	Description
Product Processor	Displays the product processor.
Fact ID	Displays the Fact ID.
Fact Name	Displays the name of the fact.
Description	Displays the description of the fact.

3. Specify the Fact details in **Filter** textbox to filter the data.

4. Click **Refresh** to refresh the screen.

5. Right-click on the fact from the list and Click **View Details**.

    The **Fact Creation** screen displays.

Figure 5-4   fact Creation

6. Specify the fields on **Fact Creation** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 5-3   Fact Creation – Field Description

Field	Description
Code	Specify the alphanumeric code without space for the fact.
Description	Specify the description of the fact.
Product Processor	Select the product processor.
Tag	Specify the tag values.
Type	Select the type of the fact from the dropdown list. The available options are: • **Number** • **Text** • **Boolean** • **Date** • **Array** • **ENUM**

5.2 Rule

This topic describes about the Rule.

Rule enables the user to build the expression to perform the calculation with the facts created.

The type of rules supported are:

• **Logical**: Example (ACCOUNT_BAL > 124432) && (VALID_TILL < VALID_DATE)

• **Arithmetic**: - Example: (CREDIT_BALANCE + TAX_CREDIT – INTEREST_AMOUNT)

• **Relational**: - Example: (FACT5 == ACCOUNT && TAX >= 10)

• **Nested**: - Example: (RULE_ACCOUNT = TRUE) && (ACCOUNT_BAL > 21234)

- **Multiple-If else**: - Example: IF (ACCOUNT_BAL > 124432) then OUTPUT1 ELSE IF (ACCOUNT_BAL < 124432) then OUTPUT2

- **Multiple Nesting**: - Example- INNERCHILDRULE : (ACC_BAL > 30000) then OUTPUT = true

  - **CHILDRULE** : ((INNERCHILDRULE == true) && (CBLSCORE > 5)) then OUTPUT = true

  - **PARENTRULE**: ((ACCTYPE == HOMELOAN) && (CHILDRULE == true))

Steps to build a Nested Rule expression is explained with the below example

The Rule Expression for Loan to Value (LTV) is Loan to Value (LTV) = (LOANAMOUNT /COLLATERAL_VALUE) *100

For now, the above expression is not supported directly, and LTV calculation is achieved by the below steps.

1. Create a Rule1 - LOAN_TO_COLLATERAL

   Expression - LOANAMOUNT/COLLATERAL_VALUE

2. Create a rule2 - Loan to Value (LTV)

   Expression - LOAN_TO_COLLATERAL *100

This topic contains the following subtopics:

- Create Rule
  This topic describes the systematic instructions to configure rule.

- View Rule
  This topic describes the systematic instructions to view the list of rule.

- Evaluate Rule
  This topic describes about the Evaluate Rule.

- Rule Group
  This topic describes about the Rule Group.

- View Audit Rule
  This topic describes the View Audit Rule.

5.2.1 Create Rule

This topic describes the systematic instructions to configure rule.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Rule**. Under **Rule**, click **Create Rule**.

   The **Create Rule** screen displays.

Figure 5-5   Create Rule

2. Specify the fields on **Create Rule** screen.

> ✎ **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 5-4   Create Rule – Field Description

Field	Description
Code	Specify the alphanumeric code without space for the rule.
Description	Specify the description of the rule.
Product Processor	Click **Search** and select the product processor.
Tag	Select the tag from the drop-down list.
Select Existing Rule	Click **Search** and select the existing rule.
Add Section	Click **Add Section** to create the multiple rule condition.
Expression Builder	Select the expressions to build the rule.
Add Expression	Click **Add Expression** to create the expression for the rule.
+ Icon	Click **+** icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list.
Operator	Select the comparison operator from the drop-down list.

Table 5-4   (Cont.) Create Rule – Field Description

Field	Description
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** The below option appears if the Data Type is selected as Boolean. • **True** • **False**
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact**
Expression	Displays the expression and output updated in the expression builder.

3. Click **Save** to save the details of rule.

Create Rule with multiple Output
Steps to build a Rule with multiple output is explained with the below example.

The Rule Expression for Multiple output rule is: IF (TotalIncome > 20000) && (TotalExpense < 8000)

Figure 5-6   Create Rule with Multiple Output
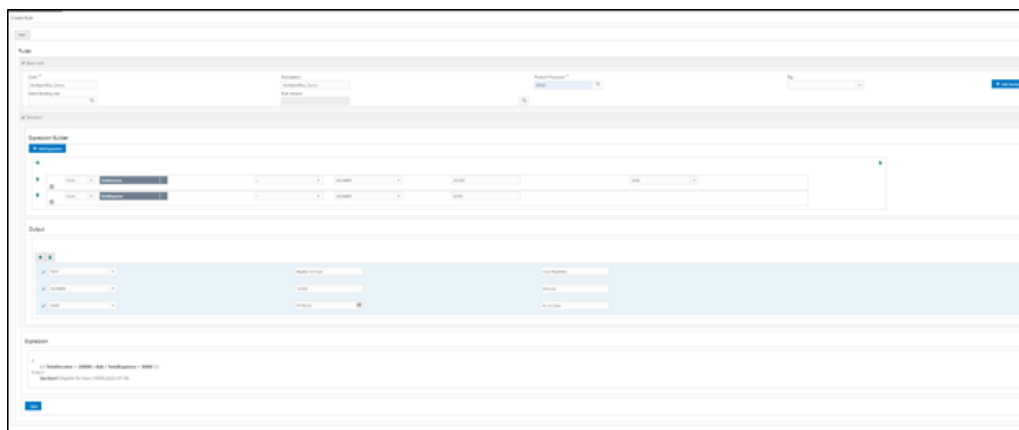
4. Click **Save** to save the details the Rule.

The Rule is successfully created and can be viewed using **View Rule** screen.

5.2.2 View Rule

This topic describes the systematic instructions to view the list of rule.

The user can configure fact using **Create Rule** screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Rule**.

2. Under **Rule**, click **View Rule**.

   The **View Rule** screen displays.

Figure 5-7   View Rule

For more information on fields, refer to the field description table.

Table 5-5   View Rule – Field Description

Field	Description
Product Processor	Displays the product processor.
Rule ID	Displays the Rule ID.
Rule Name	Displays the name of the rule.
Description	Displays the description of the rule.

3. Specify the rule details in **Filter** textbox to filter the data.

4. Click **Refresh** to refresh the screen.

5. Right-click on the rule from the list and Click **View Details**.

6. Click **Edit** to edit the rule.

   The **Rule Creation** screen displays.

Figure 5-8   Rule Creation

7. Specify the fields on **Create Rule** screen.

> **Note:**
>
> The fields, which are marked with an asterisk, are mandatory.

For more information on fields, refer to the field description table.

Table 5-6   Create Rule – Field Description

Field	Description
Code	Specify the alphanumeric code without space for the rule.
Description	Specify the description of the rule.
Product Processor	Click **Search** and select the product processor.
Tag	Select the tag from the drop-down list.
Select Existing Rule	Click **Search** and select the existing rule.
Add Section	Click **Add Section** to create the multiple rule condition.
Expression Builder	Select the expressions to build the rule.
Add Expression	Click **Add Expression** to create the expression for the rule.
+ Icon	Click **+** icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list.
Operator	Select the comparison operator from the drop-down list.
Data Type	Select the data type for the fact or rule. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact** The below option appears if the Data Type is selected as Boolean. • **True** • **False**
Output	Select the output from the drop-down list. Once the user select the data type, one more field opens adjacent to the output, update the same based on the selected output option. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact**
Expression	Displays the expression and output updated in the expression builder.

8. Click **Save** to save the details of rule.

5.2.3 Evaluate Rule

This topic describes about the Evaluate Rule.

Once the rule has been created the evaluate API has to be invoked to evaluate the rule.

To evaluate a rule, **rule name & namespace** are the **mandatory** parameters passed to the API and **version** of the rule is an **optional** parameter. If the version of the rule is not passed to the API then by **default** the **latest version of the rule** is evaluated.

The evaluate API url to be invoked is:

/rule-service/rules/evaluate/{namespace}/{ruleName}

/rule-service/rules/evaluate/{namespace}/{ruleName}/{version}

Method: POST

Headers Required

appId: PLATORULE

userId: ASHISH

Content-Type: application/json

Request Body

```
{
    "LOAN_AMOUNT": "15001",
    "LOAN_TYPE":"Auto_loan",
}
```

Response

```
{
    "ruleEvaluated": true,
    "result": "true",
    "ruleId": 8161,
    "ruleName": "DIVYARULE1",
    "outputDescription": "null",
    "responseType": null,
    "error": null,
    "req_id": "reqId_1652082090755"
}
```

5.2.4 Rule Group

This topic describes about the Rule Group.

Grouping individual rules by name and priority into a RuleGroup.

For the evaluating a RuleGroup, user will pass all the required Fact data to evaluate API & if the evaluate Group flag is set to false, the API will evaluate rule one by one based on priority and return for the rule which evaluates to true. If the evaluate Group flag is set to true then the API will evaluate rule one by one based on priority for all rules in the RuleGroup and return the response of all the rules.

Please find below an example for a Rule Group:

RULEGROUP1:

RULE1: (ACC_BAL > 400)

RULE2: (ACC_BAL < 10000)

RULE3: MIN (FICOSCORE

- **Create Rule Group**
  This topic describes the systematic instructions to configure rule group.

- View Rule Group
  This topic describes the systematic instructions to view the list of rule group.

5.2.4.1 Create Rule Group

This topic describes the systematic instructions to configure rule group.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Rule**. Under **Rule**, click **Create Rule Group**.

    The **Create Rule Group** screen displays.

    Figure 5-9   Create Rule Group

2. Specify the fields on **Create Rule Group** screen.

    > **Note:**
    >
    > The fields, which are marked with an asterisk, are mandatory.

    For more information on fields, refer to the field description table.

    Table 5-7   Create Rule Group– Field Description

Field	Description
Group Name	Specify the unique group name for the selected rules.
Product Processor	Click **Search** and select the product processor.
Tag	Specify the tag for rule group.
Evaluate Group	Select the toggle to evaluate the expression in sequence. > **Note:** > NOTE: If the toggle is disabled, the evaluation of the expression stops when the condition of expression is evaluated to **True**.
+ Icon	Click **+** icon to add new expression.

3. Click **Save** to save the details the Rule.

    The Rule is successfully created and can be viewed using **View Rule Group** screen.

5.2.4.2 View Rule Group

This topic describes the systematic instructions to view the list of rule group.

The user can configure fact using **Create Rule Group** screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Rule**.

2. Under **Rule**, click **View Rule Group**.

   The **View Rule Group** screen displays.

Figure 5-10   View Rule Group

For more information on fields, refer to the field description table.

Table 5-8   View Rule Group – Field Description

Field	Description
Product Processor	Click **Search** and select the product processor.
Tag	Specify the tag for rule group.
Group ID	Displays the Group ID.
Group Name	Displays the name of the group.
Description	Displays the description of the group.
Product Processor	Displays the product processor.
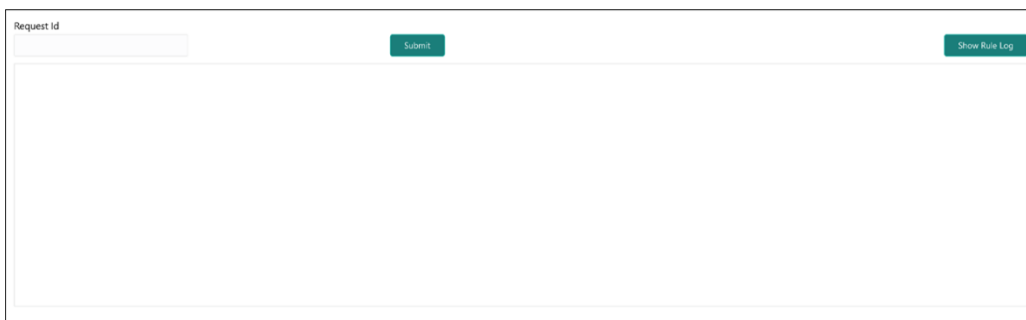
5.2.5 View Audit Rule

This topic describes the View Audit Rule.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Rule**. Under **Rule**, click **View Audit Rule**.

   The **View Audit Rule** screen displays.

Figure 5-11   View Audit Rule

2. Specify the fields on **View Audit Rule** screen.

    For more information on fields, refer to the field description table.

Table 5-9   View Audit Rule – Field Description

Field	Description
Request ID	Specify the request ID available from the output of evaluate API.

3. Click **Submit** to view to details.

4. Click **Show Rule log**, to view the log rule for selected request ID.

6

Document Verification Framework

This topic helps the user quickly get acquainted with the Document verification framework.

In this digital age, there is still a strong reliance on physical document verification, especially in large organizations such as government, enterprise companies, banks, and universities/colleges.

Manual Verification of documents for Identification is laborious. Not only do we have to organize and categorize the files, extracting meaningful information manually takes a lot of time and effort.

These business organizations employ data entry teams whose sole purpose is to take these physical documents, manually re-type the information, and then save it into the system which is cumbersome. This can annoy customers as well as employees ultimately resulting in decreased productivity.

So, there is a strong need to digitize the information on the documents and extract the required data. This document verification framework has a set of APIs that allows you to extract required fields from the Identification documents automatically, thus saving a lot of time and effort.

Prerequisites

Document Verification framework is designed to extract the detailed information from the uploaded documents like Passport, National ID card, driving license, etc.

This topic contains the following subtopics:

- Text Extraction
  This topic provides the information about the Text Extraction.

- Image Processing
  This topic provides the information about the Image Processing.

- Document Verification API Details
  This topic provides the information about the Document Verification API Details.

- Validate Information API details
  This topic provides the information about the Validate Information API details.

- Recommendations For Better Performance
  This topic provides the information about the better quality of the source image, the higher the accuracy of extraction will be.

6.1 Text Extraction

This topic provides the information about the Text Extraction.

Optical character recognition or optical character reader (OCR) is the process of digitizing documents and extracting text from them. Widely used as a form of data entry from scanned documents – Here the text is first scanned, analyzed, and is finally translated into character codes. This machine-encoded text can be easily searched and edited electronically.

OCR has greatly improved the process of data entry. The need for the documents to be scanned is on a constant rise as it enables these documents to be viewed conveniently when required. The most popular application of OCR is Data entry for business documents, e.g. ID card, driving license, passport, cheque, invoice and salary slip.

Benefits of OCR:

1. **100% Text-searchable Documents** - One of the huge advantages of OCR data processing is that it makes the digitized documents completely text searchable. This helps professionals to quickly lookup numbers, addresses, names, and various other parameters that differentiate the document being searched.

2. **Reduced Cost** - Besides helping an organization in cutting down the cost of hiring manpower for data extraction, it also helps in reducing several other costs like printing, copying, shipping charge, etc.

3. **Reduced Errors** - It resolves the problem of data loss and inaccuracy and helps in reducing errors.

4. **More Storage Space** -The lesser the documents, the larger space. Organizations have always wanted to take the 'Paperless' approach and OCR just makes it possible. Also, the expenses of file cabinets are saved with this approach.

5. **Ready Availability** - By scanning the information of documents through OCR, the data can be made available in several different places. One can carry it in a USB drive and retrieve the wanted information with just a few clicks.

6. **Superior Data Security** - Data security is of utmost importance for any organization. Paper documents are easily prone to loss or destruction. However, this is not the case with data that is scanned, analyzed, and stored in digital formats. Furthermore, access to these digital documents can also be minimized to prevent mishandling of the digitized data.

7. **Massively Improves Customer Service** - Several inbound contact centers often provide information that their customers seek. While some call centers provide customers with the information they need, others will have to quickly access certain personal or order-related information of the customers to process their requests. Quick data accessibility becomes extremely important in such cases. This helps in systematically storing and retrieving the documents digitally at blazing speeds. With this, the waiting time is drastically reduced for the customers, thereby improving their experience.

6.2 Image Processing

This topic provides the information about the Image Processing.

Text Recognition depends on a variety of factors to produce good quality output. The text output highly depends on the quality of the input image. These guidelines help document extraction engine to produce accurate results.

Image Preprocessing comes into play to improve the quality of input image so that the engine gives an accurate output. The main objective of the Preprocessing phase is to make it easy for the system to distinguish a character from the background.

The preprocessing can be controlled using the configuration files and are explained at the bottom. The configuration varies between documents and country.

The following image processing operations are used to improve the quality of input image:

- **Image Scaling** – OCR gives accurate output for images with 300 DPI which describes the resolution. Keeping DPI lower than 200 will give unclear and incomprehensible results while keeping the DPI above 600 will unnecessarily increase the size of the output file without improving the quality of the file. Thus, a DPI of 300 works best for this purpose.

- **Image Skew Correction** – A Skewed image is defined as a document image that is not straight. Skewed images directly impact the line segmentation of the OCR engine which reduces its accuracy. These kinds of images are to be processed to correct text skew.

- **Background Cropping** – Background is cropped from scanned images if it contains any. This is really important as we want to remove unwanted areas from the image that does not contain text at all.

- **Noise Removal** – Noise is removed from images as it decreases the readability of text. The main objective of the Noise removal stage is to smoothen the image by removing small dots/patches which have high intensity than the rest of the image. Noise removal can be performed for both Colored and Binary images.

- **Binarization** – This involves converting a colored image into black and white pixels which can be achieved by fixing a threshold value.

6.3 Document Verification API Details

This topic provides the information about the Document Verification API Details.

Document Verification APIs are a function of image quality, image size, and Resolution. Each API has different requirements. The Framework is designed to extract details from documents like Passport, Driving License, National ID card, Salary slips etc.

This topic contains the following subtopics:

- Passport Extraction
  This topic provides the information about the Passport Extraction.

- Driving License Extraction
  This topic provides the information about the payload details for Driving License Details extraction service.

- National Identification Extraction
  This topic provides elaborates the payload details for National ID Card Details extraction service.

- Voter Identity Card Extraction
  This topic provides the information about the payload details for voter identity card extraction service.

6.3.1 Passport Extraction

This topic provides the information about the Passport Extraction.

Passport Extraction module extracts details in the passport like Country, Document Type, Name, First Name, Last Name, Gender, Date of Birth, Date of Issue and Date of expiry of the passport, Passport No and Issuing Authority if present in the passport along with Image metadata information like Image DPI, Resolution and Image Size. This module provides support for passports of various countries listed below:

- USA passport and passport-card

- UAE

- INDIA

- CANADA

- AUSTRALIA

- BANGLADESH

All the details in the passport/ passport-card (Incase of USA) are extracted using "/extractInformation" API.

Brief of Working:

It takes "country", "document type" and "Base64 encoded image" of the passport as input. It internally generates processed text from the passport and extracts details like Name, First Name, Last Name, Gender, DOB, DOI and DOE, PP No. and Issuing Authority if present in the document. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size, etc. The output is represented in JSON format.

Table 6-1   Passport Extraction API Format

Sl.No	Description	Comments
1	Format of input images it supports	jpg, jpeg, png, pdf
2	Output Format	JSON
3	Support multiple input files	Yes

Input Request:

"/extractInformation" API -

For a single image: Base64 encoded image, Country, Document Type ("passport" in this case).

For multiple images: Array of the Base64 encoded images, Country, Document Type ("passport" in this case).

Sample Input Request:

```
{
        "country": "UAE",
        "docType": "passport",
        "docBase64s": [
        "------base64 encoded image string------"
    ]
}
```

> **Note:**
>
> In case of USA, there are 2 types of document: passport and passport-card. If the input document is of type passport-card, the docType should be mentioned as passport-card.

Output Response:

The output of "/extractInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
  "documentDetails": [
    {
     "ImageInfo": {
        "file_size": "647.22 KB",
        "image_dpi": "150",
        "image_resolution": "704x541",
        "information": "Minimum 300 DPI is required. File size is proper."
     },
  "dateOfBirth": "7/11/2001",
  "dateOfExpiry": "11/6/2022",
  "dateOfIssue": "12/6/2017",
  "docType": "Passport",
  "firstName": "SHAMA",
  "gender": "F",
  "identificationNumber": "F0Z615883",
  "issuedCountry": "UNITED ARAB EMIRATES",
  "issuingAuthority": "",
  "lastName": "RASHED ABDULIALIL MOHAMED ALFAHIM",
  "name": "SHAMA RASHED ABDULIALIL MOHAMED ALFAHIM"
  }
 ]
}
```

> **Note:**
>
> Even if Country and DocType not provided in the input request, the service tries to extract the Country Name and Document Type automatically. In case, if it is not able to extract it returns an exception/ error. This means either the quality of the document is not enough to extract all the details or resolution is poor.

Things to be taken care of:

- Make sure the base64 encoded image string of the input image is correct.
- Document Type provided in the input should be "passport" only
- Specify the country name correctly for accurate extraction of details

6.3.2 Driving License Extraction

This topic provides the information about the payload details for Driving License Details extraction service.

Driving License Details Extraction module extracts information present in the Driving License such as Name, First Name, Last Name, Gender, Address, License No, Date of Birth, Date of Issue and Date of expiry of the license along with the image metadata information like Image

DPI, Resolution and Size. Currently, we provide support for licenses of various countries listed below:

- UNITED STATES OF AMERICA

- UNITED KINGDOM

- CANADA

- AUSTRALIA

- BANGLADESH

All the details in the license are extracted using "/extractInformation" API.

Brief of Working:

The API accepts the "country", "document type" and "Base64 encoded image" of the license as input. It internally generates processed text from the license document and extracts details like Name, First Name, Last Name, Gender, DOB, DOI and DOE, License No. and Address, etc. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size. The output is represented in JSON format.

Input Request:

"/extractInformation" API -

- For a single image: Base64 encoded image, Country, Document Type ("License" in this case).

- For multiple images: Array of the Base64 encoded images, Country, Document Type ("License" in this case).

Sample Input Request:

```
{
  "country": "US",
  "docType": "license",
  "docBase64s": [
    "------base64 encoded image------"
  ]
}
```

Output Response:

The output for "/extractInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
 "documentDetails":
   [
    {
     "ImageInfo": {
      "file_size": "579.26 KB",
      "image_dpi": "",
```

```
        "image_resolution": "736x419",
        "information": "dpi info not available. Average Image Resolution. File
size is proper."
        },
    "address": "918 N ROXBURY BEVERLY HILS CA 90210",
    "dateOfBirth": "6/8/1911",
    "dateOfExpiry": "6/8/2012",
    "dateOfIssue": "2/7/2010",
    "docType": "license",
    "firstName": "LUCILLE",
    "gender": "F",
    "identificationNumber": "B2201793",
    "issuedCountry": "UNITED STATES OF AMERICA",
    "issuingAuthority": "CALIFORNIA",
    "lastName": "BALL",
    "name": "LUCILLE BALL"
  }
 ]
}
```

> **Note:**
>
> Even if Country and DocType not provided in the input request, the service tries to extract the Country Name and Document Type automatically. In case, if it is not able to extract it returns an exception/ error. This means either the quality of the document is not enough to extract all the details or resolution is poor.

Things to be taken care of:

- Make sure the base64 encoded image string of the input image is correct.

- Document Type provided in the input should be "license" only

- Specify the country name correctly for accurate extraction of details

6.3.3 National Identification Extraction

This topic provides elaborates the payload details for National ID Card Details extraction service.

National ID card Details Extraction module extracts details in the National Identity Card like Name, First Name, Last Name, Gender, Address (if present), Date of Birth, Date of Issue and Date of expiry of the NID, ID No , etc along with the image metadata information like Image DPI, Resolution and Size. This module provides support for NIDs of various countries listed below:

- USA

- South Africa

- Brazil

- Bangladesh

- India

- Kenya

- Portugal

All the details in the ID are extracted using "/extractInformation" API.

Brief of Working:

It takes "country", "document type" and "Base64 encoded image" of the NID as input. It internally generates processed text from the Identity document and extracts details like Name, First Name, Last Name, Gender, Address, DOB, DOI, DOE, and ID No. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size. The output is represented in JSON format.

Input Request:

"/extractInformation" API -

- For a single image: Base64 encoded image, Country, Document Type ("nid" in this case).

- For multiple images: Array of the Base64 encoded images, Country, Document Type ("nid" in this case).

Sample Input Request:

```
{
  "country": "BR",
  "docType": "nid",
  "docBase64s": [
    "------base64 encoded image------"
  ]
}
```

Output Response:

The output for "/extractInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
  "documentDetails": [
    {
      "ImageInfo": {
        "file_size": "566.32 KB",
        "image_dpi": "72",
        "image_resolution": "680x453",
        "information": "Minimum 300 DPI is required. Poor Image
Resolution. File size is proper."
      },
      "dateOfBirth": "12/7/1960",
      "dateOfExpiry": "20/8/2030",
      "dateOfIssue": "",
      "docType": "NID",
      "firstName": "FERNANDA",
      "gender": "F",
      "identificationNumber": "000000005-9",
```

```
        "issuedCountry": "BRAZIL",
        "issuingAuthority": "",
        "lastName": "DE CARVALHO DA SILVA",
        "name": "FERNANDA DE CARVALHO DA SILVA"
      }
    ]
}
```

> **Note:**
>
> Even if Country and DocType not provided in the input request, the service tries to extract the Country Name and Document Type automatically. In case, if it is not able to extract it returns an exception/ error. This means either the quality of the document is not enough to extract all the details or resolution is poor.

Things to be taken care of:

- Make sure the base64 encoded image string of the input image is correct.

- Document Type provided in the input should be "nid" only

- Specify the country name correctly for accurate extraction of details

6.3.4 Voter Identity Card Extraction

This topic provides the information about the payload details for voter identity card extraction service.

VoterID card Details Extraction module extracts details in the Voter ID Card like **Name**, **First Name**, **Last Name**, **Gender**, **Date of Birth** and, **ID No.** along with the image metadata information like **Image DPI**, **Resolution**, and **Size**. Currently, we provide support for Voter IDs of various countries listed below:

- INDIA

All the details in the license are extracted using "/extractInformation" API.

Brief of Working:

It takes "country", "document type" and "Base64 encoded image" of the Voter ID as input. It internally generates processed text from the Identity document and extracts details like Name, First Name, Last Name, Gender, DOB, and ID No. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size. The output is represented in JSON format.

Input Request:

"/extractInformation" API -

- For a single image: Base64 encoded image, Country, Document Type ("voterid" in this case).

- For multiple images: Array of the Base64 encoded images, Country, Document Type ("voterid" in this case).

Sample Input Request:

```
{
   "country": "IND",
   "docType": "voterid", "docBase64s": [
     "------base64 encoded image    "
  ]
}
```

Output Response:

The output for "/extractInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
    "documentDetails": [
        {
            "ImageInfo": {
                "file_size": "236.93 KB",
                "image_dpi": "300",
                "image_resolution": "317x500",
                "information": "Image DPI is proper. File size is
proper."
            },
            "dateOfBirth": "15/2/1985",
            "dateOfExpiry": "",
            "dateOfIssue": "",
            "docType": "VOTERID",
            "firstName": "PREM",
            "gender": "M",
            "identificationNumber": "GDN0225185",
            "issuedCountry": "INDIA",
            "issuingAuthority": "",
            "lastName": "RAJ THAKUR",
            "name": "PREM RAJ THAKUR"
        }
    ]
}
```

> **Note:**
>
> Even if Country and DocType are not provided in the input request, the service tries to extract the Country Name and Document Type automatically. In case, if it is not able to extract it returns an exception/ error. This means either the quality of the document is not enough to extract all the details or resolution is poor.

Things to be taken care of:

- Make sure the base64 encoded image string of the input image is correct.

- Document Type provided in the input should be "voterid" only

- Specify the country name correctly for accurate extraction of details

6.4 Validate Information API details

This topic provides the information about the Validate Information API details.

Validate Information APIs are a function of image quality, image size, and Resolution. Each API has different requirements. The Framework is designed to extract details from documents like Passport, Driving License, National ID card, Salary slips etc. and to calculate similarity score of the extracted details with input key value pairs. It uses fuzzy matching logic for calculating similarity of input value & extracted value based on given keys. For Date of Birth, Date of Issue and Date of expiry keys similarity score is calculated by exact matching logic.

Table 6-2   Validate Information API Input format

Sl. No	Description	Comments
1	Format of input images it supports	jpg, jpeg, png, pdf
2	Output format	JSON
3	Support multiple users' input key value pairs	Yes
4	Support multiple input files of different document types	Yes

This topic contains the following subtopics:

- Passport Validation
  This topic provides the information about the payload details for Passport Details validation service.

- Driving License Validation
  This topic provides the information about the payload details for Driving License validation service.

- National Identification Validation
  This topic provides the information about the payload details for National Identification validation service.

- Voter Identity Card Validation
  This topic provides the information about the payload details for Voter Identity Card validation service.

- Pointers About Request and Response
  This topic provides the information about the Pointers about Request and Response.

- Things to be taken care of

6.4.1 Passport Validation

This topic provides the information about the payload details for Passport Details validation service.

Passport Validation module extracts details in the passport like Country, Document Type, Name, First Name, Last Name, Gender, Date of Birth, Date of Issue and Date of expiry of the passport, Passport No and Issuing Authority if present in the passport along with Image metadata information like Image DPI, Resolution and Image Size. Then it calculates similarity

scores for each input key value pairs with the extracted details. This module provides support for passports of various countries listed below:

*   USA passport and passport-card

*   UAE

*   INDIA

*   CANADA

*   AUSTRALIA

*   BANGLADESH

All the details in the passport/ passport-card (in case of USA) are extracted and validated using "/validateInformation" API

Brief of Working:

It takes "country", "key value pairs to be searched", "input documents" (including "document type" and "Base64 encoded image") of the passport as input. It internally generates processed text from the passport and extracts details like Name, First Name, Last Name, Gender, DOB, DOI and DOE, PP No. and Issuing Authority if present in the document. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size, etc. Then it calculates similarity scores for each input key value pairs with the extracted details. The output is represented in JSON format.

Input Request:

"/validateInformation" API -

*   Country, Array of key value pairs to be searched, Array of the documents (including Base64 encoded image and Document Type ("passport" in this case) for each document).

Sample Input Request:

```
{
    "country": "UAE",
    "search": [
        [
            {
                "key": "------name of key------"
                "value": "------value of key------"
            }
        ]
    ],
    "docs": [
        {
            "docType": "passport",
            "docBase64s": "------base64 encoded image string------"
        }
    ]
}
```

> **✎ Note:**
>
> In case of USA, there are 2 types of documents: passport and passport-card. If the input document is of type passport-card, the docType should be mentioned as passport-card.

Output Response:

The output of "/validateInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
    "documentDetails": [
        {
            "country": "UAE",
            "documents": {
                "document_1": [
                    [
                        {
                            "extractedValue": "7/11/2001",
                            "key": "dateOfBirth",
                            "similarityScore": 100.0,
                            "value": "7 Nov 2001"
                        },
                        {
                            "extractedValue": "12/6/2017",
                            "key": "dateOfissue",
                            "similarityScore": 100.0,
                            "value": "12 06 2017"
                        },
                        {
                            "extractedValue": "11/6/2022",
                            "key": "dateOfexpiry",
                            "similarityScore": 100.0,
                            "value": "11/06/2022"
                        },
                        {
                            "extractedValue": "SHAMA RASHED ABDULJALIL
MOHAMED ALFAHIM",
                            "key": "nAME",
                            "similarityScore": 56.41,
                            "value": "SHAMA RASHED ABDULIALIL"
                        },
                        {
                            "extractedValue": "UNITED ARAB EMIRATES",
                            "key": "issuedCountry",
                            "similarityScore": 100.0,
                            "value": "UNITED ARAB EMIRATES"
                        }
                    ]
                ]
```

```
                }
            }
        ]
    }
```

6.4.2 Driving License Validation

This topic provides the information about the payload details for Driving License validation service.

Driving License Details Validation module extracts information present in the Driving License such as Name, First Name, Last Name, Gender, Address, License No, Date of Birth, Date of Issue and Date of expiry of the license along with the image metadata information like Image DPI, Resolution and Size. Then it calculates similarity scores for each input key value pairs with the extracted details. This module provides support for licenses of various countries listed below:

*   UNITED STATES OF AMERICA

*   UNITED KINGDOM

*   CANADA

*   AUSTRALIA

*   BANGLADESH

All the details in the license are extracted and validated using "/validateInformation" API.

Brief of Working:

It takes "country", "key value pairs to be searched", "input documents" (including "document type" and "Base64 encoded image") of the passport as input. It internally generates processed text from the passport and extracts details like Name, First Name, Last Name, Gender, DOB, DOI and DOE, PP No. and Issuing Authority if present in the document. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size, etc. Then it calculates similarity scores for each input key value pairs with the extracted details. The output is represented in JSON format.

Input Request:

"/validateInformation" API -

*   Country, Array of key value pairs to be searched, Array of the documents (including Base64 encoded image and Document Type ("license" in this case) for each document).

Sample Input Request:

```
{
    "country": "US",
    "search": [
        [
            {
                "key": "------name of key------"
                "value": "------value of key------"
```

```
                }
            ]
        ],
        "docs": [
            {
                "docType": "license",
                "docBase64s": "------base64 encoded image string------"
            }
        ]
}
```

Output Response:

The output of "/validateInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
    "documentDetails": [
        {
            "country": "US",
            "documents": {
                "document_1": [
                    [
                        {
                            "extractedValue": "JELANI",
                            "key": "firstnAME",
                            "similarityScore": 75.0,
                            "value": "jelani s"
                        },
                        {
                            "extractedValue": "123 MAIN ST PHOENIX, AZ
85007",
                            "key": "ADDress",
                            "similarityScore": 80.0,
                            "value": "787 Main st, phoenix, AZ 85007"
                        },
                        {
                            "extractedValue": "1/1/1974",
                            "key": "dateOfbirth",
                            "similarityScore": 100.0,
                            "value": "1/1/1974"
                        },
                        {
                            "extractedValue": "1/3/2016",
                            "key": "dateOfissue",
                            "similarityScore": 100.0,
                            "value": "03-01-16"
                        },
                        {
                            "extractedValue": "M",
                            "key": "gender",
```

```
                                    "similarityScore": 100.0,
                                    "value": "M"
                            },
                            {
                                    "extractedValue": "1/3/2024",
                                    "key": "dateOfexpiry",
                                    "similarityScore": 0.0,
                                    "value": "03/03/24"
                            }
                    ]
            ]
        }
      }
    ]
}
```

6.4.3 National Identification Validation

This topic provides the information about the payload details for National Identification validation service.

National ID card Details Validation module extracts details in the National Identity Card like Name, First Name, Last Name, Gender, Address (if present), Date of Birth, Date of Issue and Date of expiry of the NID, ID No, etc along with the image metadata information like Image DPI, Resolution and Size. Then it calculates similarity scores for each input key value pairs with the extracted details. This module provides support for NIDs of various countries listed below:

- USA
- SOUTH AFRICA
- BRAZIL
- BANGLADESH
- CANADA
- INDIA
- KENYA
- PORTUGAL

All the details in the license are extracted and validated using "/validateInformation" API.

Brief of Working:

It takes "country", "key value pairs to be searched", "input documents" (including "document type" and "Base64 encoded image") of the passport as input. It internally generates processed text from the passport and extracts details like Name, First Name, Last Name, Gender, DOB, DOI and DOE, PP No. and Issuing Authority if present in the document. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size, etc. Then it calculates similarity scores for each input key value pairs with the extracted details. The output is represented in JSON format.

Input Request:

"/validateInformation" API -

- • Country, Array of key value pairs to be searched, Array of the documents (including Base64 encoded image and Document Type ("nid" in this case) for each document).

Sample Input Request:

```
{
    "country": "BR",
    "search": [
        [
            {
                "key": "------name of key------"
                "value": "------value of key------"
            }
        ]
    ],
    "docs": [
        {
            "docType": "nid",
            "docBase64s": "------base64 encoded image string------"
        }
    ]
}
```

Output Response:

The output of "/validateInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
    "documentDetails": [
        {
            "country": "BR",
            "documents": {
                {
                    "extractedValue": "FERNANDA DE CARVALHO DA
SILVA",
                    "key": "name",
                    "similarityScore": 68.97,
                    "value": "FERNANDA DE CARVALHO"
                },
                {
                    "extractedValue": "000000005-9",
                    "key": "identificationNumber",
                    "similarityScore": 100.0,
                    "value": "000000005-9"
                },
                {
                    "extractedValue": "NA",
                    "key": "date",
                    "similarityScore": 0.0,
```

```
                                    "value": "12/7/1960"
                            },
                            {
                                "extractedValue": "BRAZIL",
                                "key": "issuedCountry",
                                "similarityScore": 100.0,
                                "value": "BRAZIL"
                            }
                        ]
                    ]
                }
            }
        ]
    }
```

6.4.4 Voter Identity Card Validation

This topic provides the information about the payload details for Voter Identity Card validation service.

Voter ID card Details Validation module extracts details in the Voter ID Card like Name, First Name, Last Name, Gender, Date of Birth and, ID No along with the image metadata information like Image DPI, Resolution and Size. Then it calculates similarity scores for each input key value pairs with the extracted details. This module provides support for Voter IDs of various countries listed below:

*   INDIA

All the details in the license are extracted and validated using "/validateInformation" API.

Brief of Working:

It takes "country", "key value pairs to be searched", "input documents" (including "document type" and "Base64 encoded image") of the passport as input. It internally generates processed text from the passport and extracts details like Name, First Name, Last Name, Gender, DOB, DOI and DOE, PP No. and Issuing Authority if present in the document. Along with the document details, it also gives image metadata information like Image DPI, Resolution and Size, etc. Then it calculates similarity scores for each input key value pairs with the extracted details. The output is represented in JSON format.

Input Request:

"/validateInformation" API -

*   Country, Array of key value pairs to be searched, Array of the documents (including Base64 encoded image and Document Type ("voterid" in this case) for each document).

Sample Input Request:

```
{
    "country": "IND",
    "search": [
        [
```

```
            {
             "key": "------name of key------"
            "value": "------value of key------"
            }
        ]
    ],
    "docs": [
        {
          "docType": "voterid",
            "docBase64s": "------base64 encoded image string------"
        }
    ]
}
```

Output Response:

The output of "/validateInformation" API is the extracted details in the JSON format given below:

Sample Output Response:

```
{
    "documentDetails": [
        {
            "country": "IND",
            "documents": {
                "document_1": [
                    [
                        {
                            "extractedValue": "PREM",
                            "key": "firstName",
                            "similarityScore": 100.0,
                            "value": "PREM"
                        },
                        {
                            "extractedValue": "PREM RAJ THAKUR",
                            "key": "name",
                            "similarityScore": 100.0,
                            "value": "Prem RAJ Thakur"
                        },
                        {
                            "extractedValue": "NA",
                            "key": "aDDress",
                            "similarityScore": 0.0,
                            "value": "Kanpur, India"
                        },
                        {
                            "extractedValue": "M",
                            "key": "GENDER",
                            "similarityScore": 0.0,
                            "value": "F"
                        },
                        {
                            "extractedValue": "GDN0225185",
```

```
                                    "key": "identificationNumber",
                                    "similarityScore": 90.0,
                                    "value": "GAN0225185"
                            }
                        ]
                    ]
                }
            }
        ]
    }
```

6.4.5 Pointers About Request and Response

This topic provides the information about the Pointers about Request and Response.

If "Country" is provided as empty string in the input request, the service return a message "Country is not provided in the input". If key "Country" is not provided/ is missing in the request, the service returns an exception/ error.

If input documents "Docs" are provided as empty list, the service return a message "Input documents are not provided". If key "Docs" is not provided/ is missing in the request, the service returns an exception/ error.

If either "DocType" is provided as empty string or key "DocType" not provided in the input request, the service returns an exception/ error.

If either the quality of the document is not enough to extract all the details or resolution is poor, the service returns an exception/ error.

If input key value pairs list "Search" is provided as empty list, the service returns empty result along with input country. If key "Search" is not provided/ is missing in the request, the service returns an exception/ error.

6.4.6 Things to be taken care of

- Make sure the base64 encoded image string of the input image is correct.
- Make sure the document type of the input image is correct.
- Specify the country name correctly for accurate extraction of details

6.5 Recommendations For Better Performance

This topic provides the information about the better quality of the source image, the higher the accuracy of extraction will be.

Keeping DPI lower than 200 will give unclear and incomprehensible results while keeping the DPI above 600 will unnecessarily increase the size of the output file without improving the quality of the file. Thus, a DPI of 300 works best for this purpose.

Following parameters determines the image quality:

- Min text-size 10 pts (below 8pts are removed by noise).
- Min resolution (dpi) of 300 works best for Text Extraction.
- Sharp and visible characters.

- Min image size of 200 kb.

- Less image noise e.g., the image with shadows.

- Image with background noise e.g., image containing background with text data in foreground.

A

Error Codes and Messages

Table A-1   Error Codes and Messages

Error Codes	Messages
CC-01015	Default BIC Is Checked For More Than One BIC.
CC-01016	Swift Address is Mandatory.
CC-01017	Default BIC Is Not Checked For any BIC.
CC-01018	Same Swift Address is present more than once.
CC-01019	Mismatch in bank code.
CC-ACC-002	Currency should be null for Multi-Currency Account.
CC-ACC-102	Record already exist for Source Branch and Source Account No combination
CC-ACC-169	Reopen not allowed for a closed Customer No
CC-BIC-010	Bic code is being used in branch maintenance. Close not allowed.
CC-BIC02	The BIC code does not conform to SWIFT standards.
CC-BIC05	Record already maintained for the customer no.
CC-BNK-001	Branch code is in Open status. Close not allowed.
CC-BNK-002	Reopen not allowed for a closed Branch Code.
CC-BNK-003	Only one Bank Code is allowed.
CC-BRN-101	Active account / accounts exist for the branch code. Close not allowed.
CC-BRN-102	This is HO branch. Close not allowed.
CC-BRN-103	Record for Source Branch Code already exists.
CC-C00100	Relationship cannot be No for a Customer Linked BIC Code.
CC-CUS-167	Record already exist for customer no and source_system_cust_no combination.
CC-CUS-169	Active account/accounts exist for the customer no.
CC-CUS-17	Kindly Enter a Valid Walkin Customer.
CC-EC-002	Record already exist for Account IBAN.
CC-ECA-001	Active $1 exist for the Source System.
CC-HST-001	Active $1 exist for the Host Code.
CC-MOD-001	$1 cannot be modified.
CC-MOD-INV	$1 is invalid.
CC-NUL-001	$1 cannot be null.
CC-TXN-001	$1 is closed. Reopen not allowed.
CMC-ACC-FOR01	Cannot reopen forgotten account.
CMC-ACC-PII01	User does not have access to PII data and cannot perform create or modify operations.
CMC-ACC-SUBAC01	No SubAccounts available for Multi-Currency Account.
CMC-ACC-SUBAC02	Exactly one account should be primary account.
CMC-ACC-SUBAC03	Sub Accounts should have unique currency code.
CMC-BRN-018	Exception occurred in ICFlipDate.

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CMC-BRN-019	Unable to get branch date.
CMC-BRN-020	Branch code is null.
CMC-BRN-100	Branch Status retrieved Successfully.
CMC-BRN-101	Branch does not exist.
CMC-BRN-CD01	Date changed successfully.
CMC-BRN-CD02	Failed to change date, holiday list not maintained properly.
CMC-BRN-EOD01	Branch Status not in TI, cannot initiate EOD.
CMC-BRN-EOD02	EOD invoked for the branch.
CMC-BRN-EOD03	Invalid Branch Code.
CMC-BRN-EOD04	EOD Requested on Date is not Branch Today.
CMC-BRN-EOD05	EOD cannot be invoked on a holiday.
CMC-BRN-EOD06	Date changed successfully.
CMC-BRN-EOD07	EOD not invoked, cannot initiate change date.
CMC-BRN-EOD08	EOFI job not completed, cannot initiate change date.
CMC-BRN-EOD09	EOD not invoked, cannot initiate mark TI.
CMC-BRN-EOD10	Date Change job not completed, cannot initiate TI for next day.
CMC-BRN-EOD11	Mark TI successful.
CMC-BRN-EOD12	Branch status not in TI, cannot initiate Mark EOFI.
CMC-BRN-EOD13	Branch status not in EOFI, cannot change Date.
CMC-BRN-EOD14	Branch status for next working date update to EOD.
CMC-BRN-EOD15	Branch status not in EOD, cannot mark TI.
CMC-BRN-EOD16	Branch status for next working date update to TI.
CMC-BRN-EOD17	Branch Status Changed to EOFI.
CMC-BRN-EOD18	Invoke Mark TI failed.
CMC-BRN-EOD19	Date change completed cannot retrigger.
CMC-BRN-EOD20	Mark TI completed cannot retrigger.
CMC-BRN-EOD21	Date changed failed.
CMC-BRN-EOD30	Invalid requested date, failed to parse.
CMC-BRN-EOD31	Mark EOFI retry initiated.
CMC-BRN-EOD32	Cannot retry Mark EOFI which has not failed.
CMC-BRN-EOD33	Date Changed successfully. $1
CMC-BRN-EOD34	BOD Batches completed successfully.
CMC-BRN-EOD35	BOD Batches retriggered successfully. $1.
CMC-BRN-EOD36	$1. Hence EOFI Failed.
CMC-BRN-EOD37	Failed in getting current date.
CMC-CCY-001	Duplicate records exists in Amount word currency Mapping.
CMC-CCY-002	Duplicate records exists in Amount Text Mapping.
CMC-CCY-003	Cannot change Currency Decimal for once authorized currencies.
CMC-CCY-004	Cannot Change round unit if the round rule is Truncate (T).
CMC-CCY-005	Mandatory field Interest Method is not entered.
CMC-CCY-006	Mandatory field Spot Days is not entered.
CMC-CCY-007	Mandatory field Settlement Days is not entered.

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CMC-CCY-008	Mandatory field Country is not entered.
CMC-CCY-009	Mandatory field Rule is not entered.
CMC-CCY-010	Value should be in range of 0 and 999 for Settlement Days.
CMC-CCY-011	Mandatory field Unit is not entered.
CMC-CCY-012	Decimals/ Rounding Unit Mismatch.
CMC-CCY-013	Numerator of Interest Method is not Actual.
CMC-CCY-014	Duplicate Alternate Currency Code.
CMC-CCY-015	Duplicate ISO Numeric Currency Code.
CMC-CCY-016	Duplicate Euro currency.
CMC-CCY-017	Euro Conversion required cannot be changed for the currency types out, Euro and Euro closed.
CMC-CCY-018	Spot days is less than fx netting days.
CMC-CCY-019	Currency Cut Off days cannot be greater than spot days for currency.
CMC-CCY-020	Spot Days for currency cannot be lesser than cut off days for currency.
CMC-CCY-021	Value should be in range of 1 and 99 for Cut Off Days.
CMC-CCY-022	Value should be in range of 1 and 23 for Cut Off Hour.
CMC-CCY-023	Value should be in range of 1 and 59 for Cut Off Min.
CMC-CCY-024	Value cannot be less than .00000 for Currency Total limit.
CMC-CCY-025	Value should be in range of 0 and 3 for Currency Decimal.
CMC-CCY-026	Country Code is Mandatory.
CMC-CCY-027	Duplicate records exists in Currency Country Mapping.
CMC-CCY-028	Mandatory field Country is not entered in Currency Country Mapping.
CMC-CCY-029	Currency Code is NULL.
CMC-CCY-030	Date is NULL.
CMC-CCY-031	Date is Invalid (should be in yyyy-mm-dd format).
CMC-CCY-032	No record found.
CMC-CCY-033	Next/Previous indicator is NULL (should be either N or P).
CMC-CCY-034	Next/Previous indicator is Invalid (should be either N or P).
CMC-CCY-035	Lower Limit Date is Invalid (should be in yyyy-mm-dd format).
CMC-CCY-036	Upper Limit Date is Invalid (should be in yyyy-mm-dd format).
CMC-CCY-037	Offset is NULL.
CMC-CCY-038	Offset is Invalid (should be > 0).
CMC-CCY-039	Input date should be between Upper limit date and Lower limit date.
CMC-CCY-040	Duplicate records exists in CurrencyHolidays.
CMC-CCY-041	Mandatory Through Currency Code is not entered
CMC-CCY-042	Cannot change spread definition option for through currency pair.
CMC-CCY-043	Through currency should be blank if the through currency is unchecked.
CMC-CCY-044	Through currency has to be of type Euro.
CMC-CCY-045	Through Currency is not allowed for Euro In Currency Pair.
CMC-CCY-046	Points multiplier should be in the range 0 - 1.
CMC-CCY-047	MidRate is invalid.
CMC-CCY-048	BuySpread is invalid.

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CMC-CCY-049	SaleSpread is invalid.
CMC-CCY-050	Atleast one Currency Rate Should be Maintained.
CMC-CCY-051	Duplicate records exists in Rate.
CMC-CCY-052	Currency Code is NULL.
CMC-CCY-053	Currency Code is Empty.
CMC-CCY-054	Amount is NULL.
CMC-CCY-055	Option is NULL.
CMC-CCY-056	Option is Empty.
CMC-CCY-057	Method is NULL.
CMC-CCY-058	Method is Empty.
CMC-CCY-059	Decimal is NULL.
CMC-CCY-060	Units is NULL.
CMC-CCY-061	Maintenance Country is NULL.
CMC-CCY-062	Maintenance Country is Empty.
CMC-CCY-063	Currency1/Currency2/branch Code is NULL.
CMC-CCY-065	Error in conversion.
CMC-CCY-066	Rate is not handled for currency1 and currency2.
CMC-CCY-067	Rate is not handled for currency2 and currency1.
CMC-CCY-068	Error in Amount rounding.
CMC-CCY-069	Currency definition is not maintained for given currency and maintenance country.
CMC-CCY-070	Error in getting branch currency and country.
CMC-CCY-071	Error in getting currency pair for currency1 and currency2.
CMC-CCY-072	Error in getting Premium points for currency1 and currency2.
CMC-CCY-073	Error in getting rate with through currency.
CMC-CCY-074	Error in getting Rate.
CMC-CCY-075	Rate History is not handled for currency1 and currency2.
CMC-CCY-076	Rate History is not handled for currency2 and currency1.
CMC-CCY-077	Currency Pair is not maintained.
CMC-CCY-078	Error in purging.
CMC-CCY-079	Data inadequate in currency Pair Definition.
CMC-CCY-080	Currency Pair already exists for the given Maintenance Country.
CMC-CCY-081	MidRate is mandatory.
CMC-CCY-082	Either buySpread / buyRate are mandatory.
CMC-CCY-083	Either saleSpread / saleRate are mandatory.
CMC-CUS-FOR01	Record successfully deleted.
CMC-CUS-PII01	User does not have access to PII data, cannot perform create or modify operations.
CMC-EOD-001	Invoked EOD successfully.
CMC-EOD-002	Failed while resolving current date.
CMC-EOD-003	EOD flow is not maintained for $1 branch.
CMC-EOD-004	EOD already invoked for today.
CMC-EOD-005	Unable to invoke EOD.

Table A-1 (Cont.) Error Codes and Messages

Error Codes	Messages
CMC-EOD-006	Retried EOD successfully.
CMC-EOD-007	Failed to retry EOD.
CMC-EOD-008	Pending maintenances exist. Failed to start EOD.
CMC-EOD-009	Failed during pending maintenance check.
CMC-EOD-010	Pending transactions exist. Failed to start EOD.
CMC-EOD-011	Failed during pending transaction check.
CMC-EOD-012	Marked cutoff for the branch successfully.
CMC-EOD-013	Branch not in Transaction Input. Cannot mark cutoff.
CMC-EOD-014	Branch not in EOD stage. Cannot release cutoff.
CMC-EOD-015	Released cutoff for the branch successfully.
CMC-EOD-016	Branch cutoff not released. Cannot mark Transaction Input.
CMC-EOD-017	Branch cutoff not marked. Cannot mark End of Transaction Input.
CMC-FORC-001	Request is null, not valid.
CMC-FORC-002	Forget customers request created successfully.
CMC-FORC-003	Failed to create forget entities request.
CMC-FORC-004	Invalid ID sent, ID null.
CMC-FORC-005	Already authorized.
CMC-FORC-006	Authorized successfully.
CMC-FORC-007	Record not found, invalid ID.
CMC-FORC-008	Cannot delete authorized record.
CMC-FORC-009	Record successfully deleted.
CMC-FORC-010	Invalid Customer $1 added, customer should be valid and in closed and authorized state without pending maintenance.
CMC-FORC-011	Invalid request. Duplicate requests for customer number $1.
CMC-INDBML-000	Failed with error - $1.
CMC-INDBML-001	Usecase already exists with a same name.
CMC-INDBML-002	Target Column cannot be null.
CMC-INDBML-003	Unique Case Identifier Column cannot be null.
CMC-INDBML-004	Invalid Partition column value.
CMC-INDBML-005	Duplicate Column Values.
CMC-INDBML-006	Partition Columns cannot be same as either of target, use case identifier or prediction column.
CMC-LOV-001	Invalid Source Code.
CMC-LOV-002	Invalid Currency.
CMC-LOV-003	Cannot Close the record for which rates are maintained.
CMC-LOV-004	Invalid Language Code.
CMC-LOV-005	Invalid Country.
CMC-LOV-006	Invalid GLCode.
CMC-LOV-007	Invalid Limit Currency.
CMC-LOV-008	Invalid Year.
CMC-LOV-009	Invalid Month.
CMC-LOV-010	Amount Limit Exceeds.

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CMC-LOV-011	Invalid Version.
CMC-LOV-012	Rate Type $1 is invalid.
CMC-NLP-000	System is unable to process the request.
CMC-NLP-001	Training File created successfully.
CMC-NLP-002	Training File creation failed.
CMC-NLP-003	Service definition not found for $1 for use case $2.
CMC-NLP-004	Unsupported file type uploaded. Please upload supported file type.
CMC-NLP-005	You do not have sufficient number of training files for use case $1 to train the model.
CMC-NLP-006	Invalid training files are present in the training corpus.
CMC-NLP-007	Error in processing step $1.
CMC-NLP-008	Successfully completed the processing of process $1.
CMC-OBRH-001	Record already exists.
CMC-OBRH-002	Record saved successfully.
CMC-OBRH-003	Record does not exist.
CMC-OBRH-004	Invalid Payload.
CMC-OBRH-005	Record deleted successfully.
CMC-OBRH-006	Record modified successfully.
CMC-OBRH-007	Data fetched successfully.
CMC-OBRH-008	Data exported successfully.
CMC-OBRH-009	Failed to get data.
CMC-OBRH-010	Cannot start disabled route.
CMC-OBRH-011	Data imported successfully.
CMC-OBRH-012	Failed to import.
CMC-OBRH-013	Failed to parse [$1].
CMC-OBRH-014	Data extracted successfully.
CMC-OBRH-015	Route state cannot be changed to Start as Consumer Service / Provider is inactive.
CMC-OBRH-016	Modified/Deleted attribute is already in use by route.
CMC-OBRH-017	Something went wrong!
CMC-OBRH-018	Imported WSDL successfully.
CMC-OBRH-019	Imported Swagger successfully.
CMC-OBRH-020	Failed to import [$1].
CMC-OBRH-021	Failed to export [$1].
CMC-OBRH-022	Request failed [$1].
CMC-OBRH-023	Request is being processed
CMC-ORCH-001	Failed to initiate.
CMC-ORCH-002	Transaction is successfully initiated.
CMC-ORCH-003	Invalid action, failed to initiate.
CMC-ORCH-004	$1 is not submitted, transaction remains the same.
CMC-ORCH-005	Cannot proceed with submit as the action is not initiated.
CMC-ORCH-006	Cannot proceed with submit as the information is incomplete.

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CMC-ORCH-007	Failed to submit.
CMC-ORCH-008	Record successfully submitted.
CMC-ORCH-009	$1 is in-progress, failed to initiate.
CMC-ORCH-010	Aw, snap! An unexpected exception occurred, try again.
CMC-ORCH-011	Invalid request.
CMC-ORCH-012	Cannot proceed with submit as the action is not initiated.
CMC-ORCH-013	Cannot find the provided information.
CMC-ORCH-014	Record is not yet submitted by $1, cannot initiate the action.
CMC-ORCH-015	Record already unlocked by $1.
CMC-ORCH-016	One record can be authorized at a time. Please close the screen and try again.
CMC-ORCH-017	Current operation terminated.
CMC-ORCH-018	Current operation could not be terminated.
CMC-OV-001	Override Codes must not be empty.
CMC-OV-002	Business Overrides Saved Successfully.
CMC-OV-003	Business Overrides Updated Successfully.
CMC-OV-004	Business Overrides Authorized Successfully.
CMC-OV-005	Business Overrides Approval Pending.
CMC-OV-006	Maker Cannot Authorize.
CMC-OV-007	Multiple Authorizations not allowed for checker.
CMC-OV-008	No Records found for approval.
CMC-OV-009	Maker should approve the records.
CMC-OV-010	Reference number is not valid.
CMC-OV-011	Exception Occurred while converting string to number.
CMC-OV-012	Server Error Occurred during API call.
CMC-OV-013	Client Error Occurred during API call.
CMC-OV-014	Illegal State Exception Occurred.
CMC-OV-015	JTA Transaction unexpectedly rolled back.
CMC-OV-016	Exception Occurred while creating Bean.
CMC-OV-017	Unexpected Exception Occurred.
CMC-OV-018	Exception Occurred while Executing Query.
CMC-STR-001	mandatory fields are missing.
CMC-STR-002	invalid real account number.
CMC-STR-003	Real Account No cannot be modified.
CMC-STR-004	Structured Address is already created for this Real Account.
CMC-STR-005	Structured Address is already created for this External Virtual Account.
CMC-STR-006	invalid virtual account number.
CMC-STR-007	Virtual Account No cannot be modified.
CMC-VAM-001	Rolled Back Due to Exception.
ERR_DEF_CODE	System is unable to process the request.
GCS-AUTH-01	Record Successfully Authorized.
GCS-AUTH-02	Valid modifications for approval were not sent. Failed to match.
GCS-AUTH-03	Maker cannot authorize.

Table A-1 (Cont.) Error Codes and Messages

Error Codes	Messages
GCS-AUTH-04	No Valid unauthorized modifications found for approval.
GCS-CLOS-002	Record Successfully Closed.
GCS-CLOS-01	Record Already Closed.
GCS-CLOS-02	Record Successfully Closed.
GCS-CLOS-03	Unauthorized record cannot be closed, it can be deleted before first authorization.
GCS-COM-001	Record does not exist.
GCS-COM-002	Invalid version sent, operation can be performed only on latest version.
GCS-COM-003	Please Send Proper ModNo.
GCS-COM-004	Please send maker ID in the request.
GCS-COM-005	Request is Null. Please Resend with Proper SELECT.
GCS-COM-006	Unable to parse JSON.
GCS-COM-007	Request Successfully Processed.
GCS-COM-008	Modifications should be consecutive.
GCS-COM-009	Resource ID cannot be blank or null.
GCS-COM-010	Successfully cancelled $1.
GCS-COM-011	$1 failed to update.
GCS-DEL-001	Record deleted successfully.
GCS-DEL-002	Record(s) deleted successfully.
GCS-DEL-003	Modifications did not match valid unauthorized modifications that can be deleted for this record.
GCS-DEL-004	Send all unauthorized modifications to be deleted for record that is not authorized even once.
GCS-DEL-005	Only Maker of first version of record can delete modifications of record that is not once authorized.
GCS-DEL-006	No valid unauthorized modifications found for deleting.
GCS-DEL-007	Failed to delete. Only maker of the modification(s) can delete.
GCS-MOD-001	Closed Record cannot be modified.
GCS-MOD-002	Record Successfully Modified.
GCS-MOD-003	Record marked for close, cannot modify.
GCS-MOD-004	Only maker of the record can modify before once auth.
GCS-MOD-005	Not amendable field, cannot modify.
GCS-MOD-006	Natural Key cannot be modified.
GCS-MOD-007	Only the maker can modify the pending records.
GCS-REOP-003	Successfully Reopened.
GCS-REOP-01	Unauthorized Record cannot be Reopened.
GCS-REOP-02	Failed to Reopen the Record, cannot reopen Open records.
GCS-REOP-03	Successfully Reopened.
GCS-REOP-04	Unauthorized record cannot be reopened, record should be closed and authorized.
GCS-SAV-001	Record already exists.
GCS-SAV-002	Record Saved Successfully.
GCS-SAV-003	The record is saved and validated successfully.
GCS-VAL-001	The record is successfully validated.

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
ML-TS-001	Invalid Data Source.
ML-TS-002	Invalid datatype for case ID.
ML-TS-003	Timeseries Model Training Failed.
ML-TS-004	Use Case Name cannot have dash.
ML-RG-001	Regression Model Build Failed.
ML-RG-002	Regression Model Statistics Calculation Failed.
ML-RG-003	Cross Validation Failed.
ML-RG-004	Model Selection Failed.
ML-RG-005	Model Successfully Trained.
ML-RG-006	Invalid Use Case Selected.
ML-RG-007	No Trained Model found.
ML-RG-008	Batch Scoring Failed.
ML-RG-009	Successfully completed Batch scoring.
ML-CLS-001	Mandatory IN Parameters are NULL.
ML-CLS-002	Stratified Sampling Failed.
ML-CLS-003	Stratified dataset Split Failed.
ML-CLS-004	Correlation Check Failed.
ML-CLS-005	Model Metrics Computation Failed.
ML-CLS-006	Only Binary Target Class Supported for Generalized Linear Model.
ML-CLS-007	Failed to Select Final Algorithm.
ML-CLS-008	Dynamic Execute Statement Failed.
ML-CLS-009	Classification Model Build Failed.
ML-CLS-010	Classification Model Successfully Built.
ML-CLS-011	No Trained Classification Model Found.
ML-CLS-012	Failed to Predict.
ML-CLS-013	Classification Batch Scoring Failed.
ML-CLS-014	Successfully completed Batch scoring. Result are available at $1.
ML-CORR-001	Correlation completed successfully.
ML-CORR-002	Correlation Failed.
ML-CORR-003	Correlation analysis not completed fully.
ML-UTIL-001	Invalid Table Name.
ML-UTIL-002	Invalid column Name(s).
ML-UTIL-003	Failed in Random Sampling.
ML-UTIL-004	Too less data for model building.
ML-UTIL-005	Failed in Splitting Data.
ML-UTIL-006	Failed in Selecting Feature.
ML-UTIL-007	Failed to Drop Model(s).
ST-CUS-167	Record already exist for customer no and source_system_cust_no combination.
ST-SAVE-027	Request Successfully Processed.
CBS-CRITERIA-001	Criteria Code cannot be blank.

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CBS-CRITERIA-002	Criteria Description cannot be blank.
CBS-CRITERIA-003	Select valid Product Processor.
CBS-CRITERIA-004	Atleast one Rule should be selected in Criteria Definition.
CBS-CRITERIA-005	Rule Description cannot be blank.
CBS-CRITERIA-006	Select a Rule ID from the list.
CBS-CRITERIA-007	Enter a valid number for Priority.
CBS-CRITERIA-008	Enter a valid number for Priority.
CBS-CRITERIA-009	Duplicate entries found for Rule ID.
CBS-CRITERIA-010	Duplicate entries found for Priority.
CBS-CRITERIA-011	Enter valid Parent Rule ID for.
CBS-CRITERIA-012	Duplicate entries found for Rule ID.
CBS-CRITERIA-013	Cannot add child Rule when Call All Bureau is enabled.
CBS-CRITERIA-014	Duplicate entries found for Priority.
CBS_ERR_004	Parameter description cannot be modified.
CBS_LKUP_01	Duplicate entries found for Lookup Code.
CBS_500	Error occurred at Bureau Call. Response structure from Bureau is different.
CBS_SYSPAR_001	System parameter not maintained for the bureau for history call.
CBS_400	Facts not found for Bureau identification Rule. Empty response from criteria for given PPcode. Empty response from Oracle Banking Routing Hub from bureau call. Bureau identification Rule not found for given facts.
CBS-CRTR-015	Criteria Code has exceeded the max length specified
CBS-CRTR-016	Description has exceeded the max length specified
CBS-CRTR-017	Rule Id has exceeded the max length specified
CBS-CRTR-018	Rule Description has exceeded the max length specified
CBS_BR_DTLS_NOT_FOUND	Bureau Details are not provided
CBS_BR_DTLS_NOT_MNT	Bureau Details are not maintained for +{reqBureauProductType} (variable, value will be replaced at runtime from payload)
CDS-DML-006	Invalid range definition. Either range or value is allowed
CDS-DML-007	Duplicate $1 values are not allowed

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CDS-DML-010	From value should not be greater than To value
CDS-RUL-001	Error occurred while evaluating the rule
CDS-RUL-003	Effective date should be less than Expiry Date
CDS-RUL-006	Effective date should be less than the Expiry Date
CDS-DML-003	Effective date should be less than Expiry Date
CDS-PRC-006	Effective date should be less than the Expiry Date
CDS-DML-002	Maintain at least one record in $1
CDS-DML-014	Effective date cannot be less than the Product Processor Effective date.
CDS-PRC-014	Effective date cannot be less than the Product Processor Effective Date.
CDS-DML-017	if dmlAppEnabledInd is selected as N then dmlFeature can not be null
CDS-DML-018	if dmlAppEnabledInd is selected as y then dmlScoreRuleId can not be null
CDS-DML-022	Input parameter is missing or incorrect. Unable to resolve any scoring model
CDS-DML-0223	Input parameter is missing or incorrect. Unable to calculate the score
CDS-DML-013	Invalid product processor
CDS-PRC-011	Incorrect Range Definition. Range definition should be continuous in $1
CDS-PRC-012	Duplicate $1 values are not allowed
CDS-PRC-015	Product Processor is not authorized
CDS-DML-011	Incorrect Range Definition. Range definition should be continuous
CDS-DML-012	Input parameter is missing or incorrect. Unable to resolve any pricing setup
CDS-QFT-001	if qftRuleApplicableInd is selected as y then qftRuleName and qftRuleId cannot be null
CDS-QFT-002	if qftRuleApplicableInd is selected as N then qftFactName and qftFactId cannot be null
CDS-QFT-005	qftCode cannot be other than alphanumeric
CDS-QFT-004	Fact or rule not found
CDS-DML-008	Invalid rule name
CDS-PRC-0010	Fact or rule not found
CDS-PRC-007	Pricing Rate definition should be greater than or equal to minimum rate and less than or equal to maximum rate
CDS-PRC-009	rate percentage of range cannot be equal to zero or less than the previous one
CDS-PRC-005	$1 should be equal to or greater than the System date
CDS-PRC-0010	Invalid product processor
CDS-PRC-004	Maintain at least one record $1
CDS-PRC-001	Min Rate cannot be less than zero or not be more than max rate
CDS-PRC-003	Overlapping price range definition not allowed $1
CDS-PRC-002	Rate Type cannot any other keyword
CDS-PRC-008	$1 cannot be less than or equal to zero
CDS-DML-009	Unable to resolve any scoring model
CDS-PPR-001	$1 should be equal to or greater than the System date
CDS-DML-005	Overlapping range definition not allowed in $1
CDS-QFT-003	Invalid product processor
CDS-DML-001	$1 should be equal to or greater than the Posting date
CDS-DML-019	Unable to resolve the best fit scoring model. Multiple scoring model resolved

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CDS-DML-016	Unable to resolve the best fit pricing model. Multiple pricing model resolved
CDS-DML-004	The sum of weightage assigned to the feature code should be 100
CDS-PPR-002	Effective date should be less than Expiry Date
CDS-PRC-013	Rate definition should be greater than or equal to minimum rate and less than or equal to maximum rate
CDS-DML-020	Unable to resolve the best fit application scoring model Multiple application scoring model resolved
CDS-DML-021	Unable to resolve the best fit decision and grade matrix. Multiple decision and grade matrix resolved
CDS-BWC-001	$1 should be equal to or greater than the System date
CDS-BWC-002	Maintain at least one record in $1
CDS-BWC-003	Effective date should be less than the Expiry Date
CDS-BWC-014	Effective date cannot be less than the Product Processor Effective date
CDS-STG-006	Effective Date cannot be null or blank
CDS-STG-007	Expiry Date cannot be null or blank
CDS-STG-008	Industry cannot be null or blank
CDS-STG-009	Module cannot be null or blank
CDS-STG-010	Line of Business cannot be null or blank
CDS-STG-011	Effective date should be less than the Expiry Date
CDS-STG-012	Expiry Date should be equal to or greater then the System date
CDS-STG-013	Invalid Strategy Code
CDS-STG-014	Invalid Industry
CDS-STG-015	Invalid Module
CDS-STG-016	Invalid Line of Business
CDS-STG-017	Invalid product processor
CDS-STG-018	Invalid Account Category
CDS-STG-019	Invalid modes for the selected module
CDS-STG-020	Invalid combination of steps for selected modes
CDS-STG-021	Record already exists
CDS-STG-022	Effective date cannot be less than the Product Processor Effective Date
CDS-RUL-002	Fact already exists
CDS-STG-023	Invalid combination of modes and steps
CDS-DML-040	FeatureDTO missing. Kindly enter the details
CDS-LML-029	Logical Model Reason Code is Invalid
CDS-DML-024	Negative values not allowed
CDS-DML-025	Category not allowed in case of multi applicant scoring model
CDS-DML-026	Percentage cannot be greater than 100
CDS-DML-027	For multi-applicant max value not allowed
CDS-DML-028	Max value not required for range type Value
CDS-DML-029	Range type cannot be null
CDS-DML-030	Max value cannot be null
CDS-DML-031	Please enter a valid scoring model type
CDS-DML-032	Please enter a valid range type

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CDS-DML-033	Feature list not required for application model
CDS-DML-034	Scoring rule id not required for the scoring model type
CDS-DML-035	Please enter a valid feature type
CDS-DML-036	Only range Type Value is allowed, for fact type feature
CDS-DML-037	Only range Type ParamPercent is allowed, for rule based feature
CDS-DML-038	Only range Type Value is allowed, for Text type fact
CDS-DML-039	Category code missing
CDS-LML-015	Logical Model Code size must be between 1 and 30
CDS-LML-016	Logical Model Description size must be between 1 and 240
CDS-LML-017	Logical Model Effective Date cannot be null
CDS-LML-018	Logical Model Expiry Date cannot be null
CDS-LML-019	Logical Model Rule Id size must be between 1 and 80
CDS-LML-020	Logical Model Details Rule Id cannot be null
CDS-LML-021	Reason Code cannot be null
CDS-LML-022	Logical Model comments size must be between 1 and 80
CDS-LML-023	Logical Model Sequence must be in the range of 1 to 999
CDS-LML-024	Logical Model Sequence is Incorrect
CDS-LML-025	Logical Model Priority must be in the range of 1 to 100
CDS-LML-026	Logical Model Details cannot be null or empty
CDS-LML-027	Rule Id cannot be duplicate
CDS-LML-028	Invalid Rule Id
CDS-QUR-001	Invalid Input for QuestionnaireId, can not be null or blank
CDS-QUR-002	Invalid Input for QuestionnaireId, null or blank required
CDS-QUR-003	Invalid Input for QuestionId, null or blank required
CDS-QUR-004	Invalid Input for QuestionId, can not be null or blank
CDS-QUR-005	Questionnaire Code cannot be null or empty
CDS-QUR-006	Questionnaire Description cannot be null or empty
CDS-QUR-007	Product Processor cannot be null or empty
CDS-QUR-008	Question Code cannot be null or empty
CDS-QUR-009	Question Short Name cannot be null or empty
CDS-QUR-010	Question Description cannot be null or empty
CDS-QUR-011	Question Type cannot be null or empty
CDS-QUR-012	Answer Description cannot be null or empty
CDS-QUR-013	Questionnaire Code size must be between 1 and 30
CDS-QUR-014	Questionnaire Description size must be between 1 and 240
CDS-QUR-015	Question Code cannot be duplicate for a product processor
CDS-QUR-016	Question Sequence Number cannot be null, empty or zero, negetive
CDS-QUR-017	Answer Option Sequence Number cannot be null, empty or zero, negetive
CDS-QUR-018	Question Sequence Number cannot be duplicate for a questionnaire
CDS-QUR-019	Answer Option Sequence Number cannot be duplicate for a Question
CDS-QUR-020	Answer OptionId cannot be null or empty
CDS-QUR-021	Answer OptionId cannot be duplicate for a question

Table A-1   (Cont.) Error Codes and Messages

Error Codes	Messages
CDS-BWC-004	Incorrect execution stage
CDS-BWC-005	$1 fact or rule not found
CDS-QUR-022	Input for whether Question Mandatory cannot be null or empty
CDS-QUR-023	System will not allow to add questions where response choice has not been captured,At least 2 record should be available
CDS-QUR-024	System will not allow to save the questionnaire without any question configured, Atleast 1 question should be configured in the questionnaire
CDS-QUR-025	Question Code cannot be duplicate for a questionnaire.
CDS-STG-024	Invalid type and value for additional info
CDS-STG-025	Selection of atleast 1 mode is mandatory
CDS-STG-026	Effective date cannot be updated after authorisation
CDS-STG-027	Multiple values of same type are not allowed under Additional Information
CDS-LOOKUP-001	Lookup Type must be alphanumeric
CDS-LOOKUP-002	Lookup Type must be between 1 and 30
CDS-LOOKUP-003	Lookup Description must be between 1 and 240
CDS-LOOKUP-004	Duplicate lookup codes not allowed

B

Functional Activity Codes

Table B-1   List of Functional Activity Codes

Screen Name	Functional Activity Code
External Chart Account	CMC_FA_EXT_CHART_ACC_AMEND
	CMC_FA_EXT_CHART_ACC_AUTHORIZE
	CMC_FA_EXT_CHART_ACC_CLOSE
	CMC_FA_EXT_CHART_ACC_DELETE
	CMC_FA_EXT_CHART_ACC_NEW
	CMC_FA_EXT_CHART_ACC_REOPEN
	CMC_FA_EXT_CHART_ACC_VIEW
Upload Source Preference	CMC_FA_UPLOAD_SOURCE_AMEND
	CMC_FA_UPLOAD_SOURCE_AUTHORIZE
	CMC_FA_UPLOAD_SOURCE_CLOSE
	CMC_FA_UPLOAD_SOURCE_DELETE
	CMC_FA_UPLOAD_SOURCE_NEW
	CMC_FA_UPLOAD_SOURCE_PREF_AMEND
	CMC_FA_UPLOAD_SOURCE_PREF_AUTHORIZE
	CMC_FA_UPLOAD_SOURCE_PREF_CLOSE
	CMC_FA_UPLOAD_SOURCE_PREF_DELETE
	CMC_FA_UPLOAD_SOURCE_PREF_NEW
	CMC_FA_UPLOAD_SOURCE_PREF_REOPEN
	CMC_FA_UPLOAD_SOURCE_PREF_VIEW
	CMC_FA_UPLOAD_SOURCE_REOPEN
	CMC_FA_UPLOAD_SOURCE_VIEW
BIC Directory	CMC_FA_BIC_DIRECTORY_AUTHORIZE
	CMC_FA_BIC_DIRECTORY_CLOSE
	CMC_FA_BIC_DIRECTORY_CREATE
	CMC_FA_BIC_DIRECTORY_DELETE
	CMC_FA_BIC_DIRECTORY_LOV
	CMC_FA_BIC_DIRECTORY_MODIFY
	CMC_FA_BIC_DIRECTORY_REOPEN
	CMC_FA_BIC_DIRECTORY_VIEW
Country Code	CMC_FA_COUNTRY_CODE_AMEND
	CMC_FA_COUNTRY_CODE_AUTHORIZE
	CMC_FA_COUNTRY_CODE_CLOSE
	CMC_FA_COUNTRY_CODE_DELETE
	CMC_FA_COUNTRY_CODE_NEW
	CMC_FA_COUNTRY_CODE_REOPEN
	CMC_FA_COUNTRY_CODE_VIEW

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
Currency Definition	CMC_FA_CURRENCY_DEFN_AMEND
	CMC_FA_CURRENCY_DEFN_AUTHORIZE
	CMC_FA_CURRENCY_DEFN_CLOSE
	CMC_FA_CURRENCY_DEFN_DELETE
	CMC_FA_CURRENCY_DEFN_LOV
	CMC_FA_CURRENCY_DEFN_NEW
	CMC_FA_CURRENCY_DEFN_REOPEN
	CMC_FA_CURRENCY_DEFN_VIEW
Currency Holiday Master	CMC_FA_CURRENCY_HOLIDAY_AMEND
	CMC_FA_CURRENCY_HOLIDAY_AUTHORIZE
	CMC_FA_CURRENCY_HOLIDAY_CLOSE
	CMC_FA_CURRENCY_HOLIDAY_DELETE
	CMC_FA_CURRENCY_HOLIDAY_NEW
	CMC_FA_CURRENCY_HOLIDAY_REOPEN
	CMC_FA_CURRENCY_HOLIDAY_VIEW
Currency Pair Definition	CMC_FA_CURRENCY_PAIR_DEFN_AMEND
	CMC_FA_CURRENCY_PAIR_DEFN_AUTHORIZE
	CMC_FA_CURRENCY_PAIR_DEFN_CLOSE
	CMC_FA_CURRENCY_PAIR_DEFN_DELETE
	CMC_FA_CURRENCY_PAIR_DEFN_NEW
	CMC_FA_CURRENCY_PAIR_DEFN_REOPEN
	CMC_FA_CURRENCY_PAIR_DEFN_VIEW
Currency Rate Type	CMC_FA_CURRENCY_RATE_TYPE_AMEND
	CMC_FA_CURRENCY_RATE_TYPE_AUTHORIZE
	CMC_FA_CURRENCY_RATE_TYPE_CLOSE
	CMC_FA_CURRENCY_RATE_TYPE_DELETE
	CMC_FA_CURRENCY_RATE_TYPE_NEW
	CMC_FA_CURRENCY_RATE_TYPE_REOPEN
	CMC_FA_CURRENCY_RATE_TYPE_VIEW
Customer Category	CMC_FA_CUSTOMER_CATEGORY_AMEND
	CMC_FA_CUSTOMER_CATEGORY_AUTHORIZE
	CMC_FA_CUSTOMER_CATEGORY_CLOSE
	CMC_FA_CUSTOMER_CATEGORY_DELETE
	CMC_FA_CUSTOMER_CATEGORY_NEW
	CMC_FA_CUSTOMER_CATEGORY_REOPEN
	CMC_FA_CUSTOMER_CATEGORY_VIEW
Customer Access Group	CMC_FA_CUST_ACCESS_GET
	CMC_FA_CUST_ACCESS_VIEW
	CMC_FA_CUST_ACCESS_CREATE
	CMC_FA_CUST_ACCESS_UPDATE

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_FA_CUST_ACCESS_AUTHORIZE
	CMC_FA_CUST_ACCESS_CLOSE
	CMC_FA_CUST_ACCESS_DELETE
	CMC_FA_CUST_ACCESS_ACTIONS
	CMC_FA_CUST_ACCESS_AGGREGATE
	CMC_FA_CUST_ACCESS_HISTORY
	CMC_FA_CUST_ACCESS_UNAUTH
	CMC_FA_CUST_ACCESS_UNLOCK
	CMC_FA_CUST_ACCESS_REOPEN
	CMC_FA_CUST_ACCESS_SUBMIT
	CMC_FA_CUST_ACCESS_VALIDATE
	CMC_FA_CUST_ACCESS_GROUP_GETBYDESCP
ECA System	CMC_FA_ECA_SYSTEM_AUTHORIZE
	CMC_FA_ECA_SYSTEM_CLOSE
	CMC_FA_ECA_SYSTEM_CREATE
	CMC_FA_ECA_SYSTEM_DELETE
	CMC_FA_ECA_SYSTEM_LOV
	CMC_FA_ECA_SYSTEM_MODIFY
	CMC_FA_ECA_SYSTEM_REOPEN
	CMC_FA_ECA_SYSTEM_VIEW
External Bank Parameters	CMC_FA_EXT_BANK_PARAMETERS_AUTHORIZE
	CMC_FA_EXT_BANK_PARAMETERS_CLOSE
	CMC_FA_EXT_BANK_PARAMETERS_CREATE
	CMC_FA_EXT_BANK_PARAMETERS_DELETE
	CMC_FA_EXT_BANK_PARAMETERS_LOV
	CMC_FA_EXT_BANK_PARAMETERS_MODIFY
	CMC_FA_EXT_BANK_PARAMETERS_REOPEN
	CMC_FA_EXT_BANK_PARAMETERS_VIEW
External Branch Parameters	CMC_FA_EXT_BRANCH_GETSTATUS
	CMC_FA_EXT_BRANCH_PARAMETERS_AUTHORIZE
	CMC_FA_EXT_BRANCH_PARAMETERS_CLOSE
	CMC_FA_EXT_BRANCH_PARAMETERS_CREATE
	CMC_FA_EXT_BRANCH_PARAMETERS_DELETE
	CMC_FA_EXT_BRANCH_PARAMETERS_LOV
	CMC_FA_EXT_BRANCH_PARAMETERS_MODIFY
	CMC_FA_EXT_BRANCH_PARAMETERS_REOPEN

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_FA_EXT_BRANCH_PARAMETERS_VIEW
External Customer	CMC_FA_EXT_CUSTOMER_AUTHORIZE
	CMC_FA_EXT_CUSTOMER_CLOSE
	CMC_FA_EXT_CUSTOMER_CREATE
	CMC_FA_EXT_CUSTOMER_DELETE
	CMC_FA_EXT_CUSTOMER_LOV
	CMC_FA_EXT_CUSTOMER_MODIFY
	CMC_FA_EXT_CUSTOMER_REOPEN
	CMC_FA_EXT_CUSTOMER_VIEW
Host Code	CMC_FA_HOST_CODE_AUTHORIZE
	CMC_FA_HOST_CODE_CLOSE
	CMC_FA_HOST_CODE_CREATE
	CMC_FA_HOST_CODE_DELETE
	CMC_FA_HOST_CODE_LOV
	CMC_FA_HOST_CODE_MODIFY
	CMC_FA_HOST_CODE_REOPEN
	CMC_FA_HOST_CODE_VIEW
Language Code	CMC_FA_LANGUAGE_CODE_AMEND
	CMC_FA_LANGUAGE_CODE_AUTHORIZE
	CMC_FA_LANGUAGE_CODE_CLOSE
	CMC_FA_LANGUAGE_CODE_DELETE
	CMC_FA_LANGUAGE_CODE_NEW
	CMC_FA_LANGUAGE_CODE_REOPEN
	CMC_FA_LANGUAGE_CODE_VIEW
Local Holiday	CMC_FA_LOCAL_HOLIDAY_AMEND
	CMC_FA_LOCAL_HOLIDAY_AUTHORIZE
	CMC_FA_LOCAL_HOLIDAY_CLOSE
	CMC_FA_LOCAL_HOLIDAY_DELETE
	CMC_FA_LOCAL_HOLIDAY_NEW
	CMC_FA_LOCAL_HOLIDAY_REOPEN
	CMC_FA_LOCAL_HOLIDAY_VIEW
System Dates	CMC_FA_SYSTEM_DATES_AMEND
	CMC_FA_SYSTEM_DATES_AUTHORIZE
	CMC_FA_SYSTEM_DATES_CLOSE
	CMC_FA_SYSTEM_DATES_DELETE
	CMC_FA_SYSTEM_DATES_NEW
	CMC_FA_SYSTEM_DATES_REOPEN
	CMC_FA_SYSTEM_DATES_TODAY
	CMC_FA_SYSTEM_DATES_VIEW
Amount Text Language	CMC_FA_AMTXTLANG_AMEND
	CMC_FA_AMTXTLANG_AUTHORIZE
	CMC_FA_AMTXTLANG_CLOSE

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_FA_AMTXTLANG_DELETE
	CMC_FA_AMTXTLANG_NEW
	CMC_FA_AMTXTLANG_REOPEN
	CMC_FA_AMTXTLANG_VIEW
Branch EOD	CMC_FA_CORE_BRANCH_EOD_AMEND
	CMC_FA_CORE_BRANCH_EOD_CURRENT_DATE
	CMC_FA_CORE_BRANCH_EOD_FLIPDATE
	CMC_FA_CORE_BRANCH_EOD_MAP
	CMC_FA_CORE_BRANCH_EOD_MAP_AMEND
	CMC_FA_CORE_BRANCH_EOD_MAP_AUTHORIZE
	CMC_FA_CORE_BRANCH_EOD_MAP_CLOSE
	CMC_FA_CORE_BRANCH_EOD_MAP_COPY
	CMC_FA_CORE_BRANCH_EOD_MAP_DELETE
	CMC_FA_CORE_BRANCH_EOD_MAP_NEW
	CMC_FA_CORE_BRANCH_EOD_MAP_VIEW
	CMC_FA_CORE_BRANCH_EOD_MAP_VIEWALL
	CMC_FA_CORE_BRANCH_EOD_MARKEOTI
	CMC_FA_CORE_BRANCH_EOD_MARKTI
	CMC_FA_CORE_BRANCH_EOD_RETRY
	CMC_FA_CORE_BRANCH_EOD_VIEWBYBRANCHDATE
	CMC_FA_CORE_BRANCH_EOD_VIEWBYID
	CMC_FA_BATCH_INVOKEEOD
	CMC_FA_BATCH_FLIPDATE
	CMC_FA_BRANCH_EOD_PROCESS
	CMC_FA_BRANCH_EOD_SERVICE_START
	CMC_FA_BRANCH_EOD_SERVICE_STATUS
	CMC_FA_BRANCH_EOD_SERVICE_RETRY
Forget Process	CMC_FA_CORE_FORGET_CUSTOMER_AUTHORIZE
	CMC_FA_CORE_FORGET_CUSTOMER_CREATE
	CMC_FA_CORE_FORGET_CUSTOMER_DELETE
	CMC_FA_CORE_FORGET_CUSTOMER_MODIFY
	CMC_FA_CORE_FORGET_CUSTOMER_VIEW
	CMC_FA_EXT_CUSTOMER_INVOKEFORGETACCBATCH
	CMC_FA_FORGET_CORECUSTOMERS
	CMC_FA_GET_FORGET_CORECUSTOMERS

Appendix B

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_FA_EXT_ACCOUNT_FORGETACCOUNT
	CMC_FA_EXT_ACCOUNT_INVOKEBATCH
	CMC_FA_FORGET_COREACCOUNTS
	CMC_FA_GET_FORGET_COREACCOUNTS
Multi-Currency Account Linkage	CMC_FA_MCA_LINKAGE_AUTHORIZE
	CMC_FA_MCA_LINKAGE_CLOSE
	CMC_FA_MCA_LINKAGE_CREATE
	CMC_FA_MCA_LINKAGE_DELETE
	CMC_FA_MCA_LINKAGE_MODIFY
	CMC_FA_MCA_LINKAGE_REOPEN
	CMC_FA_MCA_LINKAGE_VIEW
Transaction Code	CMC_FA_TRN_CODE_AUTHORIZE
	CMC_FA_TRN_CODE_CLOSE
	CMC_FA_TRN_CODE_CREATE
	CMC_FA_TRN_CODE_DELETE
	CMC_FA_TRN_CODE_LOV
	CMC_FA_TRN_CODE_MODIFY
	CMC_FA_TRN_CODE_REOPEN
	CMC_FA_TRN_CODE_VIEW
Routing Hub	CMC_FA_RH_DASHBOARD_HEALTH_INDICATOR
	CMC_FA_RH_CONFIG
	CMC_FA_RH_APPLICATION
	CMC_FA_RH_DISPATCH_AUDIT_LOG
	CMC_FA_RH_AUDIT_LOG
	CMC_FA_RH_CONFIG_CREATE
	CMC_FA_RH_CONFIG_DELETE
	CMC_FA_RH_CONFIG_MODIFY
	CMC_FA_RH_CONFIG_GET
	CMC_FA_RH_DISPATCH_AUDIT_GETALL
	CMC_FA_RH_METRICS_GET
	CMC_FA_RH_SERVICECONSUMER_CREATE
	CMC_FA_RH_SERVICECONSUMER_DELETE
	CMC_FA_RH_SERVICECONSUMER_GETALL
	CMC_FA_RH_SERVICECONSUMER_GETBYID
	CMC_FA_RH_SERVICECONSUMER_MODIFY
	CMC_FA_RH_SERVICECONSUMER_EXPORT
	CMC_FA_RH_SERVICECONSUMER_IMPORT
	CMC_FA_RH_SERVICECONSUMER_PROCESSJSON
	CMC_FA_RH_SERVICECONSUMER_SERVICE_MODIFY

Table B-1 (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_FA_RH_SERVICECONSUMER_SERVICE_IMPORT
	CMC_FA_RH_SERVICECONSUMER_SERVICE_CREATE
	CMC_FA_RH_SERVICECONSUMER_SERVICE_EXPORT
	CMC_FA_RH_SERVICECONSUMER_SERVICE_GETBYID
	CMC_FA_RH_SERVICECONSUMER_SERVICE_GETALL
	CMC_FA_RH_SERVICECONSUMER_SERVICE_DELETE
	CMC_FA_RH_SERVICECONSUMER_SERVICEROUTING_CREATE
	CMC_FA_RH_SERVICECONSUMER_SERVICEROUTING_MODIFY
	CMC_FA_RH_SERVICECONSUMER_SERVICEROUTING_GETALL
	CMC_FA_RH_SERVICECONSUMER_SERVICEROUTING_GETBYID
	CMC_FA_RH_SERVICECONSUMER_SERVICEROUTING_DELETE
	CMC_FA_RH_SERVICECONSUMER_SERVICETRANSFORMATION_GETALL
	CMC_FA_RH_SERVICECONSUMER_SERVICETRANSFORMATION_IMPORT
	CMC_FA_RH_SERVICECONSUMER_SERVICETRANSFORMATION_DELETE
	CMC_FA_RH_SERVICECONSUMER_SERVICETRANSFORMATION_EXPORT
	CMC_FA_RH_SERVICECONSUMER_SERVICETRANSFORMATION_GETBYID
	CMC_FA_RH_SERVICECONSUMER_SERVICETRANSFORMATION_MODIFY
	CMC_FA_RH_SERVICECONSUMER_SERVICETRANSFORMATION_CREATE
	CMC_FA_RH_PROVIDEDSERVICE_IMPORT
	CMC_FA_RH_SERVICEPROVIDER_GENERATEREQUEST
	CMC_FA_RH_SERVICEPROVIDER_CREATE
	CMC_FA_RH_SERVICEPROVIDER_MODIFY
	CMC_FA_RH_SERVICEPROVIDER_GETBYID
	CMC_FA_RH_SERVICEPROVIDER_GETALL
	CMC_FA_RH_SERVICEPROVIDER_DELETE
	CMC_FA_RH_SERVICEPROVIDER_EXPORT
	CMC_FA_RH_SERVICEPROVIDER_IMPORT

Table B-1 (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_FA_RH_SERVICEPROVIDER_IMPL_CREATE
	CMC_FA_RH_SERVICEPROVIDER_IMPL_MODIFY
	CMC_FA_RH_SERVICEPROVIDER_IMPL_GETBYID
	CMC_FA_RH_SERVICEPROVIDER_IMPL_GETALL
	CMC_FA_RH_SERVICEPROVIDER_IMPL_DELETE
	CMC_FA_RH_SERVICEPROVIDER_IMPL_IMPORT
	CMC_FA_RH_SERVICEPROVIDER_IMPL_EXPORT
	CMC_FA_RH_SERVICEPROVIDER_IMPL_GENERATEREQUEST
Borrowing Capacity	CMC_OBCDS_FA_BWC_ACTIONS
	CMC_OBCDS_FA_BWC_AMEND
	CMC_OBCDS_FA_BWC_AUTHORIZE
	CMC_OBCDS_FA_BWC_AUTHORIZE
	CMC_OBCDS_FA_BWC_AUTHQUERY
	CMC_OBCDS_FA_BWC_CLOSE
	CMC_OBCDS_FA_BWC_DELETE
	CMC_OBCDS_FA_BWC_HISTORY
	CMC_OBCDS_FA_BWC_NEW
	CMC_OBCDS_FA_BWC_REOPEN
	CMC_OBCDS_FA_BWC_VALIDATE_LOV
	CMC_OBCDS_FA_BWC_VIEW
	CMC_OBCDS_FA_BWC_VIEWALL
	CMC_OBCDS_FA_BWC_VIEWCHANGES
Decision Matrix	CMC_OBCDS_FA_DGM_ACTIONS
	CMC_OBCDS_FA_DGM_AMEND
	CMC_OBCDS_FA_DGM_AUTHORIZE
	CMC_OBCDS_FA_DGM_AUTHORIZE
	CMC_OBCDS_FA_DGM_AUTHQUERY
	CMC_OBCDS_FA_DGM_CLOSE
	CMC_OBCDS_FA_DGM_DELETE
	CMC_OBCDS_FA_DGM_GETALLDGMDATA
	CMC_OBCDS_FA_DGM_GETDGXCODES
	CMC_OBCDS_FA_DGM_HISTORY
	CMC_OBCDS_FA_DGM_NEW
	CMC_OBCDS_FA_DGM_REOPEN
	CMC_OBCDS_FA_DGM_VALIDATE_LOV
	CMC_OBCDS_FA_DGM_VIEW

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_OBCDS_FA_DGM_VIEWALL
	CMC_OBCDS_FA_DGM_VIEWCHANGES
Quantitative Scoring Model	CMC_OBCDS_FA_DML_ACTIONS
	CMC_OBCDS_FA_DML_AMEND
	CMC_OBCDS_FA_DML_AUTHORIZE
	CMC_OBCDS_FA_DML_AUTHORIZE
	CMC_OBCDS_FA_DML_AUTHQUERY
	CMC_OBCDS_FA_DML_CLOSE
	CMC_OBCDS_FA_DML_DELETE
	CMC_OBCDS_FA_DML_HISTORY
	CMC_OBCDS_FA_DML_NEW
	CMC_OBCDS_FA_DML_REOPEN
	CMC_OBCDS_FA_DML_VALIDATE_LOV
	CMC_OBCDS_FA_DML_VIEW
	CMC_OBCDS_FA_DML_VIEWALL
	CMC_OBCDS_FA_DML_VIEWCHANGES
Fetch Credit Decision Service	CMC_OBCDS_FA_FETCH_CREDIT_DECISION
Validation Model	CMC_OBCDS_FA_LML_ACTIONS
	CMC_OBCDS_FA_LML_AMEND
	CMC_OBCDS_FA_LML_AUTHORIZE
	CMC_OBCDS_FA_LML_AUTHORIZE
	CMC_OBCDS_FA_LML_AUTHQUERY
	CMC_OBCDS_FA_LML_CLOSE
	CMC_OBCDS_FA_LML_DELETE
	CMC_OBCDS_FA_LML_HISTORY
	CMC_OBCDS_FA_LML_NEW
	CMC_OBCDS_FA_LML_REOPEN
	CMC_OBCDS_FA_LML_VALIDATE_LOV
	CMC_OBCDS_FA_LML_VIEW
	CMC_OBCDS_FA_LML_VIEWALL
	CMC_OBCDS_FA_LML_VIEWCHANGES
Lookup	CMC_OBCDS_FA_LOOKUPS_ACTIONS
	CMC_OBCDS_FA_LOOKUPS_AMEND
	CMC_OBCDS_FA_LOOKUPS_AUTHORIZE
	CMC_OBCDS_FA_LOOKUPS_AUTHORIZE
	CMC_OBCDS_FA_LOOKUPS_AUTHQUERY
	CMC_OBCDS_FA_LOOKUPS_CLOSE
	CMC_OBCDS_FA_LOOKUPS_CODE_VIEW
	CMC_OBCDS_FA_LOOKUPS_DELETE
	CMC_OBCDS_FA_LOOKUPS_HISTORY
	CMC_OBCDS_FA_LOOKUPS_NEW
	CMC_OBCDS_FA_LOOKUPS_REOPEN

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_OBCDS_FA_LOOKUPS_VALIDATE_LOV
	CMC_OBCDS_FA_LOOKUPS_VIEW
	CMC_OBCDS_FA_LOOKUPS_VIEWALL
	CMC_OBCDS_FA_LOOKUPS_VIEWCHANGES
System Parameter	CMC_OBCDS_FA_PMT_ACTIONS
	CMC_OBCDS_FA_PMT_AMEND
	CMC_OBCDS_FA_PMT_AUTHORIZE
	CMC_OBCDS_FA_PMT_AUTHORIZE
	CMC_OBCDS_FA_PMT_AUTHQUERY
	CMC_OBCDS_FA_PMT_CLOSE
	CMC_OBCDS_FA_PMT_DELETE
	CMC_OBCDS_FA_PMT_HISTORY
	CMC_OBCDS_FA_PMT_NEW
	CMC_OBCDS_FA_PMT_REOPEN
	CMC_OBCDS_FA_PMT_VALIDATE_LOV
	CMC_OBCDS_FA_PMT_VIEW
	CMC_OBCDS_FA_PMT_VIEWALL
	CMC_OBCDS_FA_PMT_VIEWCHANGES
Product Processor	CMC_OBCDS_FA_PPR_ACTIONS
	CMC_OBCDS_FA_PPR_AMEND
	CMC_OBCDS_FA_PPR_AUTHORIZE
	CMC_OBCDS_FA_PPR_AUTHORIZE
	CMC_OBCDS_FA_PPR_AUTHQUERY
	CMC_OBCDS_FA_PPR_CLOSE
	CMC_OBCDS_FA_PPR_DELETE
	CMC_OBCDS_FA_PPR_HISTORY
	CMC_OBCDS_FA_PPR_NEW
	CMC_OBCDS_FA_PPR_REOPEN
	CMC_OBCDS_FA_PPR_VALIDATE_LOV
	CMC_OBCDS_FA_PPR_VIEW
	CMC_OBCDS_FA_PPR_VIEWALL
	CMC_OBCDS_FA_PPR_VIEWCHANGES
Pricing Model	CMC_OBCDS_FA_PRC_ACTIONS
	CMC_OBCDS_FA_PRC_AMEND
	CMC_OBCDS_FA_PRC_AUTHORIZE
	CMC_OBCDS_FA_PRC_AUTHORIZE
	CMC_OBCDS_FA_PRC_AUTHQUERY
	CMC_OBCDS_FA_PRC_CLOSE
	CMC_OBCDS_FA_PRC_DELETE
	CMC_OBCDS_FA_PRC_HISTORY
	CMC_OBCDS_FA_PRC_NEW
	CMC_OBCDS_FA_PRC_REOPEN

Table B-1　(Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_OBCDS_FA_PRC_VALIDATE_LOV
	CMC_OBCDS_FA_PRC_VIEW
	CMC_OBCDS_FA_PRC_VIEWALL
	CMC_OBCDS_FA_PRC_VIEWCHANGES
Scoring Feature	CMC_OBCDS_FA_QFT_ACTIONS
	CMC_OBCDS_FA_QFT_AMEND
	CMC_OBCDS_FA_QFT_AUTHORIZE
	CMC_OBCDS_FA_QFT_AUTHORIZE
	CMC_OBCDS_FA_QFT_AUTHQUERY
	CMC_OBCDS_FA_QFT_CLOSE
	CMC_OBCDS_FA_QFT_DELETE
	CMC_OBCDS_FA_QFT_HISTORY
	CMC_OBCDS_FA_QFT_NEW
	CMC_OBCDS_FA_QFT_REOPEN
	CMC_OBCDS_FA_QFT_VALIDATE_LOV
	CMC_OBCDS_FA_QFT_VIEW
	CMC_OBCDS_FA_QFT_VIEWALL
	CMC_OBCDS_FA_QFT_VIEWCHANGES
Qualitative Scoring Model	CMC_OBCDS_FA_QUAL_ACTIONS
	CMC_OBCDS_FA_QUAL_AMEND
	CMC_OBCDS_FA_QUAL_AUTHORIZE
	CMC_OBCDS_FA_QUAL_AUTHORIZE
	CMC_OBCDS_FA_QUAL_AUTHQUERY
	CMC_OBCDS_FA_QUAL_CLOSE
	CMC_OBCDS_FA_QUAL_DELETE
	CMC_OBCDS_FA_QUAL_HISTORY
	CMC_OBCDS_FA_QUAL_NEW
	CMC_OBCDS_FA_QUAL_REOPEN
	CMC_OBCDS_FA_QUAL_VALIDATE_LOV
	CMC_OBCDS_FA_QUAL_VIEW
	CMC_OBCDS_FA_QUAL_VIEWALL
	CMC_OBCDS_FA_QUAL_VIEWCHANGES
Questionnaire	CMC_OBCDS_FA_QUES_ACTIONS
	CMC_OBCDS_FA_QUES_AMEND
	CMC_OBCDS_FA_QUES_AUTHORIZE
	CMC_OBCDS_FA_QUES_AUTHORIZE
	CMC_OBCDS_FA_QUES_AUTHQUERY
	CMC_OBCDS_FA_QUES_CLOSE
	CMC_OBCDS_FA_QUES_DELETE
	CMC_OBCDS_FA_QUES_HISTORY
	CMC_OBCDS_FA_QUES_NEW
	CMC_OBCDS_FA_QUES_REOPEN

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_OBCDS_FA_QUES_VALIDATEQUSCODE
	CMC_OBCDS_FA_QUES_VALIDATE_LOV
	CMC_OBCDS_FA_QUES_VIEW
	CMC_OBCDS_FA_QUES_VIEWALL
	CMC_OBCDS_FA_QUES_VIEWCHANGES
	CMC_OBCDS_FA_QUES_VIEWPPR
	CMC_OBCDS_FA_QUES_VIEWQURCODE
Strategy Configuration	CMC_OBCDS_FA_STRATEGYCONFIG_AMEND
	CMC_OBCDS_FA_STRATEGYCONFIG_AUTHORIZE
	CMC_OBCDS_FA_STRATEGYCONFIG_AUTHQUERY
	CMC_OBCDS_FA_STRATEGYCONFIG_VIEWCHANGES
	CMC_OBCDS_FA_STRATEGYCONFIG_CLOSE
	CMC_OBCDS_FA_STRATEGYCONFIG_DELETE
	CMC_OBCDS_FA_STRATEGYCONFIG_NEW
	CMC_OBCDS_FA_STRATEGYCONFIG_REOPEN
	CMC_OBCDS_FA_STRATEGYCONFIG_VIEW
	CMC_OBCDS_FA_STRATEGYCONFIG_VIEWALL
	CMC_OBCDS_FA_STRATEGYCONFIG_VALIDATE_LOV
	CMC_OBCDS_FA_STRATEGYCONFIG_HISTORY
	CMC_OBCDS_FA_STRATEGYCONFIG_ACTIONS
	CMC_OBCDS_FA_STRATEGYCONFIG_AUTHORIZE
Credit Bureau Display	CMC_CBR_FA_CBD_ACTIONS
	CMC_CBR_FA_CBD_AMEND
	CMC_CBR_FA_CBD_AUTHORIZE
	CMC_CBR_FA_CBD_AUTHQUERY
	CMC_CBR_FA_CBD_CLOSE
	CMC_CBR_FA_CBD_DELETE
	CMC_CBR_FA_CBD_HISTORY
	CMC_CBR_FA_CBD_NEW
	CMC_CBR_FA_CBD_REOPEN
	CMC_CBR_FA_CBD_VALIDATE_LOV
	CMC_CBR_FA_CBD_VIEW
	CMC_CBR_FA_CBD_VIEWALL
	CMC_CBR_FA_CBD_VIEWCHANGES
Criteria	CMC_CBR_FA_CRITERIA_ACTIONS

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_CBR_FA_CRITERIA_AMEND
	CMC_CBR_FA_CRITERIA_AUTHORIZE
	CMC_CBR_FA_CRITERIA_AUTHQUERY
	CMC_CBR_FA_CRITERIA_CLOSE
	CMC_CBR_FA_CRITERIA_DELETE
	CMC_CBR_FA_CRITERIA_HISTORY
	CMC_CBR_FA_CRITERIA_NEW
	CMC_CBR_FA_CRITERIA_REOPEN
	CMC_CBR_FA_CRITERIA_VALIDATE_LOV
	CMC_CBR_FA_CRITERIA_VIEW
	CMC_CBR_FA_CRITERIA_VIEWALL
	CMC_CBR_FA_CRITERIA_VIEWCHANGES
Lookup	CMC_CBR_FA_LOOKUP_ACTIONS
	CMC_CBR_FA_LOOKUP_AMEND
	CMC_CBR_FA_LOOKUP_AUTHORIZE
	CMC_CBR_FA_LOOKUP_AUTHQUERY
	CMC_CBR_FA_LOOKUP_CLOSE
	CMC_CBR_FA_LOOKUP_DELETE
	CMC_CBR_FA_LOOKUP_HISTORY
	CMC_CBR_FA_LOOKUP_NEW
	CMC_CBR_FA_LOOKUP_REOPEN
	CMC_CBR_FA_LOOKUP_VALIDATE_LOV
	CMC_CBR_FA_LOOKUP_VIEW
	CMC_CBR_FA_LOOKUP_VIEWALL
	CMC_CBR_FA_LOOKUP_VIEWCHANGES
System Parameter	CMC_FA_SYSTEM_PARAM_ACTIONS
	CMC_FA_SYSTEM_PARAM_AMEND
	CMC_FA_SYSTEM_PARAM_AUTHORIZE
	CMC_FA_SYSTEM_PARAM_AUTHQUERY
	CMC_FA_SYSTEM_PARAM_CLOSE
	CMC_FA_SYSTEM_PARAM_DELETE
	CMC_FA_SYSTEM_PARAM_HISTORY
	CMC_FA_SYSTEM_PARAM_NEW
	CMC_FA_SYSTEM_PARAM_REOPEN
	CMC_FA_SYSTEM_PARAM_VALIDATE_LOV
	CMC_FA_SYSTEM_PARAM_VIEW
	CMC_FA_SYSTEM_PARAM_VIEWALL
	CMC_FA_SYSTEM_PARAM_VIEWCHANGES
Product Processor	CMC_OBCBS_FA_PPR_ACTIONS
	CMC_OBCBS_FA_PPR_AMEND
	CMC_OBCBS_FA_PPR_AUTHORIZE
	CMC_OBCBS_FA_PPR_AUTHQUERY

Table B-1   (Cont.) List of Functional Activity Codes

Screen Name	Functional Activity Code
	CMC_OBCBS_FA_PPR_CLOSE
	CMC_OBCBS_FA_PPR_DELETE
	CMC_OBCBS_FA_PPR_HISTORY
	CMC_OBCBS_FA_PPR_NEW
	CMC_OBCBS_FA_PPR_REOPEN
	CMC_OBCBS_FA_PPR_VALIDATE_LOV
	CMC_OBCBS_FA_PPR_VIEW
	CMC_OBCBS_FA_PPR_VIEWALL
	CMC_OBCBS_FA_PPR_VIEWCHANGES
View Execution Summary	CMC_OBCDS_FA_SERVICE_LOG_VIEWALL
Model Training and Scoring	CMC_FA_ML_TS_MODEL_TRAINING
Model Definition	CMC_FA_ML_TS_USECASE_DEFINITION_GET
Annotator	CMC_NLP_FA_ANNOTATOR
Model Training	CMC_NLP_FA_MODEL_TRNG
Model Management	CMC_NLP_FA_MOD_MNGMNT_GET
Document Upload	CMC_NLP_FA_ONLINE_PROCESSING
Transaction Log	CMC_NLP_FA_PROCESSING_DASHBOARD
Use Case Definition	CMC_NLP_FA_TAG_CREATION_GET

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