Oracle Banking Common Core User Guide

Oracle Banking Supply Chain Finance

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Oracle Banking Common Core User Guide

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1 Preface

1.1 Introduction

This user guide is designed to help you quickly get acquainted with the many functions routinely executed every day.

1.2 Audience

This user 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.

1.3 Document Accessibility

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

1.4 Acronyms and Abbreviations

Following are some of the acronyms and abbreviations you are likely to find in this user manual:

Table 1: Acronyms and Abbreviations

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

1.5 List of Topics

This user guide is organized as follow:

Table 2: List of Topics

Topics	Description
Core Maintenance	This topic describes about Core Maintenance module.
Bureau Integration Service	This topic describes about Bureau Integration Service.
Decision Service	This topic describes about Decision Service.
NLP Framework	This topic describes about NLP Framework.
Machine Learning Framework	This topic describes about Machine Learning Framework.

Topics	Description
Rules Framework	This topic describes about Rules Framework.
Document Verification Framework	This topic describes about Document Verification Framework.
File Upload	This topic describes about the various file upload features supported in common core maintenances.
Error Codes and Messages	This topic describes list of error codes and messages.
Functional Activity Codes	This topic contains the functional activity codes.
Glossary	This topic provides list of glossary and their definitions.
List of Menus	This topic has alphabetical list of Core Maintenance processes with page references for quick navigation.
Reference and Feedback	This topic provides the reference documents and information about feedback and support.

1.6 Related Documents

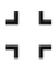
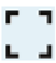
For more information on any related features, you can refer to the following documents:

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

1.7 Symbols and Icons

The following are some of the Symbols you are likely to find in the guide:

Table 3: Symbols and Icons - Common

Symbol/Icon	Function
→	Represents Results
	Minimize
	Maximize
X	Close

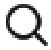
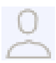
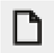
Symbol/Icon	Function
	Perform Search
	Open a list
	Add a new record
	Navigate to the first record
	Navigate to the last record
	Navigate to the previous record
	Navigate to the next record
	Grid view
	List view
	Refresh
	Click this icon to add a new row.
	Click this icon to delete an existing row.
	Click to view the created record.
	Click to modify the fields.
	Click to unlock, delete, authorize or view the created record.

Table 4: Symbols and Icons – Audit Details

Symbol/Icon	Function
	A user
	Date and time

Symbol/Icon	Function
⚠	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

1.8 Basic Actions

Most of the screens contain buttons to perform all or few of the basic actions. The table below gives a snapshot of them:

Table 6: Basic Actions

Actions	Description
New	Click to add a new record. When you click New, system displays a new record enabling you to specify the required data. It is mandatory to specify details for the fields marked with '*' symbol. **NOTE:** This button is displayed only for the records that are already created.
Save	Click to save the details entered or selected in the screen.
Unlock	Click to update the details of an existing record. System displays an existing record in editable mode. **NOTE:** This button is displayed only for the records that are already created.
Authorize	Click to authorize the record created. A maker of the screen is not allowed to authorize the same. Only a checker can authorize a record. **NOTE:** This button is displayed only for the already created records. For more information on the process, see Authorization Process.
Approve	Click to approve the initiated record. **NOTE:** This button is displayed, once you click **Authorize.**
Audit	Click to view the maker details, checker details of the particular record. **NOTE:** This button is displayed only for the records that are already created.
Close	Click to close a record. This action is available only when a record is created.
Confirm	Click to confirm the action you performed.
Cancel	Click to cancel the action you performed.

Actions	Description
Compare	Click to view the comparison through the field values of old record and the current record. **NOTE:** This button is displayed in the widget, once you click **Authorize.**
View	Click to view the details in a particular modification stage. **NOTE:** This button is displayed in the widget, once you click **Authorize.**
View Difference only	Click to view a comparison through the field element values of old record and the current record, which has undergone changes. **NOTE:** This button is displayed, once you click **Compare.**
Expand All	Click to expand and view all the details in the sections. **NOTE:** This button is displayed, once you click **Compare.**
Collapse All	Click to hide the details in the sections. **NOTE:** This button is displayed, once you click **Compare.**
OK	Click to confirm the details in the screen.

2 Core Maintenance

This section is designed to help you quickly get acquainted with the many functions routinely executed everyday.

This section contains the following topics:

2.1 Account Entitlement Group

You can configure an account entitlement group.

- 2.1.1 Account Entitlement Group Summary
- 2.1.2 Account Entitlement Group Maintenance

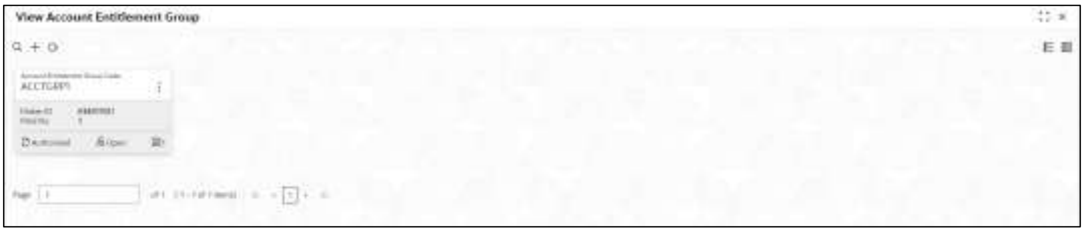
2.1.1 Account Entitlement Group Summary

The summary screen provides a list of configured account entitlement group. You can configure an account entitlement group using the Account Entitlement Group Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Account Entitlement Group**.
2. Under **Account Entitlement Group**, click **View Account Entitlement Group.**

   → The **View Account Entitlement Group** screen is displayed.

Figure 1: View Account Entitlement Group



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

Table 7: View Account Entitlement Group – Field Description

Field	Description
Account Entitlement Group Code	Displays the account entitlement group code.
Maker	Displays the name of the user who has configured the account entitlement group details.
Modification Number	Displays the number of modifications performed on the record.

2.1.2 Account Entitlement Group Maintenance

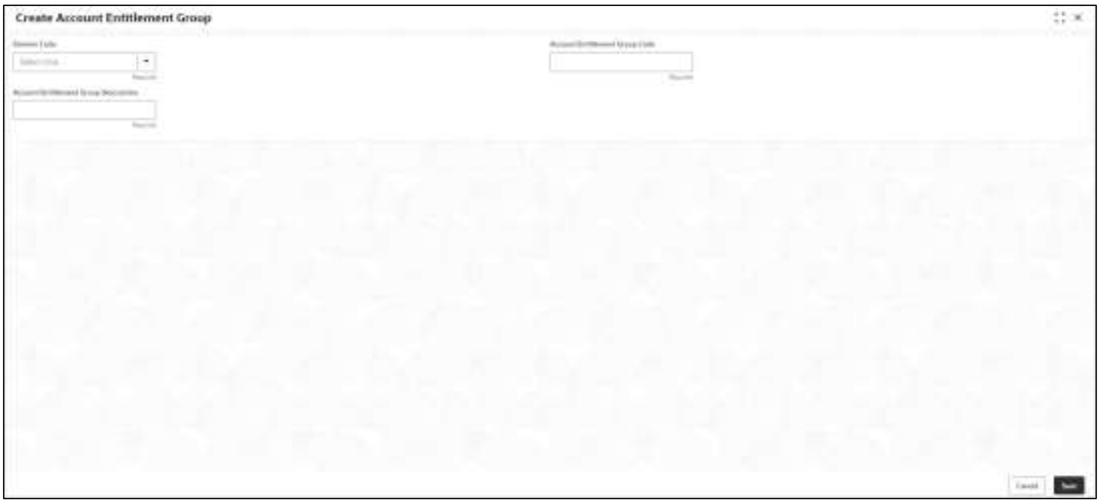
The maintenance screen allows you to configure amount text language. To process this screen, perform the following steps

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Account Entitlement Group**.

2. Under **Account Entitlement Group**, click **Create Account Entitlement Group.**

   → The **Create Account Entitlement Group** screen is displayed.

   Figure 2: Create Account Entitlement Group



3. On **Create Account Entitlement Group** screen, specify the fields. For more information on fields, refer to the field description table below.

   Table 8: Create Account Entitlement Group – Field Description

Field	Description
Domain Code	Select the Domain Code from the drop-down list.
Account Entitlement Group Code	Specify the code of the account entitlement group.
Account Entitlement Group Description	Specify the description of the account entitlement group.

4. Click **Save**. You can view the confirmation account entitlement group details in the Account Entitlement Group Summary.

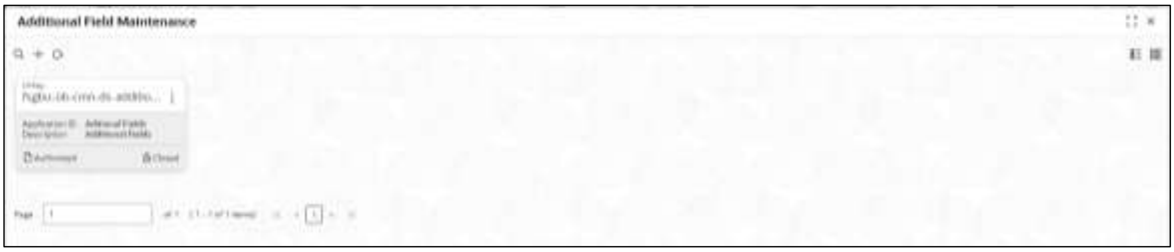
2.2 Additional Field Maintenance

This screen is used to configure and maintain the additional fields for the transaction screens. To process this screen, perform the following steps:

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

   → The **Additional Field Maintenance** Summary screen is displayed.

   Figure 3: Additional Field Maintenance Summary



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

Table 9: Additional Field Maintenance Summary – 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.

2. On **Additional Field Maintenance Summary** screen, click + icon.

   → The **Additional Fields Maintenance** screen is displayed.

   Figure 4: Additional Fields Maintenance

3. On **Additional Fields Maintenance** screen, specify the fields. For more information on fields, refer to the field description table below.

Table 10: Additional Fields Maintenance – Field Description

Field	Description
Component Name	Click Search icon and select the component name from the list of
Unique Identifier/Product Code	Specify the unique identifier or product code.
Description	Displays the description as **Additional Fields**, and it can be modified.
Application ID	Displays the Application ID.
UI Key	Displays the UI Key.
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 Properties	Click this icon to edit the fields in the row.
Mandatory	Check this box if the field needs to be configured as mandatory.
Is Unique	Check this box if the field is unique.
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.
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 validation.
Edit Arguments	Click this icon to edit the fields in the row.

4. Click **Save**. You can view the confirmation advice details in the Additional Field Maintenance Summary.

2.3 Advice

You can configure various BIP advice that are available for the process.

This section contains following subsections:

- 2.3.1 Advice Summary
- 2.3.2 Advice Maintenance

2.3.1 Advice Summary

The summary screen provides a list of configured advice. You can configure an advice for a process using the Advice Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Advice**.
2. Under **Advice**, click **View Advice**.

→ The **View Advice** screen is displayed.

Figure 5: View Advice

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

Table 11: 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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.3.2 Advice Maintenance

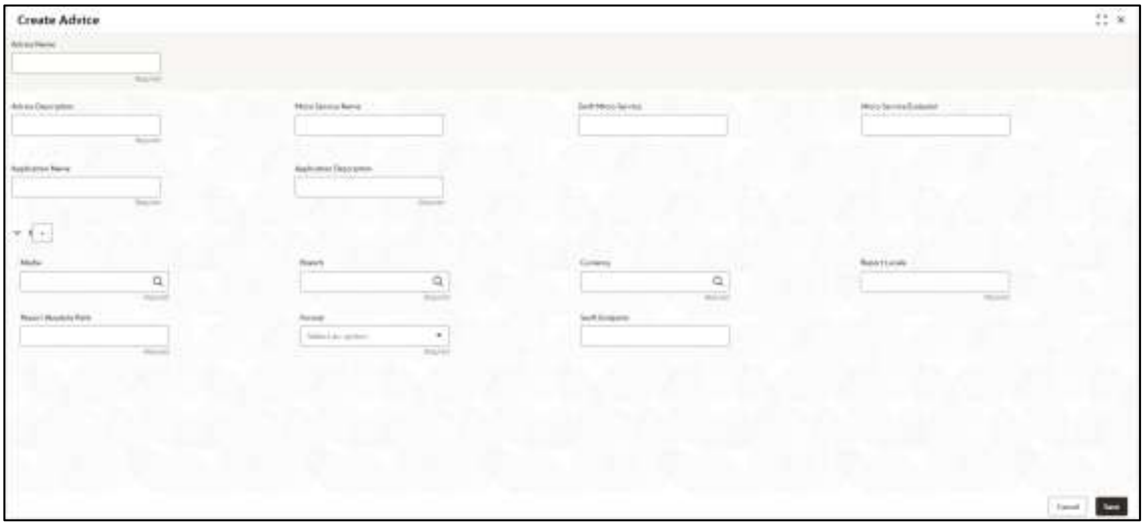
The maintenance screen allows you to configure advices. To process this screen, perform the following steps:

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

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

   → The **Create Advice** screen is displayed.

   Figure 6: Create Advice



3. On **Create Advice** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 12: 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.

Field	Description
Report Absolute Path	Specify the report absolute path.
Format	Select a download file format for an advice from the dropdown list. The formats available are, PDF, PPTX, HTML, XLS, and RTF.
Swift Endpoint	Specify the swift endpoint.

4. Click **Save**. You can view the confirmation advice details in the Advice Summary.

2.4 Amount Text Language

You can configure an amount text language.

This section contains following subsections:

- 2.4.1 Amount Text Language Summary
- 2.4.2 Amount Text Language Maintenance

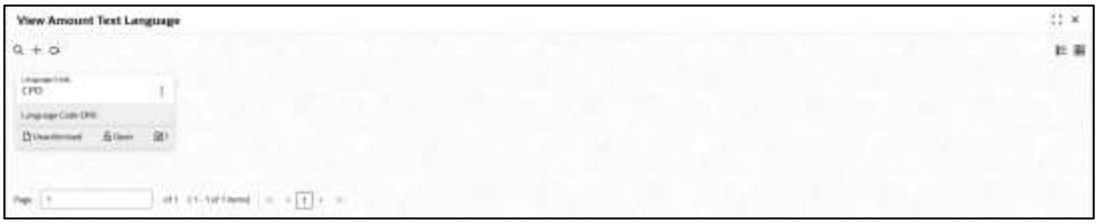
2.4.1 Amount Text Language Summary

The summary screen provides a list of configured amount text language. You can configure an amount text language using the Amount Text Language Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

Figure 7: View Amount Text Language



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

Table 13: View Amount Text Language – Field Description

Field	Description
Language Code	Displays the language code associated with the amount word.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.4.2 Amount Text Language Maintenance

The maintenance screen allows you to configure amount text language. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 8: Create Amount Text Language

3. On **Create Amount Text Language** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below. .

   Table 14: Create Amount Text Language – Field Description

Field	Description
Language Code	Search and select the required language code.
Amount Word Currency List	Specify the amount word currency details.
CCY Symbol	Specify the CCY 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.

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

4. Click **Save**. You can view the configured amount text language details in the Amount Text Language Summary.

2.5 BIC Directory

As part of setting up basic information, you must maintain Bank Identifier Codes (BIC). You can configure the BIC directory for a customer.

This section contains following subsections:

- 2.4.1 BIC Directory Summary
- 2.4.2 BIC Directory Maintenance

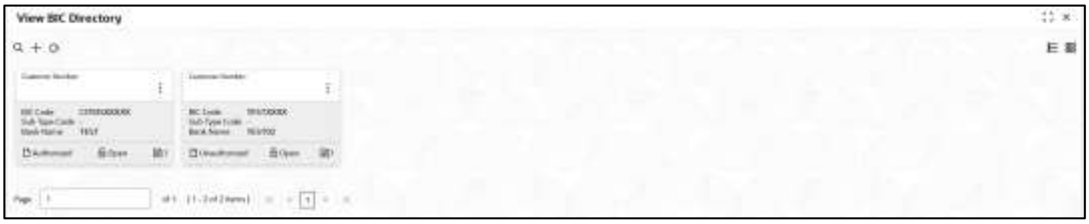
2.5.1 BIC Directory Summary

The summary screen provides a list of configured BIC directory. You can configure the BIC directory using the BIC Directory Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **BIC Directory**.
2. Under **BIC Directory**, click **View BIC Directory**.

→ The **View BIC Directory** screen is displayed.

Figure 9: View BIC Directory



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

Table 15: 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
Bank Name	Displays the name of the bank.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

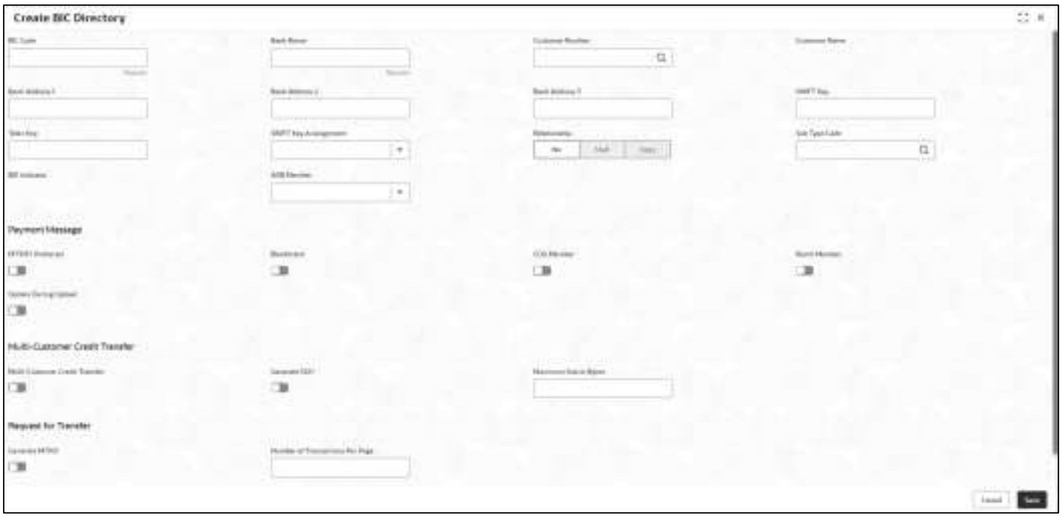
2.5.2 BIC Directory Maintenance

The maintenance screen allows you to configure a BIC directory for a customer. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **BIC Directory**.
2. Under **BIC Directory**, click **Create BIC Directory**.

   → The **Create BIC Directory** screen is displayed.

   Figure 10: Create BIC Directory

3. On **Create BIC Directory** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below. .

   Table 16: 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	Search and select the required customer number.
Customer Name	Based on the **Customer Number** selected, the information is auto-populated.
Bank Address 1-3	Based on the **Customer Number** selected, the information is auto-populated.
SWIFT Key	Specify the swift key details.
Telex Key	Specify the unique telex key for the BIC directory.

Field	Description
SWIFT Key Arrangement	Select the SWIFT key arrangement from the drop-down list.
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	Search and select the required sub-type code.
BEI Indicator	Based on the **Sub-type Code** selected, the information is auto-populated.
ADB Member	Select the ADB member from the drop-down list.
Payment Message	Specify the payment message details.
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	Specify the Multi-Customer Credit Transfer details.

Field	Description
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.
Request for Transfer	Specify the Request for Transfer details.
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 you do not specify a value it is defaulted to 10.
Real Customer Number	Search 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**. You can view the configure BIC directory in the BIC Directory Summary.

2.6 Branch EOD

You can invoke End of Day (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 (End of Transaction Input) stage.

This section contains following subsections:

- 2.6.1 Branch EOD Summary
- 2.6.2 Branch EOD Maintenance
- 2.6.3 Branch EOD Invoke

2.6.1 Branch EOD Summary

The summary screen provides list of branch workflow mappings. You can configure branch workflow mapping using the Branch EOD Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Branch EOD**.
2. Under **Branch EOD**, click **View EOD**.

→ The **View EOD** screen is displayed.

Figure 11: View EOD

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

Table 17: View EOD – Field Description

Field	Description
Branch Code	Displays the branch code details.
Workflow Name	Displays the name of the workflow.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.6.2 Branch EOD Maintenance

The maintenance screen allows you to create/configure the EOD workflow with a Branch. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Branch EOD**.
2. Under **Branch EOD**, click **Configure EOD**.

   → The **Configure EOD** screen is displayed.

   Figure 12: Configure EOD

3. On **Configure EOD** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 18: 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 workflow name that is already created.

For more information on EOD Workflow creation and related terminologies please refer to **EOD Configuration Guide** of the respective products.

2.6.3 Branch EOD Invoke

The action screen allows you to invoke the branch EOD process as per branch and workflow mapping configured using Branch EOD Maintenance. To process this screen, perform the following steps:

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

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

   → The **Invoke EOD** screen is displayed.

   Figure 15: Invoke EOD

3. On **Invoke EOD** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 19: 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.
Current Branch Date	Displays the current branch date.

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 workflow from the failed task.
   NOTE: Retry button will be enabled 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.

Table 20: EOD Task – Status Description

Status	Description
Green	Task is completed
Yellow	Task is in progress
Red	Task failed due to some error.
Grey	Task is scheduled but not executed
Diamond Shape	Task has reached a milestone stage where execution will be paused. Right-click on milestone stage and select "Proceed" to resume batch execution.

For more information on EOD stages, please refer to EOD Configurations Guide of the respective products.

2.7 Checklists

You can configure the checklists details.

- 2.7.1 Checklists Linkage Maintenance
- 2.7.2 Checklist Maintenance

2.7.1 Checklists Linkage Maintenance

The summary screen provides a list of configured checklists linkage. You can configure a checklists linkage using the Checklists Linkage Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Checklists**.
2. Under **Checklists**, click **Checklists Linkage Maintenance**.

   → The **Checklists Linkage Maintenance** screen is displayed.

   Figure 14: Checklists Linkage Maintenance

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

   Table 21: Checklists Linkage Maintenance – Field Description

Field	Description
Process Code	Displays the process code.
Application Category Code	Displays the application category code.
Stage Code	Displays the stage code.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. Click '**+**' to configure the checklists linkage maintenance.

   → The **Checklist Linkage Maintenance** screen is displayed.

Figure 15: Checklists Linkage Maintenance

4. On **Checklists Linkage Maintenance** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 22: Checklists Linkage Maintenance – Field Description

Field	Description
Process Code	Click **Search** and select the process code to maintain the checklists.
Process Name	Displays the name of the process code.
Application Category Code	Select the application category code from the drop-down list.
Application Category Name	Displays the name of the application category.
Stage Code	Select the stage code from the drop-down list.
Stage Name	Displays the name of the stage code to be maintained.

5. Click '**+'** to add a row and provide the checklist code details.
6. Click **Save**. You can view the configured **Checklists Linkage Maintenance**.

2.7.2 Checklist Maintenance

The summary screen provides a list of configured checklist. You can configure a checklist using the Checklist Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **Checklists**.
2. Under **Checklists**, click **Checklist Maintenance**.

→ The **Checklist Maintenance** screen is displayed.

Figure 16: Checklist Maintenance

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

Table 22: Checklist Maintenance – Field Description

Field	Description
Checklist Name	Displays the checklist name.
Checklist Code	Displays the code of the checklist maintained.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. Click '**+**' on **Checklist Maintenance** screen to configure the new checklist.

→ The **Checklist** screen is displayed.

Figure 22: Checklist

4. On **Checklist** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 22: Checklist – Field Description

Field	Description
Checklist Code	Displays the auto-generated code for each new checklist.
Checklist Name	Specify the name of the checklist to be maintained.

5. Click **Save**, you can view the configured in **Checklist Maintenance.**

2.8 Country Code

You can configure a country code.

This section contains following subsections:

- 2.8.1 Country Code Summary
- 2.8.2 Country Code Maintenance

2.8.1 Country Code Summary

The summary screen provides a list of configured country code. You can configure a country code using the Country Code Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Country Code**.
2. Under **Country Code**, click **View Country Code**.

→ The **View Country Code** screen is displayed.

Figure 17: View Country Code

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

Table 23: View Country Code – Field Description

Field	Description
Country Code	Displays the country code details.
Country Name	Displays the name of the country.
ISO Numeric Code	Displays the ISO numeric code details of the country code.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.8.2 Country Code Maintenance

The maintenance screen allows you to configure a country code. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Country Code**.
2. Under **Country Code**, click **Create Country Code**.

→ The **Create Country Code** screen is displayed.

Figure 18: Create Country Code

3. On **Create Country Code** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 24: 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.
Limit Currency	Specify the limit currency.
Overall Limit	Specify the overall limit.
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.

Field	Description
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 you do 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**. You can view the configured country code details in the Country Code Summary.

2.9 Currency Definition

You can define the attributes of the currencies in which the bank can deal. For each currency, you can define attributes such as, the SWIFT code for the currency, the country 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 are available to the branches based on the currencies defined for the country linked to the branch.

This section contains following subsections:

- 2.9.1 Currency Definition Summary
- 2.9.2 Currency Definition Maintenance

2.9.1 Currency Definition Summary

The summary screen provides a list of defined currency. You can define a currency using the Currency Definition Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Currency Definition**.
2. Under **Currency Definition**, click **View Currency Definition**.

   → The **View Currency Definition** screen is displayed.

Figure 19: View Currency Definition

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

Table 25: 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.

Field	Description
Maintenance Country	Displays the maintenance country.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

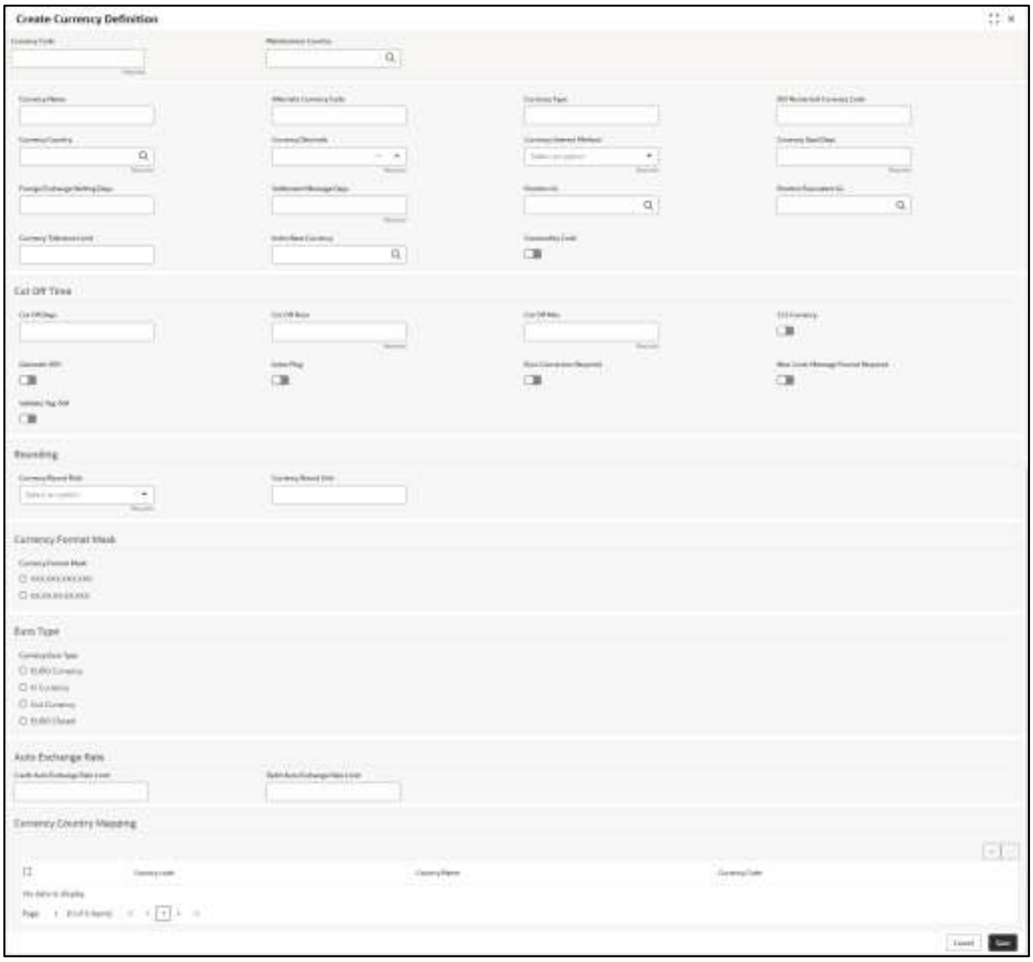
2.9.2 Currency Definition Maintenance

The maintenance screen allows you to define currency. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Currency Definition**.
2. Under **Currency Definition**, click **Create Currency Definition**.

   → The **Create Currency Definition** screen is displayed.

   Figure 20: Create Currency Definition

3. On **Create Currency Definition** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 26: Create Currency Definition – Field Description

Field	Description
Currency Code	Specify the currency code.
Maintenance Country	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	Search and select the required currency country.
Currency Decimals	Select the currency decimals.
Currency Interest Method	Select the currency interest method from the drop-down list.
Currency Spot Days	Select the number of spot working days applicable for the currency.
Foreign Exchange Netting Days	Select the number of days for the foreign exchange netting.
Settlement Message Days	Select the settlement message days.
Position GL	Search 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	Search and select the required index base currency.
Commodity Code	By default, this is disabled. If selected, enables a commodity code.
Cut Off Time	Specify the cut off time details.

Field	Description
Cut Off Days	Select the cut off days for the payment transaction involving the currency.
Cut Off Hour	Select the hour of the day for the cut off.
Cut Off Min	Select the minute of the hour for the cut off.
CLS Currency	By default, this is disabled. If selected, allow customers of your 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.
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.
Rounding	Specify the Rounding details of currency.
Currency Round Rule	Select the currency round rule from the dropdown list.
Currency Round Unit	Select the currency round unit.
Currency Format Mask	Specify the currency format mask details.
Currency Format Mask	Select one of the currency format.
Euro Type	Specify the Euro Type details.
Currency Euro Type	Select one of the currency Euro type.

Field	Description
Auto Exchange Rate	Specify the Auto exchange rate details.
Credit Auto Exchange Rate Limit	Specify the credit automatic exchange rate limit.
Debit Auto Exchange Rate Limit	Specify the debit automatic exchange rate limit.
Currency Country Mapping	Specify the currency country mapping details.
Country Code	Search and select the required country code.
Country Name	Specify the name of the country.
Currency Code	Search and select the required currency code.

Cut Off Time

Refers to the time by which all transactions involving a currency should be generated. For a currency, you 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.

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 1200 hrs, if the payment is received on 1st June 2018, it must be received before 1200 hrs.

4. Click **Save**. You can view the defined currency in the Currency Definition Summary.

2.10 Currency Exchange Rate

You can maintain exchange rates for a currency pair, the rates at which you 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. You can define a rate type which you would like to associate with a transaction type example: CASH, TRAVCHKS, and so on.

You 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 section contains following subsections:

- 2.10.1 Currency Exchange Rate Summary
- 2.10.2 Currency Exchange Rate Maintenance

2.10.1 Currency Exchange Rate Summary

The summary screen provides a list of configured currency exchange rates. You can configure a currency exchange rate using the Currency Exchange Rate Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 21: View Currency Exchange Rate

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

   Table 27: 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
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

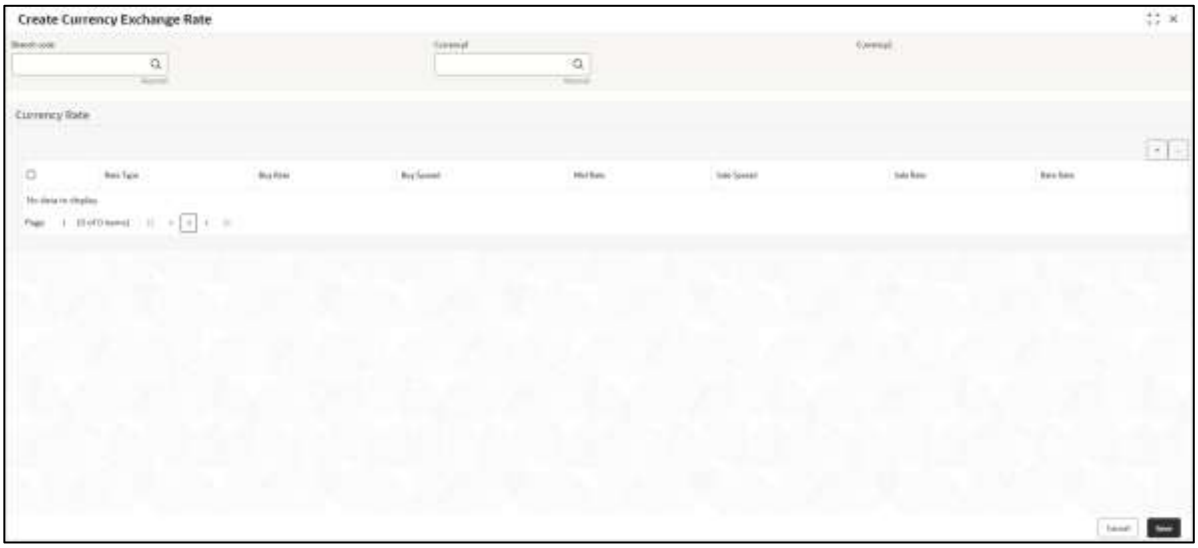
2.10.2 Currency Exchange Rate Maintenance

The maintenance screen allows you to configure a currency exchange rate. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 22: Create Currency Exchange Rate



3. On Create Entity screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 28: Create Currency Exchange Rate – Field Description

Field	Description
Branch Code	Search and select the required branch code.
Currency 1	Search and select the required currency.
Currency 2	Search and select the required currency.
Currency Rule	Specify the currency rule details.
Rate Type	Select a rate type from the drop-down list.

Field	Description
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: **1. 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. **2. 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.
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: **1. 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. **2. 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.

Field	Description
Rate Date	Select a rate date from the drop-down calendar.

4. Click **Save**. You can view the configured currency exchange rate details in the Currency Exchange Rate Summary.

2.11 Currency Holiday Master

You 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's 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, five years hence, you 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 section contains following subsections:

- 2.11.1 Currency Holiday Master Summary
- 2.11.2 Currency Holiday Master Maintenance

2.11.1 Currency Holiday Master Summary

The summary screen provides a list of configured currency holiday. You can configure a currency holiday using the Currency Holiday Master Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 23: View Currency Holiday Master

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

Table 29: View Currency Holiday Master – Field Description

Field	Description
Currency	Displays the currency details.
Weekly Holidays	Displays the weekly holidays associated with the currency.
Status	Displays the status of the record.

Field	Description
Modification Number	Displays the number of modifications performed on the record.

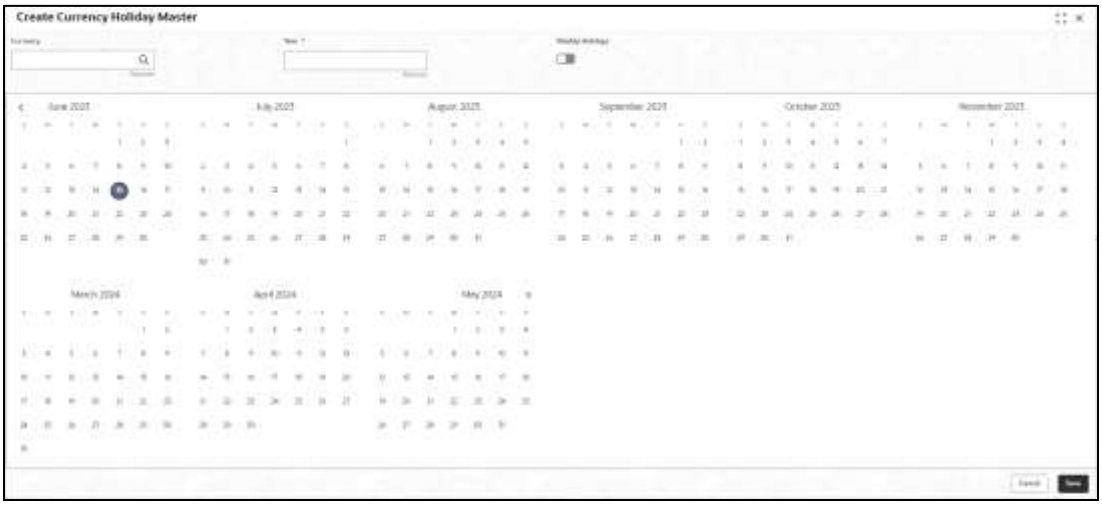
2.11.2 Currency Holiday Master Maintenance

The maintenance screen allows you to configure a currency holiday. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 24: Create Currency Holiday Master

3. On **Create Currency Holiday Master** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 30: Create Currency Holiday Master – Field Description

Field	Description
Currency	Search 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. The selected dates appear in blue highlighted circle.
5. Click **Save**. You can view the configured currency holidays in the Currency Holiday Master Summary.

2.12 Currency Pair Definition

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, is determined through a third currency. The third currency is usually the US dollar, since the US dollar is quoted in all trading centers.

You 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 section contains following subsections:

- 2.12.1 Currency Pair Definition Summary
- 2.12.2 Currency Pair Definition Maintenance

2.12.1 Currency Pair Definition Summary

The summary screen provides a list of define a currency pair. You can define a currency pair using the Currency Pair Definition Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

Figure 25: View Currency Pair Definition

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

Table 31: 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.

Field	Description
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.12.2 Currency Pair Definition Maintenance

The maintenance screen allows you to define currency pair. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 26: Create Currency Pair Definition

3. On **Create Currency Pair Definition** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 32: Create Currency Pair Definition – Field Description

Field	Description
Currency 1-2	Search 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 you 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

Field	Description
	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	Search and select the required maintenance country.
Check through Currency	By default, this is disabled. If selected, indicates a check through currency.
Through Currency	Search 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.
Points Multiplier	Select the points multiplier.
Quotation	Select one of the required quotation: • Direct method 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 method 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 one 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 you specify applies to two instances: • While maintaining exchange rates for the currency pair • While maintaining customer spread for the currency pair

4. Click **Save**. You can view the defined currency pair details in the Currency Pair Definition Summary.

2.13 Currency Rate Type

You can configure a currency rate type.

This section contains following subsections:

- 2.13.1 Currency Rate Type Summary
- 2.13.2 Currency Rate Type Maintenance

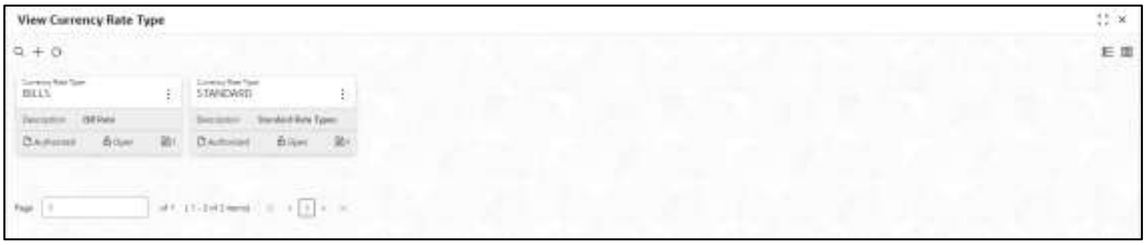
2.13.1 Currency Rate Type Summary

The summary screen provides a list of configured currency rate type. You can configure a currency rate type using the Currency Rate Type Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 27: View Currency Rate Type



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

Table 33: View Currency Rate Type – Field Description

Field	Description
Currency Rate Type	Displays the currency rate type.
Description	Displays additional information about the currency rate type.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.13.2 Currency Rate Type Maintenance

The maintenance screen allows you to configure currency rate type. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 28: Create Currency Rate Type

3. On **Create Currency Rate Type** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 34: 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**. You can view the configured currency rate type details in the Currency Rate Type Summary.

2.14 Customer Access Group

You can configure a customer access group.

This section contains following subsections:

- 2.14.1 Customer Access Group Summary
- 2.14.2 Customer Access Group Maintenance

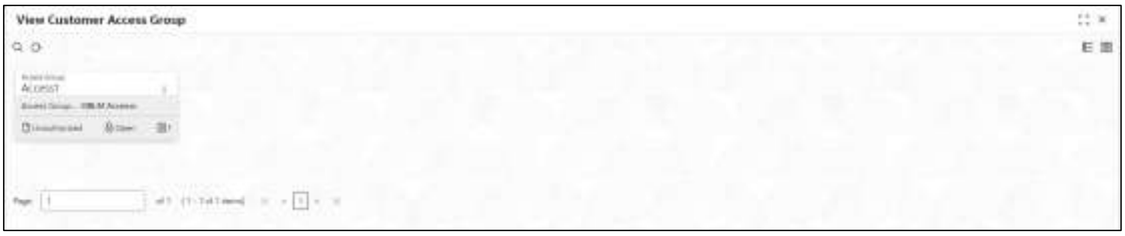
2.14.1 Customer Access Group Summary

The summary screen provides a list of configured customer access group. You can configure a customer access group using the Customer Access Group Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

Figure 29: View Customer Access Group



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

Table 35: View Customer Access Group – Field Description

Field	Description
Access Group	Displays the access group.
Access Group Description	Displays additional information about the customer access group.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.14.2 Customer Access Group Maintenance

The maintenance screen allows you to configure a customer access group. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 30: Create Customer Access Group

3. On **Create Customer Access Group** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 36: Create Customer Access Group – Field Description

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

4. Click **Save**. You can view the configured customer access group details in the Customer Access Group Summary.

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.

2.15 Customer Category

You can configure a customer category.

This section contains following subsections:

- 2.15.1 Customer Category Summary
- 2.15.2 Customer Category Maintenance

2.15.1 Customer Category Summary

The summary screen provides a list of configured customer category. You can configure a customer category using the Customer Category Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 31: View Customer Category

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

Table 37: View Customer Category – Field Description

Field	Description
Customer Category	Displays the customer category.
Description	Displays additional information about the customer category.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.15.2 Customer Category Maintenance

The maintenance screen allows you to configure a customer category. To process this screen, perform the following steps:

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 is displayed.

   Figure 32: Create Customer Category

3. On **Create Customer Category** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 38: 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**. You can view the configured customer category details in the Customer Category Summary.

2.16 Data Segment

You can configure the data segment details.

- 2.16.1 Data Segment Summary
- 2.16.2 Data Segment Maintenance

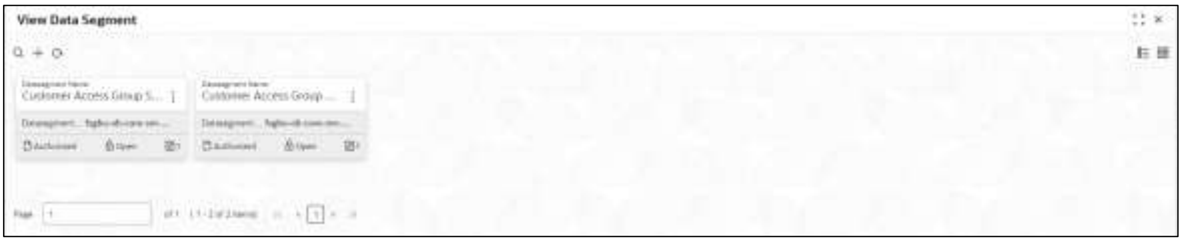
2.16.1 Data Segment Summary

The summary screen provides a list of configured data segment. You can configure a data segment using the Data Segment Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Data Segment**.
2. Under **Data Segment**, click **View Data Segment**.

→ The **View Data Segment** screen is displayed.

Figure 33: View Data Segment



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

Table 39: View Data Segment – Field Description

Field	Description
Datasegment Name	Displays the datasegment name.
Datasegment Code	Displays the datasegment code.
Maker	Displays the name of the user who has configured the datasegment details.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.16.2 Data Segment Maintenance

The maintenance screen allows you to configure a datasegment. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Data Segment**.
2. Under **Data Segment**, click **Create Data Segment**.

   → The **Create Data Segment** screen is displayed.

   Figure 34: Create Data Segment

3. On **Data Segment** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 40: Create Data Segment – Field Description

Field	Description
Data Segment Name	Specify the data segment name to be maintained.
Data Segment Code	Specify the data segment code to be used.
Domain	Click **Search** icon and select the domain
Sub-Domain	Specify the sub domain details.
Purpose	Specify the purpose details.

4. Click **Save**. You can view the configured data segment in the Data Segment Summary.

2.17 ECA System

You can configure the External Credit Approval (ECA) system.

This section contains following subsections:

- 2.17.1 ECA System Summary
- 2.17.2 ECA System Maintenance

2.17.1 ECA System Summary

The summary screen provides a list of configured ECA system. You can configure the ECA system details using the ECA System Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 35: View ECA System

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

Table 41: View ECA System – Field Description

Field	Description
Description	Displays any additional information of the ECA system.
ECA System	Displays the name of the ECA system.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

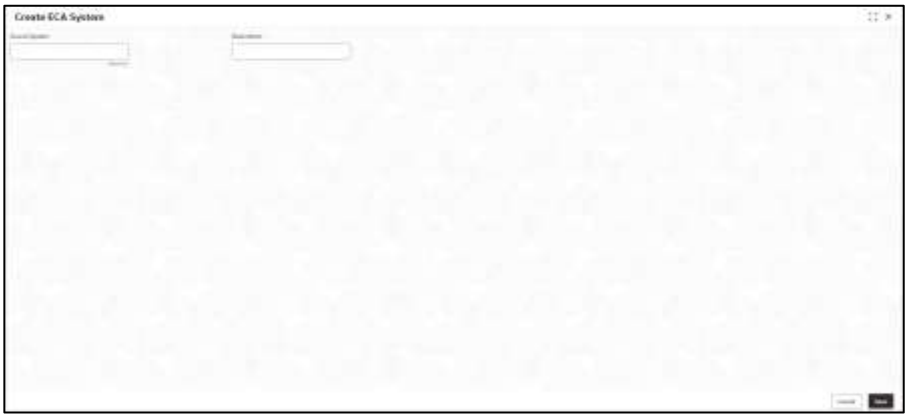
2.17.2 ECA System Maintenance

The maintenance screen allows you to configure ECA system details. To process this screen, perform the following steps:

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 is displayed.

   Figure 36: Create ECA System



3. On **Create ECA System** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 42: 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**. You can view the configure ECA system details in the ECA System Summary.

2.18 External Bank Parameters

You can configure bank level parameters.

This section contains following subsections:

- 2.18.1 External Bank Parameters Summary
- 2.18.2 External Bank Parameters Maintenance

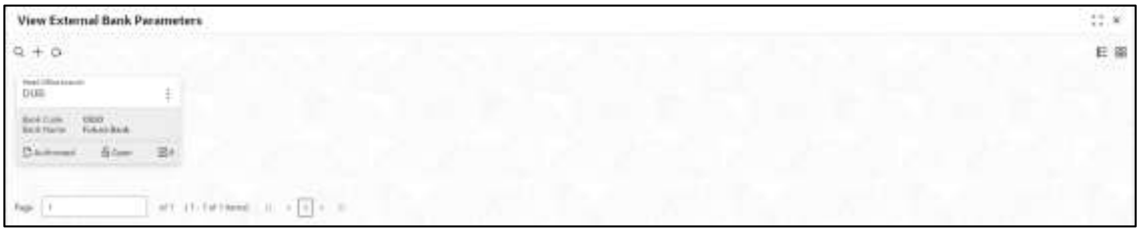
2.18.1 External Bank Parameters Summary

The summary screen provides a list of configured external bank parameters. You can configure the external bank parameters using the External Bank Parameters Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 37: View External Bank Parameters



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

Table 43: 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.
Bank Name	Displays the name of the bank.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.18.2 External Bank Parameters Maintenance

The maintenance screen allows you to configure external bank parameters. The Bank Code will be auto-created for an entity when the entity is created. Please refer the **View External Bank Parameters** screen for the bank code created. To process this screen, perform the following steps:

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 is displayed.

   Figure 38: Create External Bank Parameters

3. On **Create External Bank Parameters** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 44: Create External Bank Parameters – Field Description

Field	Description
Bank Code	Specify the code for the bank.
Bank Name	Specify the name of the bank.
Head Office Branch	Search and select the required head office branch.
Branch Description	Based on the Head Office Branch selected, the information is auto-populated.
Number of Days to Forget Customer	Specify the number of days to inactive/forget the customer.

4. Click **Save**. You can view the configure core bank parameter details in the External Bank Parameters Summary.

2.19 External Branch Parameters

You can configure branch level parameters.

This section contains following subsections:

- 2.19.1 External Branch Parameters Summary
- 2.19.2 External Branch Parameters Maintenance

2.19.1 External Branch Parameters Summary

The summary screen provides a list of configured external branch parameters. You can configure the external branch parameters using the External Branch Parameters Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 39: View External Branch Parameters

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

Table 45: View External Branch Parameters – Field Description

Field	Description
Branch Code	Displays the code of the branch associated with the bank.
Branch Name	Displays the name of the branch associated with the bank.
Local Currency	Displays the local currency details.
Source Branch Code	Displays the code of the source branch.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

NOTE: The Branch Parameters for the Head Office (HO) Branch of the entity will get 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 Parameterrs

2.19.2 External Branch Parameters Maintenance

The maintenance screen allows you to configure the branch parameters. To process this screen, perform the following steps:

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 is displayed.

Figure 40: Create External Branch Parameters

3. On **Create External Branch Parameters** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 46: Create External Branch Parameters – Field Description

Field	Description
Branch Details	Specify the branch details.
Branch Code	Specify a branch code.
Branch Name	Specify a name for the branch.
Local Currency	Search and select the required local currency.
Source System	Search and select the required source system.

Field	Description
Source Branch Code	Specify a source branch code.
Branch Address	Specify the branch address details.
Address Line 1-3	Specify the address details.
Other Details	Specify the other details.
Host Code	Search and select the required host code.
Country Code	Based on the Host Code selected, the information is auto-populated.
Host Name	Specify the name for the host.
Walk-in Customer	Search and select the required walk-in customer.
Weekly Holiday 1-2	Select a weekly holiday from the dropdown 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.
Swift Address	Specify the swift address details.
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**. You can view the configure branch parameter details in the External Branch Parameters Summary.

2.20 External Chart Account

You can configure an external chart.

This section contains following subsections:

- 2.20.1 External Chart Account Summary
- 2.20.2 External Chart Account Maintenance

2.20.1 External Chart Account Summary

The summary screen provides a list of configured external chart accounts. You can configure an external chart account using the External Chart Account Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 41: View External Chart Account

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

Table 47: View External Chart Account – Field Description

Field	Description
General Ledger Code	Displays the code of the general ledger.
Source System	Displays the source system.
Source System GL Code	Displays the GL code of the source system.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.20.2 External Chart Account Maintenance

The maintenance screen allows you to configure external chart accounts. To process this screen, perform the following steps:

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 is displayed.

   Figure 42: Create External Chart Account

3. On **Create External Chart Account** screen, specify the fields. For more information on fields, refer to the field description table below.

   Table 48: 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	Search 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**. You can view the configured external chart details in the External Chart Account Summary.

2.21 External Customer

You can configure the external customer details.

This section contains following subsections:

- 2.21.1 External Customer Summary
- 2.21.2 External Customer Maintenance

2.21.1 External Customer Summary

The summary screen provides a list of configured external customer details. You can configure the external customers using the External Customer Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 43: View External Customer

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

Table 49: 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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.21.2 External Customer Maintenance

The maintenance screen allows you to configure the external customer details. To process this screen, perform the following steps:

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 is displayed.

   Figure 44: Create External Customer

3. On **Create External Customer** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 50: Create External Customer – Field Description

Field	Description
Customer Details	Specify the customer details.
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.

Field	Description
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	Search and select the required source system.
Customer Category	Search and select the required customer category.
Relationship Manager ID	Specify the relationship manager ID.
Access Group	Search and select the required access group.
Address	Specify the address details.
Address Line 1-4	Specify the customer address details.
Country	Search and select the required country.
Other Details	Specify the other details.
Postal Code	Specify the postal code details.
Deceased	By default, this is disabled. If selected, indicates the customer is deceased.
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 customer’s 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.

Field	Description
Staff	By default, this is disabled. If selected, indicates a staff customer.
Language	Search and select the required language.
Nationality	Search and select the required nationality.

4. Click **Save**. You can view the configured external customer details in the External Customer Summary. In addition, the external customers can be directly replicated from the host system using service API.

2.22 External Customer Account

You can configure the external customer account details.

This section contains following subsections:

2.22.1 External Customer Account Summary

The summary screen provides a list of configured external customer accounts. You can configure the external customer accounts using the External Customer Account Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 45: View External Customer Account

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

Table 51: View External Customer Account – Field Description

Field	Description
Customer Number	Displays the customer number associated with the account name.
Customer Account Number	Displays the customer account number associated with the account name.
Account Name	Displays the name of the account.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.22.2 External Customer Account Maintenance

The maintenance screen allows you to configure external customer account details. To process this screen, perform the following steps:

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 is displayed.

   Figure 46: Create External Customer Account

3. On **Create External Customer Account** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 52: Create External Customer Account – Field Description

Field	**Description**
Account Details	Specify the account details.
Customer Account Number	Specify the customer account number.
Account Name	Specify the name for an account.
Customer Number	Search and select the required customer number.
Customer Name	Based on the Customer Number selected, the information is auto-populated.
Account Currency	Search and select the required account currency.
Account Class	Select the account class from the drop-down list.

Field	Description
Source Account Branch	Search and select the required source account branch.
Source Customer Account	Based on the Source Account Branch selected, the information is auto- populated.
Account IBAN	Specify the account IBAN details.
Payment Entitlement Group	Search and select the payment entitlement group.
Branch Entitlement	Search and select the branch entitlement group.
Address	Specify the address details.
Address Line 1-4	Specify the address details.
Country	Search and select the required country.
Other Details	Specify the other details.
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	Search and select the required external credit approval system.
Host Code	Specify the host code details.

Field	Description
Account Open Date	Select an effective date for the account from the dropdown calendar.

4. Click **Save**. You can view the configured external customer account details in the External Customer Account Summary. In addition, the external customer accounts can be directly replicated from the host system using service API.

2.23 External Customer Account Structured Address

You can configure the external customer account structured address details.

This section contains following subsections:

- 2.23.1 View External Customer Account Structured Address
- 2.23.2 Create External Customer Account Structured Address

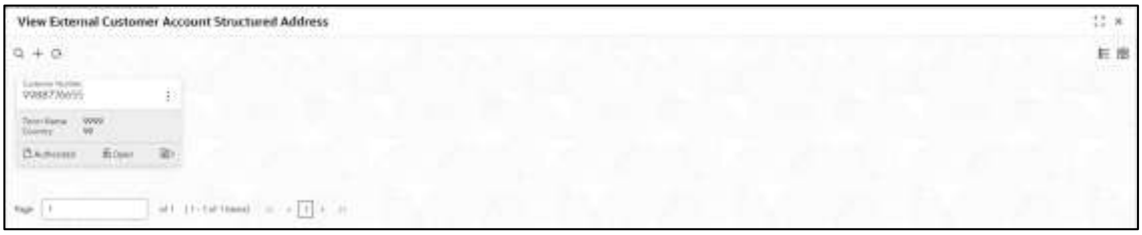
2.23.1 View External Customer Account Structured Address

The summary screen provides a list of configured external customer account structured addresses. You can configure the external customer account structured address using the Create External Customer Account Structured Address. To process this screen, perform the following steps:

1. From **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 is displayed.

Figure 47: View External Customer Account Structured Address



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

Table 53: 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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

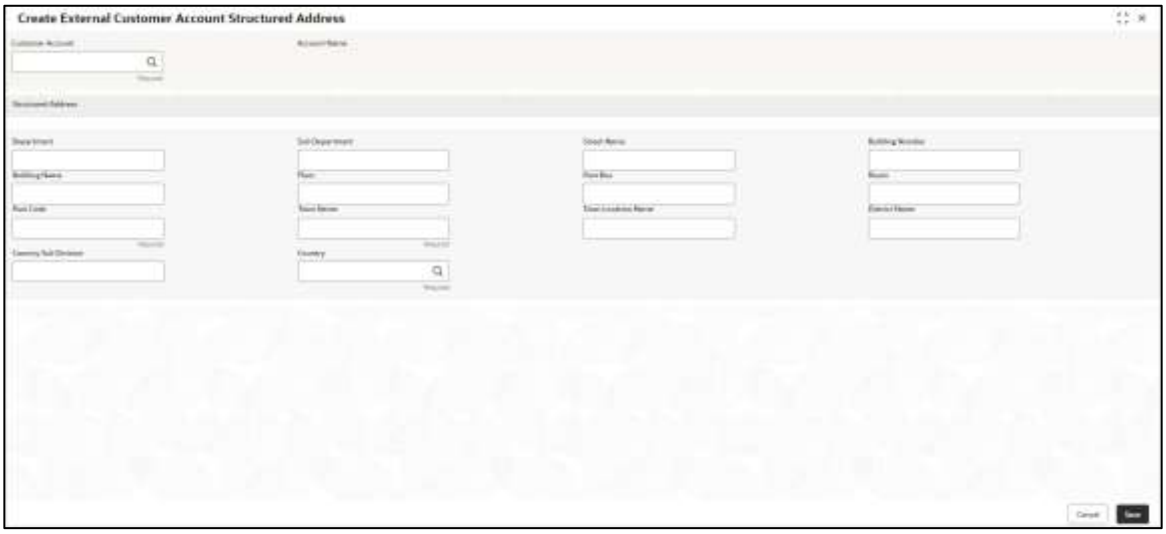
2.23.2 Create External Customer Account Structured Address

The maintenance screen allows you to configure external customer account structured address. To process this screen, perform the following steps:

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 is displayed.

   Figure 48: Create External Customer Account Structured Address



3. On **Create External Customer Account Structured Address** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 54: Create External Customer Account Structured Address – Field Description

Field	Description
Account Details	Specify the account details.
Customer Account	Search and select the required customer account.
Account Name	Specify the name for an account.
Structured Address	Specify the structured address details.
Department	Specify the department.
Sub Department	Search and select the required country.

Field	Description
Street Name	Specify the street name.
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	Specify the country name.

4. Click **Save**. You can view the configured external customer structured address details in View External Customer Account Structured Address.

2.24 External Virtual Account Structured Address

You can view the external virtual account structured address details.

This section contains following subsections:

- 2.24.1 View External Virtual Account Structured Address

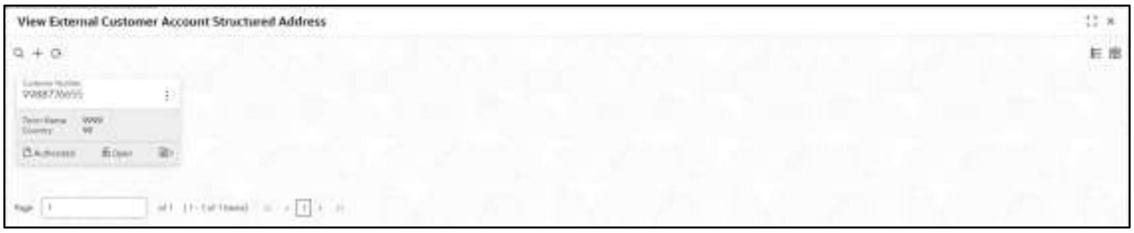
2.24.1 View External Virtual Account Structured Address

The summary screen provides a list of configured virtual account structured addresses. To process this screen, perform the following steps:

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 is displayed.

Figure 49: View External Virtual Account Structured Address



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

Table 55: View External Virtual Account Structured Address – Field Description

Field	Description
Customer Number	Displays the customer number.
Town Name	Displays the town name.
Country	Displays the country name.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

Click on the specific tile to view the structured address details.

2.25 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 section contains following subsections:

- 2.25.1 Forgotten Customers Summary
- 2.25.2 Forget Customer Maintenance

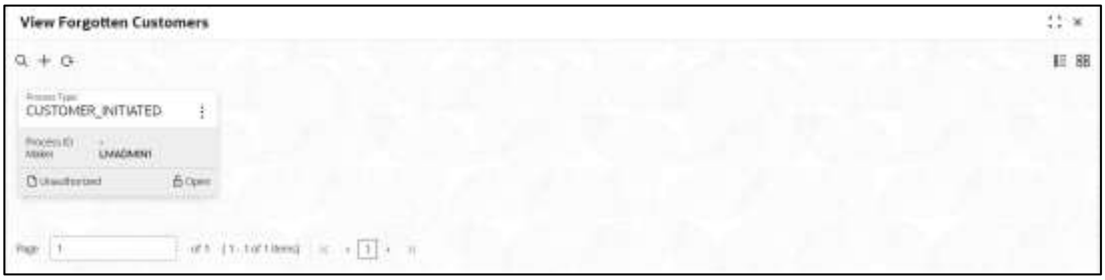
2.25.1 Forgotten Customers Summary

The summary screen provides a list of configured customer to be forgotten. You can configure a customer detail who wants to be forgotten using the Forget Customer Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Forget Process**.
2. Under **Forget Process**, click **View Forgotten Customer**.

→ The **View Forgotten Customer** screen is displayed.

Figure 50: View Forgotten Customers



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

Table 56: View Forgotten Customers – Field Description

Field	Description
Process Type	Indicates if the process is initiated by the customer/bank
Process ID	Displays the forgotten customer's process ID.
Maker	Displays the name of the user who has configured the forgotten customer details.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.25.2 Forget Customer Maintenance

The maintenance screen allows you to configure a customer to be forgotten. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Forget Process**.
2. Under **Forget Process**, click **Forget Customer**.

   → The **Forget Customer** screen is displayed.

   Figure 51: Forget Customer

3. On **Forget Customer** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 57: 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.

4. Click + to add a row and provide the customer/bank details.
5. Click **Save**. You can view the configured forgotten customers in the Forgotten Customers Summary.

2.26 Host Code

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

This section contains following subsections:

- 2.26.1 Host Code Summary
- 2.26.2 Host Code Maintenance

2.26.1 Host Code Summary

The summary screen provides a list of configured host codes. You can configure the host code using the Host Code Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 52: View Host Code

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

Table 58: 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.
Status	Displays the status of the records.
Modification Number	Displays the number of modifications performed on the record.

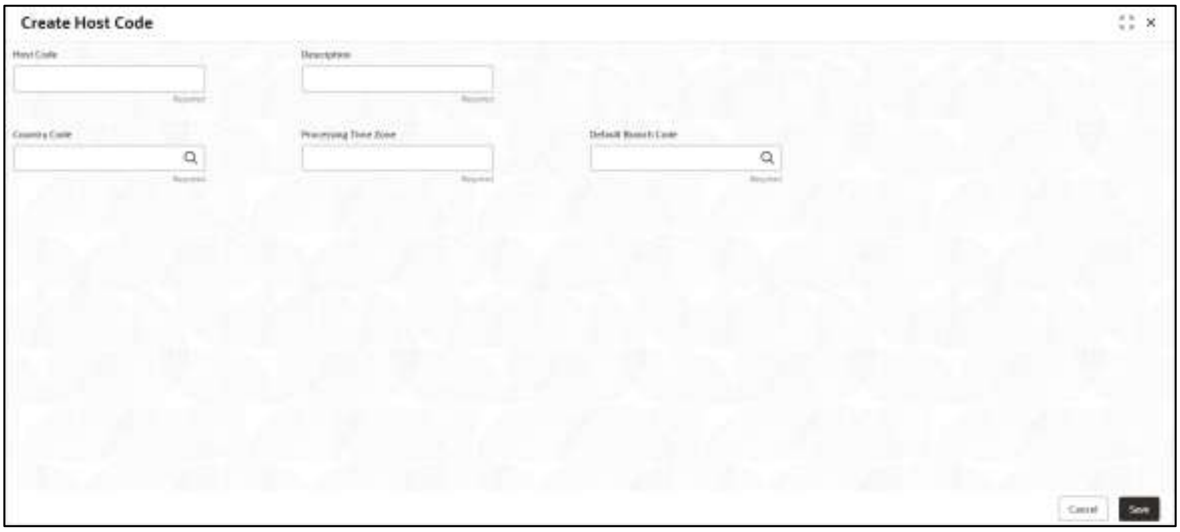
2.26.2 Host Code Maintenance

The maintenance screen allows you to configure host code. To process this screen, perform the following steps:

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 is displayed.

   Figure 53: Create Host Code



3. On **Create Host Code** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 59: 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	Search and select the required country code.
Processing Time Zone	Specify the processing time zone details.
Default Branch Code	Search and select the required default branch code.

4. Click **Save**. You can view the configured host code details in the Host Code Summary.

2.27 Language Code

You can configure a language code.

This section contains following subsections:

- 2.27.1 Language Code Summary
- 2.27.2 Language Code Maintenance

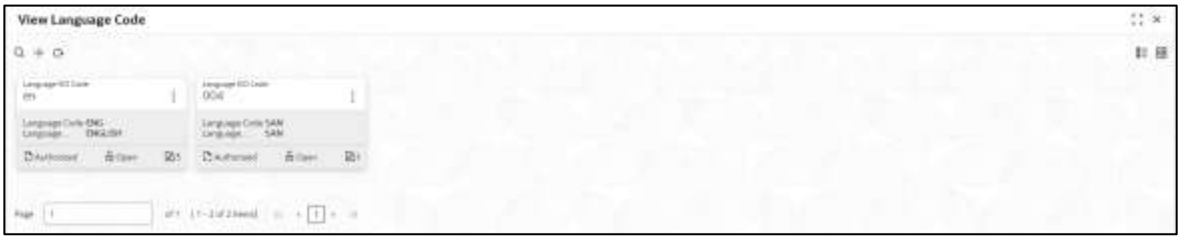
2.27.1 Language Code Summary

The summary screen provides a list of configured language code. You can configure a language code using the Language Code Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, **Core Maintenance.** Under **Core Maintenance**, click **Language Code**.
2. Under **Language Code**, click **View Language Code**.

→ The **View Language Code** screen is displayed.

Figure 54: View Language Code



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

Table 60: 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.
Status	Displays the status of the records.
Modification Number	Displays the number of modifications performed on the record.

2.27.2 Language Code Maintenance

The maintenance screen allows you to configure a language code. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Language Code**.
2. Under **Language Code**, click **Create Language Code**.

   → The **Create Language Code** screen is displayed.

   Figure 55: Create Language Code

3. On **Create Language Code** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 61: 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**. You can view the configured language code details in the Language Code Summary.

2.28 Local Holiday

You can configure a local holiday.

This section contains following subsections:

- 2.28.1 Local Holiday Summary
- 2.28.2 Local Holidays Maintenance

2.28.1 Local Holiday Summary

The summary screen provides a list of configured local holidays. You can configure a local holiday using the Local Holidays Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 56: View Local Holiday

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

Table 62: 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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

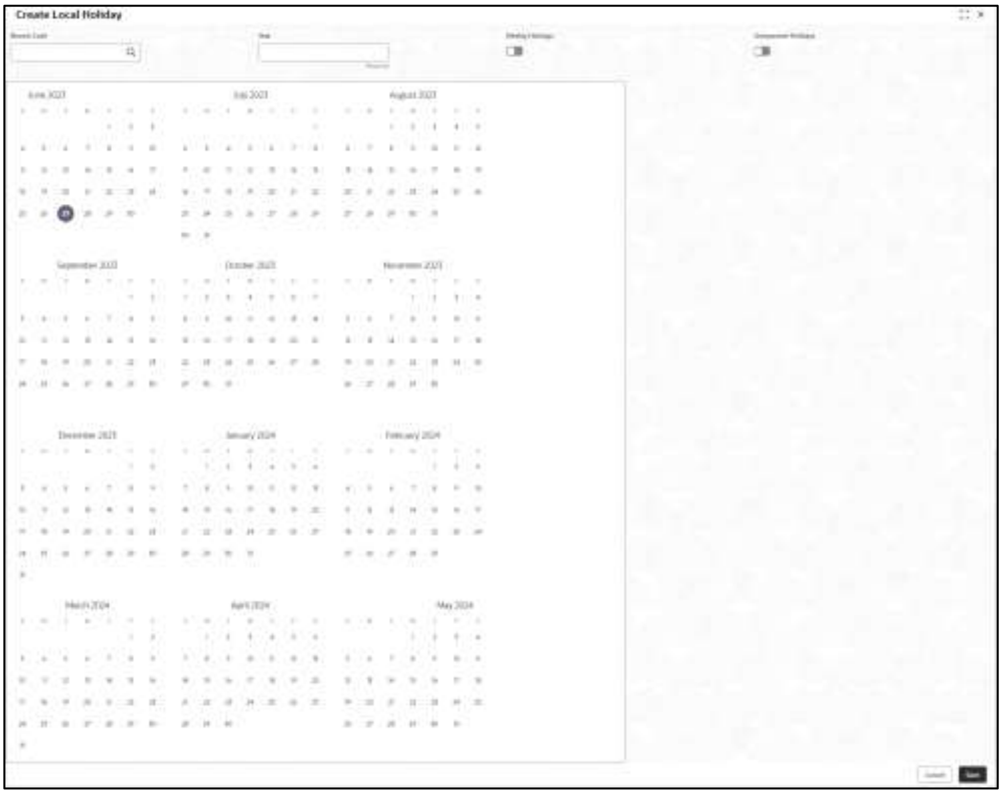
2.28.2 Local Holidays Maintenance

The maintenance screen allows you to configure local holidays. To process this screen, perform the following steps:

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 is displayed.

   Figure 57: Create Local Holiday

3. On **Create Local Holiday** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 63: Create Local Holiday – Field Description

Field	Description
Branch Code	Search 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. The selected dates appear in pink highlighted circle.
5. Click **Save**. You can view the configured local holiday details in the Local Holiday Summary.

2.29 Media

You can configure media information.

This section contains following subsections:

- 2.29.1 Media Summary
- 2.29.2 Media Maintenance

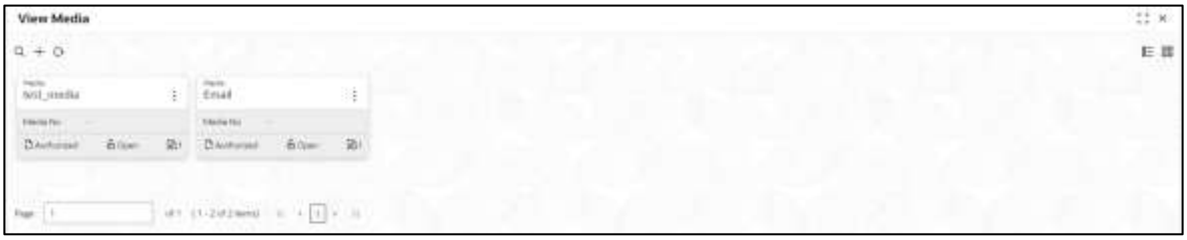
2.29.1 Media Summary

The summary screen provides a list of configured media. You can configure a media using the Media Maintenance. To process this screen, perform the following steps:

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

→ The **View Media** screen is displayed.

Figure 58: View Media



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

Table 64: View Media – Field Description

Field	Description
Media	Displays the name of the media.
Media Number	Displays the number of the media.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.29.2 Media Maintenance

The maintenance screen allows you to configure media. To process this screen, perform the following steps:

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

   → The **Create Media** screen is displayed.

   Figure 59: Create Media

3. On **Create Media** screen, specify the fields. The fields, which are marked with asterisk, are mandatory. For more information on fields, refer to the field description table below.

   Table 65: 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.

Field	Description
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	Select a 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	Select a number the padding characters should be repeated for the advice from the spin box.
Media Details	Specify the media details.
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 **Save**. You can view the configured media details in the Media Summary.

2.30 MIS Group

You can configure the class into the MIS Group.

2.30.1 MIS Group Summary

The summary screen provides a list of configured MIS Group. You can configure the MIS Group details using the MIS Group Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **MIS Class**.
2. Under **MIS Group**, click **View MIS Group.**

→ The **View MIS Group** screen is displayed.

Figure 60: View MIS Group

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

Table 66: View MIS Group – Field Description

Field	Description
MIS Group	Displays the name of the MIS group.
Description	Displays the description of the MIS group.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

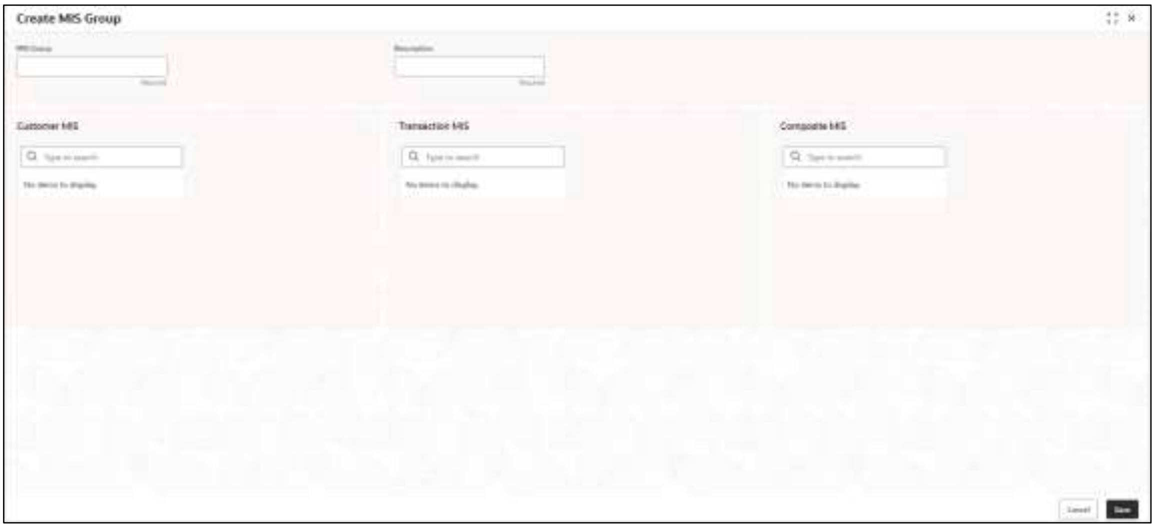
2.30.2 MIS Group Maintenance

This maintenance screen allows you to configure the MIS Group. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **MIS Class**.
2. Under **MIS Group**, click **Create MIS Group.**

→ The **Create MIS Group** screen is displayed.

Figure 61: Create MIS Group



3. On **Create MIS Group** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 22: Create MIS Group – Field Description

Field	Description
MIS Group	Specify the MIS Group.
Description	Specify the description of the MIS Group.
Customer MIS	Click **Search** and select the customer MIS
Transaction MIS	Click **Search** and select the transaction MIS
Composite MIS	Click **Search** and select the composite MIS

4. Click Save, you can view the configure details in MIS Group Summary.

2.31 MIS Class

You can configure the MIS Class.

- 2.31.1 MIS Class Summary
- 2.31.2 MIS Class Maintenance

2.31.1 MIS Class Summary

The summary screen provides a list of configured MIS Class. You can configure the MIS Class details using the MIS Class Maintenance. To process this screen, perform the following steps:

5. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **MIS Class**.
6. Under **MIS Class**, click **View MIS Class.**

→ The **View MIS Class** screen is displayed.

Figure 22: View MIS Class

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

Table 22: View MIS Class – Field Description

Field	Description
MIS Class	Displays the Configured MIS Class.
Description	Displays the description of MIS Class
MIS Type	Displays the type of MIS Class.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.31.2 MIS Class Maintenance

This maintenance screen allows you to configure the MIS Class. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance**. Under **Core Maintenance**, click **MIS Class**.
2. Under **MIS Class**, click **Create MIS Class**.

→ The **Create MIS Class** screen is displayed.

Figure 22: Create MIS Class

3. On **Create MIS Class** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 22: Create MIS Class – Field Description

Field	Description
MIS Class	Specify the MIS Class to be maintained.
Description	Specify the description of the MIS Class code.
MIS Type	Select the type of the MIS class from the drop-down list. The available options are: • **Transaction Class** • **Composite Class** • **Customer Class**
Mandatory	Select the Toggle to make the MIS Code mandatory.

4. Click '+' icon to associate the MIS code to a class.
5. Click **Save**, you can view the configure details in MIS Class Summary.

2.32 Multi-Currency Account Linkage

The Multi-Currency Account (MCA) linkage enables the user to link the sub-accounts to a core multi-currency account. This section contains following subsections:

- 2.32.1 Create MCA Linkage
- 2.32.2 View MCA Linkage

2.32.1 Create MCA Linkage

This maintenance screen allows you to link the sub-accounts to a core multi-currency account. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 62: Create MCA Linkage

3. On **Create MCA Linkage** screen, specify the fields.

   The fields, which are marked with asterisk, are mandatory. For more information on fields, refer to the field description table below.

   Table 67: Create MCA Linkage – Field Description

Field	Description
Multi-Currency Account No	Click search icon 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.

Field	Description
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**. You can view the configured sub-account details in the View MCA Linkage.

2.32.2 View MCA Linkage

This summary screen provides a list of configured sub-accounts to a core multi-currency account. To process this screen, perform the following steps:

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 is displayed.

Figure 63: View MCA Linkage

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

Table 68: View MCA Linkage – Field Description

Field	Description
Multi-Currency Account Number	Displays the multi-currency account number.
Customer Number	Displays the customer number.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.33 Process Code

Process code enables the user to set the process code to the individual stages according to the process.

This section contains following subsections:

- 2.33.1 View Process Code
- 2.33.2 Process Code Maintenance

2.33.1 View Process Code

The summary screen provides a list of configured process codes. You can add a process code using the Process Code Maintenance. To process this screen, perform the following steps:

3. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Process Code**.
4. Under **Process Code**, click **View Process Code**.

→ The **View Process Code** screen is displayed.

Figure 64: View Process Code

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

Table 69: View Process Code – Field Description

Field	Description
Process Code	Displays the process code.
Description	Displays the description of process code.
Status	Displays the status of the record.

2.33.2 Process Code Maintenance

Process Code Maintenance screen allows you to define the stages for a particular process. The process code information that is defined in this screen will be used in further business processing to construct the stages. To process this screen, perform the following steps:

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

   → The **Process Code** screen is displayed.

   Figure 65: Process Code

2. On **Process Code** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 70: 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.

Field	Description
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 an existing 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 an existing row with phase details.

3. Click **Save**. You can view the configured process codes in the View Process Code.

2.34 Priority Code

You can configure the priority code.

- 2.34.1 Customer Priority Maintenance
- 2.34.2 Priority Code Maintenance

2.34.1 Customer Priority Maintenance

The summary screen provides a list of configured customer priority maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Priority Code**.
2. Under **Priority Code**, click **Customer Priority Maintenance.**

→ The **Customer Priority Maintenance** screen is displayed.

Figure 22: Customer Priority Maintenance

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

Table 71: Customer Priority Maintenance – Field Description

Field	Description
Customer Name	Displays the name of the customer.
Customer Code	Displays the code of the customer.
Maker	Displays the name of the user who has configured the customer priority details.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

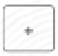
3. Click '+' button to configure the new customer priority maintenance.

→ The **Customer Priority Maintenance** screen is displayed.

Figure 66: Customer Priority Maintenance

4. On **Customer Priority Maintenance** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 72: Customer Priority Maintenance – Field Description

Field	Description
Customer Number	Click **Search** and select the customer number from the list.
Customer Name	Displays the name of the selected customer.
Branch	Select the branch of the customer from the drop-down list.
	Click '+' icon to add the new row for the process codes configuration.
Process Code	Click **Search** and select the process code from the list.
Process Name	Displays the name of the selected process code.
Priority	Select the priority of the process code from the drop-down list.
Edit	Click the 'Edit' action button to modify the details.

5. Click **Save** to save the details capture for customer priority maintenance.

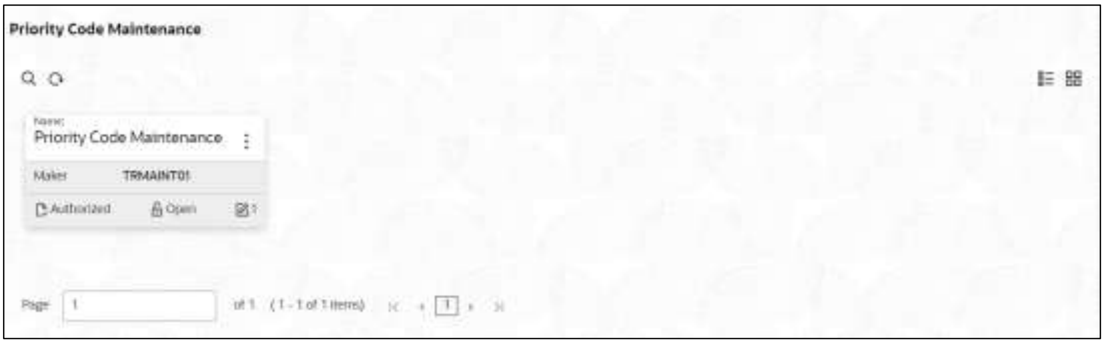
2.34.2 Priority Code Maintenance

The summary screen provides a configured priority code maintenance. To process this screen, perform the following steps:

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

→ The **Priority Code Maintenance** screen is displayed.

Figure 67: Priority Code Maintenance



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

Table 73: Priority Code Maintenance

Field	Description
Name	Displays the name of the priority code configured.
Maker	Displays the name of the user who has configured the priority code details.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.35 Pricing Source System

You can configure the pricing source system.

This section contains following subsections:

- 2.35.1 Pricing Source System Summary
- 2.35.2 Pricing Source System Maintenance

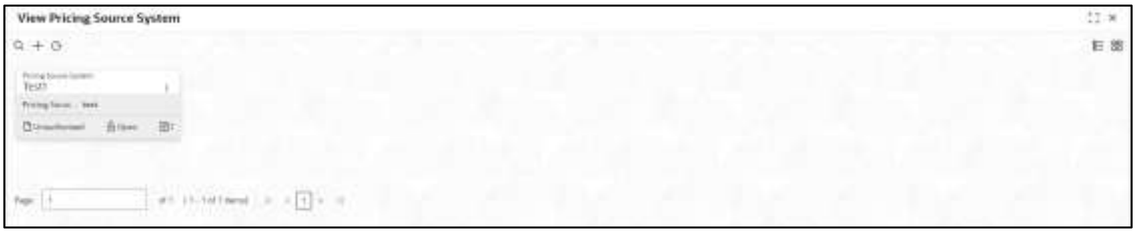
2.35.1 Pricing Source System Summary

The summary screen provides a list of configured Pricing Source system. You can configure the pricing source system details using the Pricing Source System Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

Figure 68: View Pricing Source System



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

Table 74: 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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

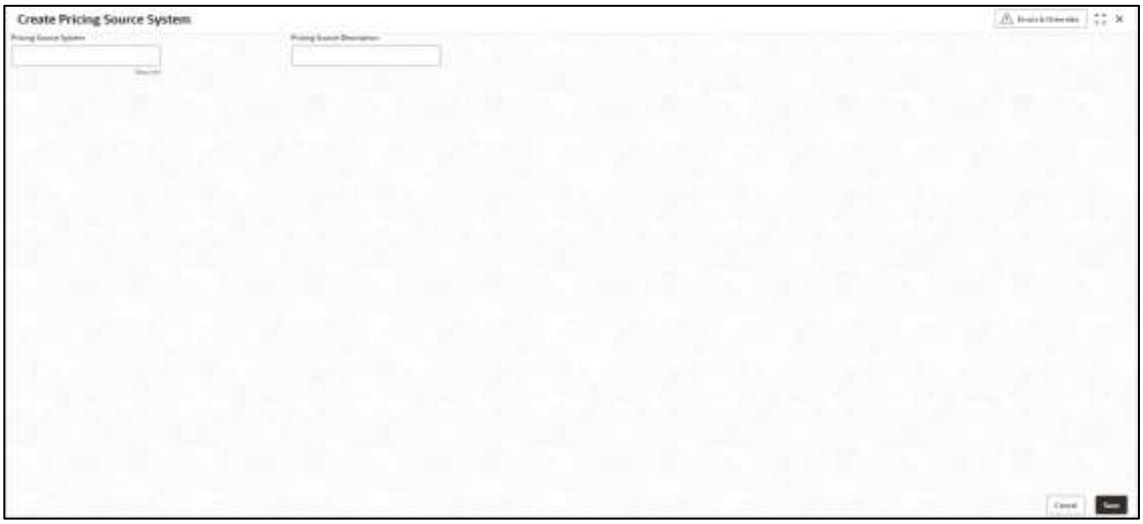
2.35.2 Pricing Source System Maintenance

The maintenance screen allows you to configure Pricing Source System details. To process this screen, perform the following steps:

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 is displayed.

   Figure 69: Create Pricing Source System



3. On **Create Pricing Source System** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 75: 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**. You can view the configure Pricing Source system details in the Pricing Source System Summary.

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2.36 Resource Class

You can configure the resource class details.

- 2.36.1 Resource Class Summary
- 2.36.2 Resource Class Maintenance

2.36.1 Resource Class Summary

The summary screen provides a list of configured Resource Class system. You can configure the resource class details using the Resource Class Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Resource Class**.
2. Under **Resource Class**, click **View Resource Class**.

→ The **View Resource Class** screen is displayed.

Figure 70: View Resource Class

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

Table 76: View Resource Class – Field Description

Field	Description
Resource Class Code	Displays the code of the resource class.
Resource Class Description	Displays the description of the resource class.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.36.2 Resource Class Maintenance

The maintenance screen allows you to configure Resource Class details. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Resource Class**.
2. Under **Resource Class**, click **Create Resource Class**.

→ The **Create Resource Class** screen is displayed.

Figure 71: Create Resource Class

3. On **Create Resource Class** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 77: Create Resource Class – Field Description

Field	Description
Code	Specify the Code for the resource class to configure.
Description	Specify the description for the code.
Kernel Domains	This section provides the information related to kernel domains.
+	Click this icon to add the new kernel domain.
Domain	Click Search and select the domain from the list.
Data segments	Click '+' and select the required data segments for the domain to be configured.
Extended Domain	This section provides the information related to extended domains.
+	Click this icon to add the new extended domain.
Domain	Click Search and select the domain from the list.

Field	Description
URL	Specify the URL of the selected domain.
Data segments	Click '+' and select the required data segments for the domain to be configured.

4. Click **Save**. You can view the configure Resource Class details in the Resource Class Summary.

2.37 SLA Maintenance

You can configure the SLA Maintenance details.

- 2.37.1 View SLA
- 2.37.2 Create SLA

2.37.1 View SLA

The summary screen provides a list of configured SLA Maintenance. You can configure the Create SLA details using the. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **SLA Maintenance**.
2. Under **SLA Maintenance**, click **View SLA.**

   → The **View SLA** screen is displayed.

Figure 72: View SLA

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

Table 78: Create SLA – Field Description

Field	Description
Process Code	Displays the process code of the SLA Maintenance configured.
Application	Displays the name of the application.
Maker	Displays the name of the user who has configured the SLA Maintenance details.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.37.2 Create SLA

The create screen allows you to configure SLA Maintenance details. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **SLA Maintenance**.
2. Under **SLA Maintenance**, click **Create SLA.**

   → The **Create SLA** screen is displayed.

   Figure 73: Create SLA

3. On **Create SLA** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 79: Create SLA – Field Description

Field	Description
Product/Application Code	Click Search icon and select the Product or Application Code.
Product/Application Name	Displays the name of the Product/Application.
Business Process Code	Click Search icon and select the Business Process Code for which the SLA maintenance has to be made.
Business Process Name	Displays the Business Process name based on the Business Process code selected.
Branch	Select the branch code for which SLA maintenance has to be done.

Field	Description
Branch Working Hours	Click the icon to view the branch working hours.
Include for SLA Calculation	Select the checkbox to consider the below options for the SLA calculation. • **Branch Holidays** • **Currency Holidays** • **Hold Time** • **Customer Clarification** • **Off Branch Time Transactions**

4. Click **Calculate** to view data will appear for the selected Business process code, you can view the configure SLA Maintenance details in View SLA.

2.38 Screenclass

You can configure screenclass details:

- 2.38.1 View Screenclass
- 2.38.2 Create Screenclass

2.38.1 View Screenclass

The summary screen provides a list of configured Screenclass Maintenance. You can configure the Create Screenclass details using the. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Screenclass**.
2. Under **Screenclass**, click **View Screenclass**.

→ The **View Screenclass** screen is displayed.

Figure 74: View Screenclass

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

Table 80: View Screenclass – Field Description

Field	Description
Screenclass Code	Displays the code of screenclass.
Screenclass Description	Displays the description of screenclass.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.38.2 Create Screenclass

The create screen allows you to configure screenclass details. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Screenclass**.
2. Under **Screenclass**, click **Create Screenclass**.

→ The **Create Screenclass** screen is displayed.

Figure 75: Create Screenclass

3. On **Create Screenclass** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 22: Create Screenclass – Field Description

Field	Description
Code	Specify the code to configure the screenclass.
Description	Specify the description of the screenclass code.
Domain	Search and select the domain for the screenclass
Breadcrumb Position	Select the position of breadcrumb for the screenclass.
Resource Flag	Select the toggle to enable the resource class code.
Resource Class Code	Search and select the resource class code from the list.

4. Click **Save**. You can view the configure Screenclass details in the View Screenclass.

2.39 State Code

You can configure the State code details:

- 2.39.1 View State Code
- 2.39.2 Create State Code

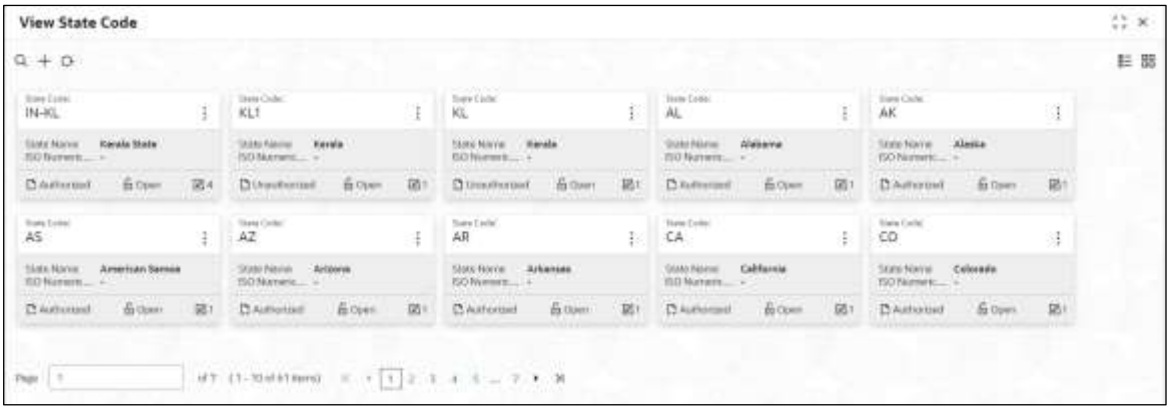
2.39.1 View State Code

The summary screen provides a list of configured Screenclass Maintenance. You can configure the Create State Code details using the. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **State Code**.
2. Under **State Code**, click **View State Code**.

   → The **View State Code** screen is displayed.

Figure 76: View State Code



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

Table 81: View State Code – Field Description

Field	Description
State Code	Displays the State code.
State Name	Displays the name of state code.
ISO Numeric	Displays the ISO numeric.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.39.2 Create State Code

The create screen allows you to configure state code details. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **State Code**.
2. Under **State Code**, click **Create State Code**.

   → The **Create State Code** screen is displayed.

   Figure 22: Create State Code

3. On **Create State Code** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 22: Create State Code – Field Description

Field	Description
State Code	Specify the code of the state.
State Name	Specify the name of the state.
Country Code	Search and select the country code for the state to be configured.

4. Click **Save**. You can view the configure State Code details in the View State Code.

2.40 System Dates

You can view the system date details.

This section contains following subsections:

- 2.40.1 System Dates Summary

2.40.1 System Dates Summary

The summary screen provides a list of configured system date. To process this screen, perform the following steps:

5. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **System Dates**.
6. Under **System Dates**, click **View System Dates**.

→ The **View System Dates** screen is displayed.

Figure 77: View System Dates

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

Table 82: View System Dates – Field Description

Field	Description
Branch Code	Displays the code of the branch.
Today's Date	Displays system's current date.
Today's Date in Text	Displays the system's current date in words.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications 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

2.41 Transaction Code

You can configure the transaction code.

This section contains following subsections:

- 2.41.1 Transaction Code Summary
- 2.41.2 Transaction Code Maintenance

2.41.1 Transaction Code Summary

The summary screen provides a list of configured transaction code. You can configure a transaction code using the Transaction Code Maintenance. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Transaction Code**.
2. Under **Transaction Code**, click **View Transaction Code**.

   → The **View Transaction Code** screen is displayed.

Figure 78: View Transaction Code

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

Table 83: 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.
Status	Displays the status of the record,
Modification Number	Displays the number of modifications performed on the record.

2.41.2 Transaction Code Maintenance

The maintenance screen allows you to configure transaction code details. To process this screen, perform the following steps:

1. From **Home** screen, click **Core Maintenance.** Under **Core Maintenance**, click **Transaction Code**.
2. Under **Transaction Code**, click **Create Transaction Code**.

   → The **Create Transaction Code** screen is displayed.

   Figure 79: Create Transaction Code

3. On **Create Transaction Code** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 84: Create Transaction Code – Field Description

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

4. Click **Save**. You can view the configured transaction code details in the Transaction Code Summary.

2.42 Upload Source

You can upload a source code.

This section contains following subsections:

- 2.42.1 Upload Source Summary
- 2.42.2 Upload Source Maintenance

2.42.1 Upload Source Summary

The summary screen provides a list of configured source code. You can upload a source code using the Upload Source Maintenance. To process this screen, perform the following steps:

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 is displayed.

Figure 80: View Upload Source

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

Table 85: View Upload Source – Field Description

Field	Description
Upload Source	Displays the upload source details.
Source Description	Displays information about the source code.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.42.2 Upload Source Maintenance

The maintenance screen allows you to upload source. To process this screen, perform the following steps:

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

   → The **Create Upload Source** screen is displayed.

   Figure 81: Create Upload Source

3. On **Create Upload Source** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 86: 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**. You can view the configured upload source details in the Upload Source Summary.

2.43 Upload Source Preference

You can configure upload source preference.

This section contains following subsections:

- 2.43.1 Upload Source Preference Summary
- 2.43.2 Upload Source Preference Maintenance

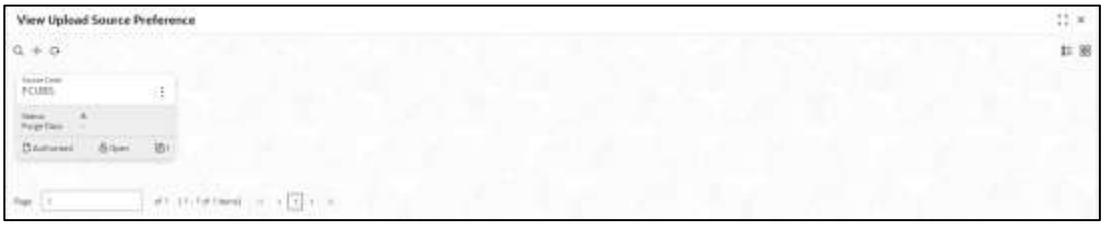
2.43.1 Upload Source Preference Summary

The summary screen provides a list of configured upload source preferences. You can configure an upload source preference using the Upload Source Preference Maintenance. To process this screen, perform the following steps:

1. From **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 is displayed.

Figure 82: View Upload Source Preference



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

Table 87: 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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

2.43.2 Upload Source Preference Maintenance

The maintenance screen allows you to configure upload source preference. To process this screen, perform the following steps:

1. From **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 is displayed.

   Figure 83: Create Upload Source Preference

3. On **Create Upload Source Preference** screen, specify the fields. For more information on fields, refer to the field description table below.

   Table 88: Create Upload Source Preference – Field Description

Field	Description
Source Code	Search and select the required source code.
Error Handling	Specify the error handling details.
On Error	Select an error from the drop-down list.
On Override	Select an override from the drop-down list.
On Repairable Exception	Select the repairable exception from the drop-down list.
On Queue Exception	Select the queue exception from the drop-down list.
Post Upload	Specify the post upload details.
Status	Select a status from the dropdown list.
Purge Days	Specify the purging days if you want to maintain any days to be purged while processing interface.

Field	Description
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**. You can view the configured upload source preference details in the Upload Source Preference Summary.

3 Bureau Integration Service

3.1 Overview

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.

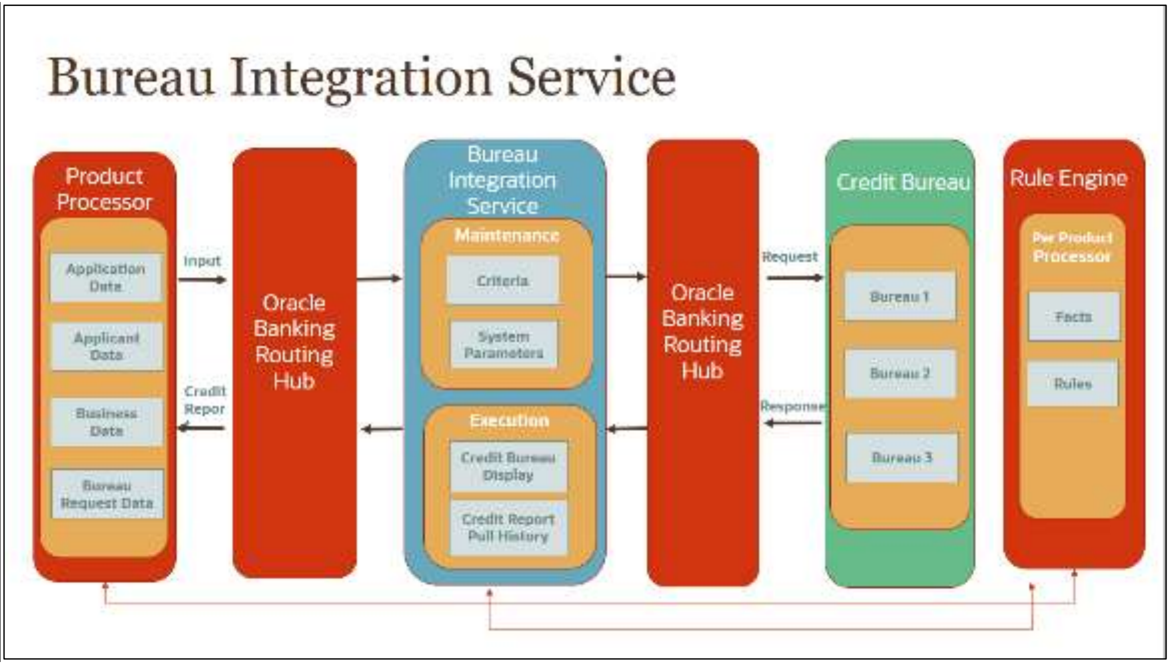
A new bureau can be added with only a configuration and without any change in the code. Two lookup types are required to be created in the bureau integration service. One for bureau and another for bureau product type. The additional maintenance required is configuration of the new bureau in the routing 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 84: Bureau Integration Service



Authorization process

To authorize and approve record, you need to perform the following actions:

1. Navigate to the required screen.
2. Click **Authorize**. The record pending for authorization are displayed.
3. Select the required record and click **Approve.**

4. The records are displayed in a widget. If you have modified the lookup, criteria twice, system displays two widgets with respective modification number along with the modified details.

5. Specify remarks for approving the record in the **Remarks** field.

6. Click **Confirm** and authorize the record.
   The record is authorized successfully.

3.2 System Parameter

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 section contains the following subsections:

- 3.2.1 Create System Parameter
- 3.2.2 View System Parameter

3.2.1 Create System Parameter

The **Create System Parameter** screen allows the user to create system parameter by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Bureau**.
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **System Parameter**, under **System Parameter**, click **Create System Parameter**.

   → The **Create System Parameter** screen displays.

   Figure 85 : Create System Parameter

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

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 89: System Parameter – Field Description.

Field	Description
Basic Details	
Parameter Code	Select the parameter code from the drop-down list.
Parameter Description	Specify a short description for the parameter code.

Field	Description
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.

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

   The **System Parameter** is successfully created and can be viewed using the **View System Parameter** screen.

3.2.2 View System Parameter

The **View System Parameter** screen allows the user to view the system parameter created using the **Create System Parameter** screen. The status of the created system parameter is displayed as **Unauthorized** and **Open**. Once the checker authorizes the parameter, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click Core Maintenance, under **Core Maintenance**, click **Credit Bureau**.
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **System Parameter**, under **System Parameter**, click **View System Parameter**.

→ The **View System Parameter** screen displays.

Figure 86 : View System Parameter

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

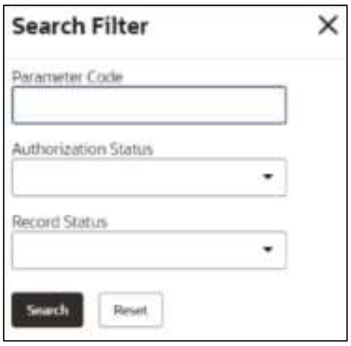
Table 90: View System Parameter – Field Description

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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View System Parameter** screen, click  icon.

   → The **View System Parameter - Search** displays.

   Figure 87 : View System Parameter – Search

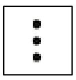


4. On **View System Parameter – Search** screen, Specify the **Search Filter** to fetch the required parameter.

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

   Table 91: View System Parameter – Search Filter - Field Description.

Field	Description
Parameter Code	Specify the parameter code.
Authorization Status	Select the authorization status of the criteria. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the criteria. The options are: • Open • Closed

5. Click **Search** to display the required system parameter.
6. On **View System Parameter** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created parameter code.
7. Click **Unlock** to modify the created parameter code.

   → The **System Parameter Maintenance** screen displays.

Figure 88 : System Parameter Maintenance - Modify

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

Table 92: System Parameter Maintenance – Modify – Field Description.

Field	Description
Basic Details	
Parameter Code	Displays the created parameter code.
Parameter Description	Displays the description for the created parameter.
Product Processor	Displays the product processor of the created parameter.
Value	Displays the value of the created parameter.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created parameter code.

→ The **System Parameter Maintenance – View** screen displays.

Figure 89 : System Parameter Maintenance - View

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

Table 93: System Parameter Maintenance - View – Field Description.

Field	Description
Basic Details	
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.

3.3 Lookup

Lookup is the service for mapping of keys and values that is used to enrich the description of the data displayed to the user. The lookup screen facilitates to define the contents for drop-down or list of value fields. Lookup fields are used throughout the system. The identified fields will only accept entries stored in this screen. 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, 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 section contains the following subsections:

3.3.1 Create Lookup

The **Create Lookup** screen allows the user to create lookup definitions by updating various details.

1. On **Homescreen**, click Core maintenance, under **Core Maintenance**, click **Credit Bureau**.
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **Lookup**, under **Lookup**, click **Create Lookup**.

   → The **Create Lookup** screen displays.

   Figure 90 : Create Lookup

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

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer the field description table.

Table 94: 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 an existing row.
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.

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

   The **Lookup** is successfully created and can be viewed using the **View Lookup** screen.

3.3.2 View Lookup

The **View Lookup** screen allows user to view the lookup created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Bureau.**
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **Lookup**, under **Lookup**, click **View Lookup**.

   → The **View Lookup** screen displays.

   Figure 91 : View Lookup

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

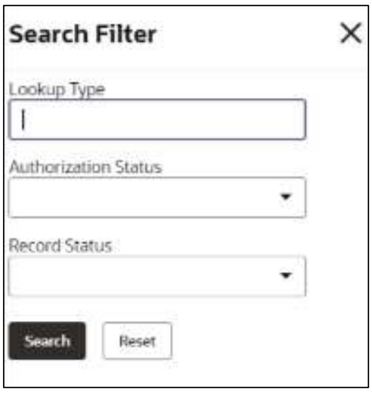
   Table 95 View Lookup – Field Description

Field	Description
Lookup Type	Displays the lookup type.
Description	Displays the description of the lookup.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Lookup** screen, click  icon.

   → The **View Lookup – Search** screen displays.

Figure 92 : View Lookup - Search

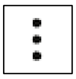


4. On **View Lookup – Search** screen, Specify the **Search Filter** to fetch the required lookup.

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

   Table 96: View Lookup – Search Filter – Field Description

Field	Description
Lookup Type	Displays the lookup type.
Authorization Status	Select the authorization status of the lookup. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the lookup. The options are: • Open • Closed

5. Click **Search** to display the required lookup.
6. On **View Lookup** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created lookup.
7. Click **Unlock** to modify the created lookup code.

   → The **Lookup Maintenance - Modify** screen displays.

Figure 93 : Lookup Maintenance – Modify

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

Table 97: Lookup Maintenance – Modify - Field Description.

Field	Description
Basic Details	
Lookup Type	Displays the lookup type.
Description	Displays the description of the lookup.
Lookup Codes	
+ button	Click to add a new row.
- button	Click to delete an existing row.
Lookup Code	Displays the lookup code for the created lookup. You can modify the same.
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. You can modify the same.
Enable	Indicates if the lookup is enabled or not. You can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created lookup code.

→ The **Lookup Maintenance - View** screen displays.

Figure 94 : Lookup Maintenance – View

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

Table 98: Lookup Maintenance – View - Field Description.

Field	Description
Basic Details	
Lookup Type	Displays the created lookup type.
Description	Displays the description for the created lookup.
Lookup Codes	
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.

3.4 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 section contains the following subsections:

- 3.4.1 Create Product Processor
- 3.4.2 View Product Processor

3.4.1 Create Product Processor

The **Create Product Processor** screen allows the user to create product processor by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Bureau.**
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **Product Processor**, under **Product Processor**, click **Create Product Processor**.

   → The **Create Product Processor** screen displays.

   Figure 95 : Create Product Processor

3. Specify the fields on **Create Product Processor** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 99 : Create Product Processor - Field Description

Field	Description
Basic Details	
Product Processor Code	Specify the unique product processor code.
Product Processor Description	Specify the short description for the product processor.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.

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

   The **Product Processor** is created successfully and can be viewed using the **View Product Processor** screen.

3.4.2 View Product Processor

The **View Product Processor** screen allows the user to view the product processor created using the **Create Product Processor** screen. The status of the created product processor is displayed as **Unauthorized** and **Open**. Once the checker authorizes the product processor, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Bureau**.
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **Product Processor**, under **Product Processor**, click **View Product Processor**.

   → The **View Product Processor** screen displays.

   Figure 96 : View Product Processor

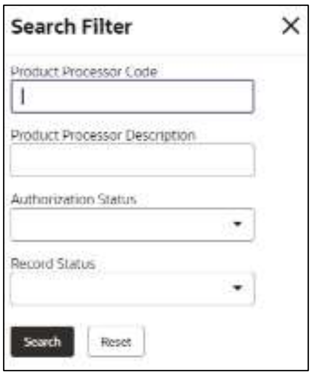
Table 100 : View Product Processor - Field Description

Field	Description
Product Processor Code	Displays the product processor code.
Product Processor Description	Displays the product processor description.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Product Processor** screen, click  icon.

   → The **View Product Processor – Search** screen displays.

   Figure 97 : View Product Processor - Search

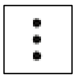


4. On **View Product Processor – Search** screen, Specify the **Search Filter** to fetch the required product processor.

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

Table 101 : View Product Processor - Search Filter - 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 options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the product processor. The options are: • Open • Closed

5. Click **Search** to display the required product processor.
6. On **View Product Processor** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created product processor.
7. Click **Unlock** to modify the created product processor.

   → The **Product Processor Maintenance – Modify** screen displays.

Figure 98 : Product Processor Maintenance – Modify

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

Table 102 : Product Processor Maintenance - Modify - Field Description

Field	Description
Basic Details	
Product Processor Code	Displays the product processor code.

Field	Description
Product Processor Description	Displays the product processor description. User can modify the same.
Effective Date	Displays the effective date of created product processor. User can modify the same before authorization if it is future dated.
Expiry Date	Displays the expiry date of created product processor. User can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created product processor.

→ The **Product Processor Maintenance – View** screen displays.

Figure 99 : Product Processor Maintenance – View

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

Table 103 : Product Processor Maintenance - View - Field Description

Field	Description
Basic Details	
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.

3.5 Criteria

The Criteria screen facilitates to setup criteria definition, which are used in evaluating 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 section contains the following subsections:

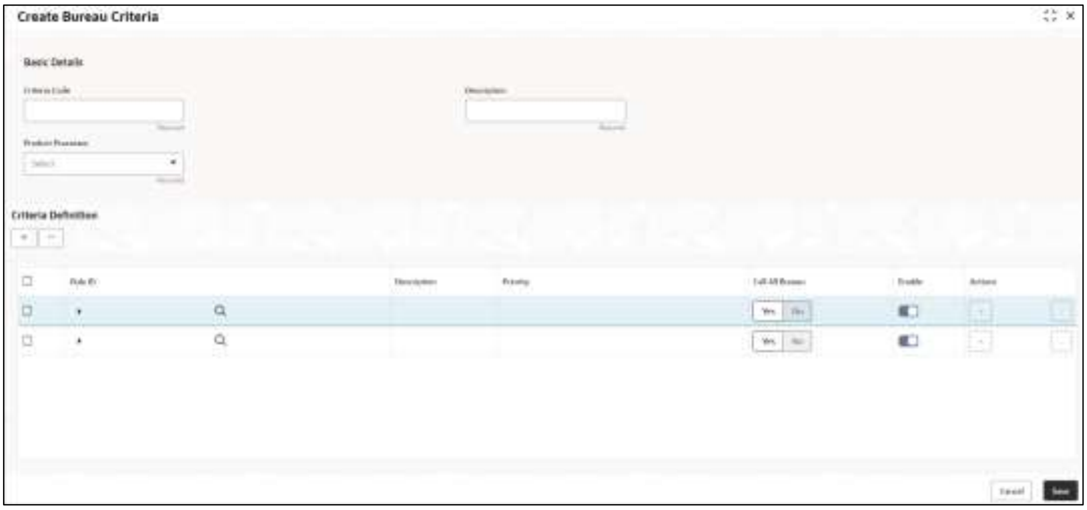
3.5.1 Create Bureau Criteria

The **Create Bureau Criteria** screen allows the user to create bureau criteria by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Bureau**.
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **Criteria**, under **Bureau Criteria**, click **Create Bureau Criteria**.

   → The **Create Bureau Criteria** screen displays.

   Figure 100 : Create Bureau Criteria

3. Specify the fields on **Create Bureau Criteria** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table.

Table 104: Create Bureau Criteria – Field Description.

Field	Description
Basic Details	
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 an existing row.
Rule ID	Specify the rule ID.
	Click to get the information about the rule.
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.
Actions	This field is enabled if **Call All Bureau** field is selected as **No**
+ button	Click this icon to add a new row.
The below fields appear if **Call All Bureau** toggle status is not clicked. To add the child rule to the parent rule.	
Rule ID	Select the rule ID from the drop-down list.
	Click to get the information about the rule.
Description	Displays the description of the rule ID selected it is auto populated.
Priority	Specify the priority of the criteria.
Enable	Click the toggle status to enable the rule criteria.

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

   The **Bureau Criteria** is successfully created and can be viewed using the **View Criteria** screen.

3.5.2 View Bureau Criteria

The **View Bureau Criteria** screen allows the user to view the criteria created using the **Create Bureau Criteria** screen. The status of the created criteria is displayed as **Unauthorized** and **Open**. Once the checker authorizes the criteria, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Bureau**.
2. Under **Credit Bureau**, click **Maintenance**, under **Maintenance**, click **Criteria**, under **Criteria**, click **View Bureau Criteria**.

→ The **View Bureau Criteria** screen displays.

Figure 101 : View Bureau Criteria

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

Table 105: 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.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Criteria** screen, click  icon.

→ The **View Criteria - Search** screen displays.

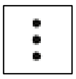
Figure 102 : View Criteria – Search

4. On **View Criteria – Search** screen, Specify the **Search Filter** to fetch the required criteria.

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

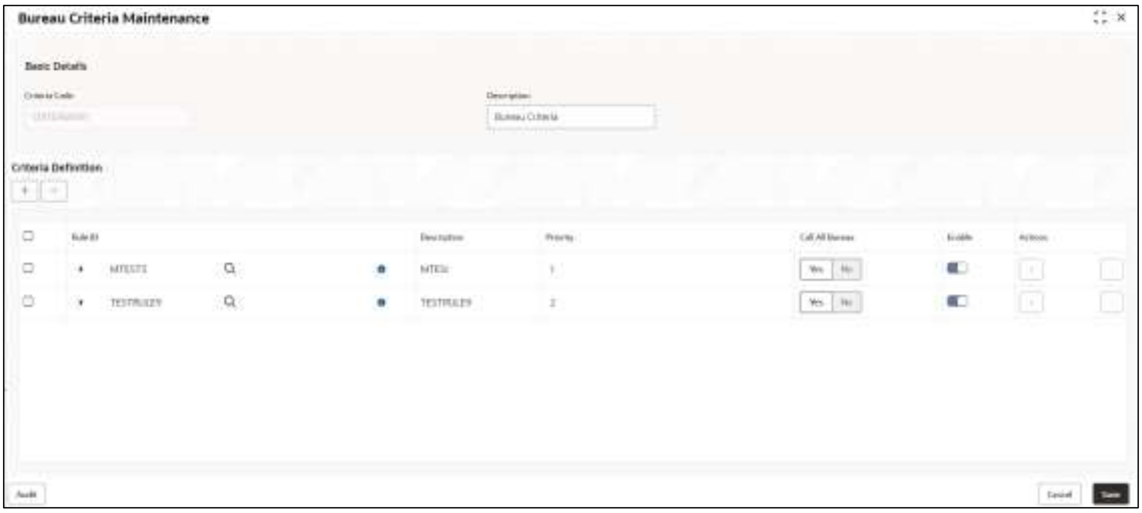
   Table 106: View Criteria – Search Filter - Field Description.

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 of the criteria. 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** to display the required bureau criteria.
6. On **View Bureau Criteria** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created criteria.
7. Click **Unlock** to modify the created criteria.

   → The **Bureau Criteria Maintenance – Modify** screen displays.

Figure 103 : Bureau Criteria Maintenance - Modify



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

Table 107: Bureau Criteria Maintenance – Modify - Field Description.

Field	Description
Basic Details	
Criteria Code	Displays the created criteria code.
Description	Displays the description for the created criteria code.
Product Processor	Displays the product processor for which the criteria being created.
Criteria Definition	
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.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created criteria code.

→ The **Bureau Criteria Maintenance – View** screen displays.

Figure 104 : Bureau Criteria Maintenance – View

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

Table 108: Bureau Criteria Maintenance- View – Field Description.

Field	Description
Basic Details	
Criteria Code	Displays the created criteria code.
Description	Displays the created criteria description.
Product Processor	Displays the product processor of the created criteria.
Criteria Definition	
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.

3.6 Credit Bureau Display

The **Credit Bureau Display** screen facilitates to view the reports received from the various bureaus. The report includes credit history details of the customer and the credit score of the customer based on these details.

This section contains the following subsection:

- 3.6.1 View Credit Bureau Report

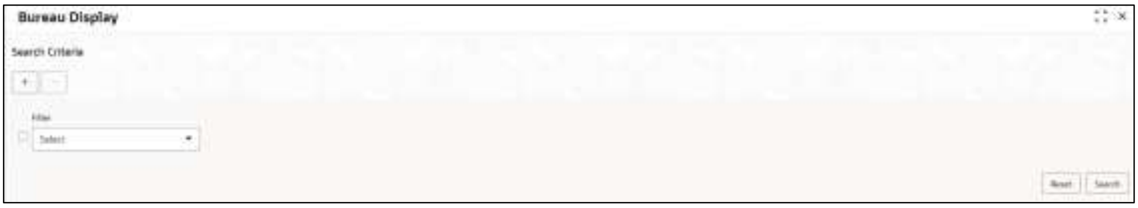
3.6.1 View Credit Bureau Report

The **Credit Bureau Display** screen allows the user to view the credit bureau report based on the various filter options provided.

1. On **Homescreen**, click **Credit Bureau**, under **Credit Bureau**, click **Operations**.
2. Under **Operations**, click **Credit Bureau Display**.

   → The **Credit Bureau Display** screen displays.

   Figure 105 : Credit Bureau Display



3. Specify the fields on **Credit Bureau Display** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 109: 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. This field appears once you select an option from the **Filter** list.
From Date	Select the start of the period during which the report was generated. This field appears once the user selects the filter option as **Inquiry Date** and value as **Date Range.**

Field	Description
To Date	Select the end date of the period during which the report was generated. This field appears if you have selected the filter option as **Inquiry Date** and value as **Date Range.**

4. In the **Search Criteria** screen, specify the details and click **Search**.

   → The **Credit Bureau Display – Report History** screen displays showing a list of records based on the specified search criteria.

Figure 106 : Credit Bureau Display – Report History

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

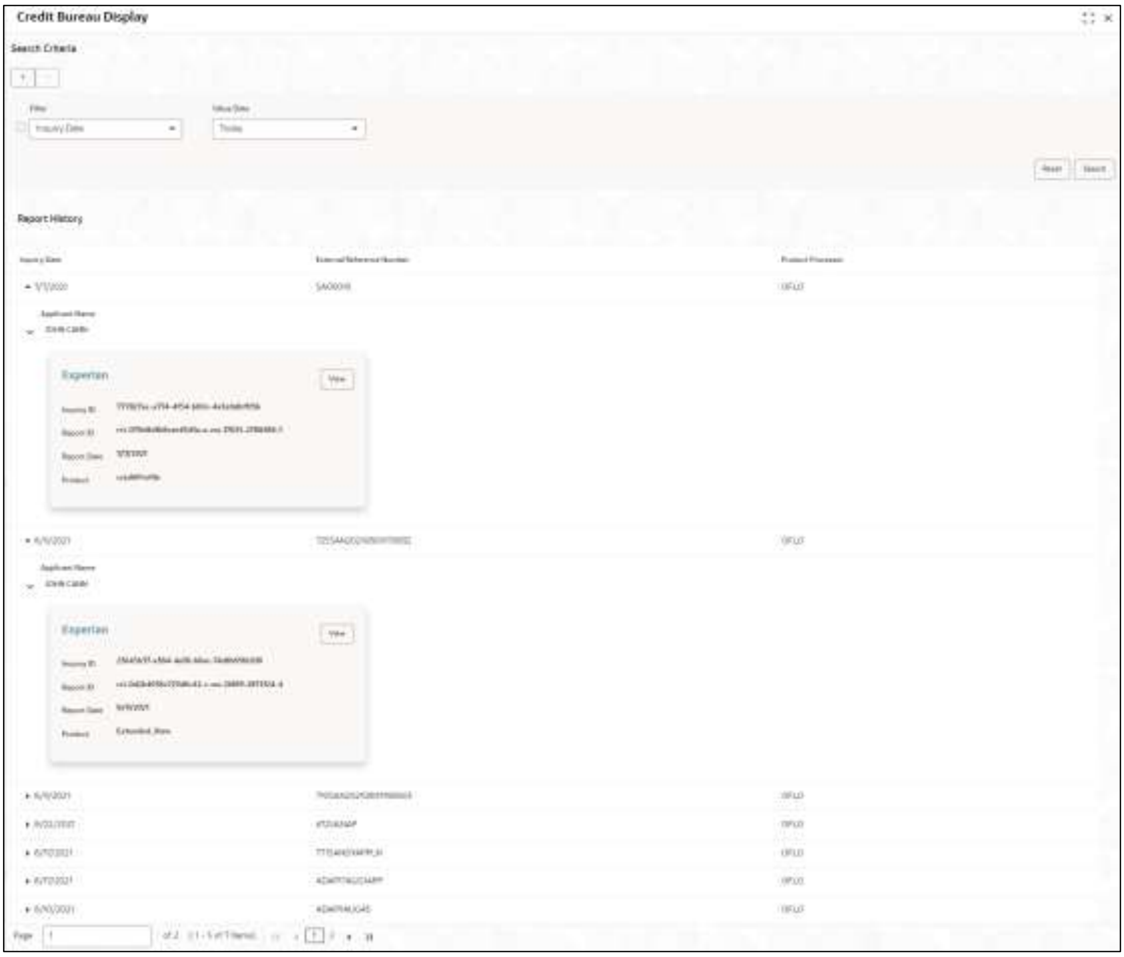
Table 110: Credit Bureau Display – Field Description

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 **Credit Bureau Display – View List of Report** screen displays.

Figure 107 : Credit Bureau Display - View List of Report



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

Table 111: Create Bureau Display View List of Report – Field Description

Field	Description
The Following fields appear if you click	
<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.

Field	Description
The Following fields appear if you click	
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 **Credit Bureau Report** displays.

Figure 108 : Credit Bureau Report

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

Table 112: Create 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.

3.7 Integrating Bureau Integration Service with Oracle Banking Routing Hub

3.7.1 Oracle Banking Routing Hub Configuration

Need to import existing service consumer and providers in the system. Service Consumer is Oracle product, which invokes oracle banking routing hub API, oracle banking routing hub analyses evaluates destination product processor and transform data into format of the same. Service consumer comprises of the source and destination integration details.

7. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Routing Hub**.
8. Under **Routing Hub**, click **Service Consumers**.

→ The **Service Consumers** screen displays.

Figure 109: Service Consumers

Figure 110: Oracle Banking Routing Hub Configuration

Table 113: Oracle Banking Routing Hub Configuration

Component Name	Component Type	Condition	Comments
Add	Button		Pops up add dialog
Import	Button		Pops up import dialog
Search	Combo Box One		Provides search functionality with case insensitive (Service Consumer Name)
View	menu option	Non-editable	Pops up view dialog
Edit	menu option		Pops up edit dialog
Delete	menu option		
Export	Sub menu item		
JSON	menu option		Exports in JSON
SQL	menu option		Exports in SQL
Configuration	menu option		Pops up configuration dialog
Request Audit	menu option		Pops up request audit log

This section contains the following subsections:

- 3.7.1.1 Add
- 3.7.1.2 Environment Variables
- 3.7.1.3 Import
- 3.7.1.4 View
- 3.7.1.5 Edit
- 3.7.1.6 Delete
- 3.7.1.7 JSON Export
- 3.7.1.8 SQL Export

3.7.1.1 Add

User can create service consumer manually.

On **Service Consumers** screen, click **Add** to create service consumer.

Figure 111: Add

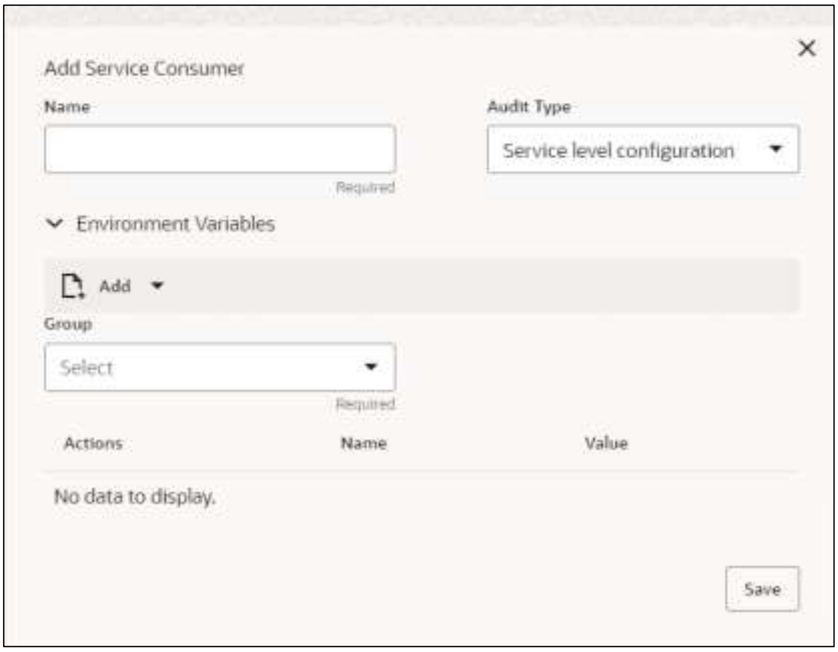


Table 114: Add

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255 • No numeric value at beginning and no space allowed	Unique Service Consumer name
Environment Variables	Table Content				
Save	Button				Saves the Service Consumer

3.7.1.2 Environment Variables

User can define the group of variables, which can be accessed through the specific consumer's configuration.

Below is the syntax for accessing environment variables:

$env.Environment_Group_Name.Environment_Variable_Name

such as: $env.COMMON.BRANCH_CODE

Figure 112: Environment Variables

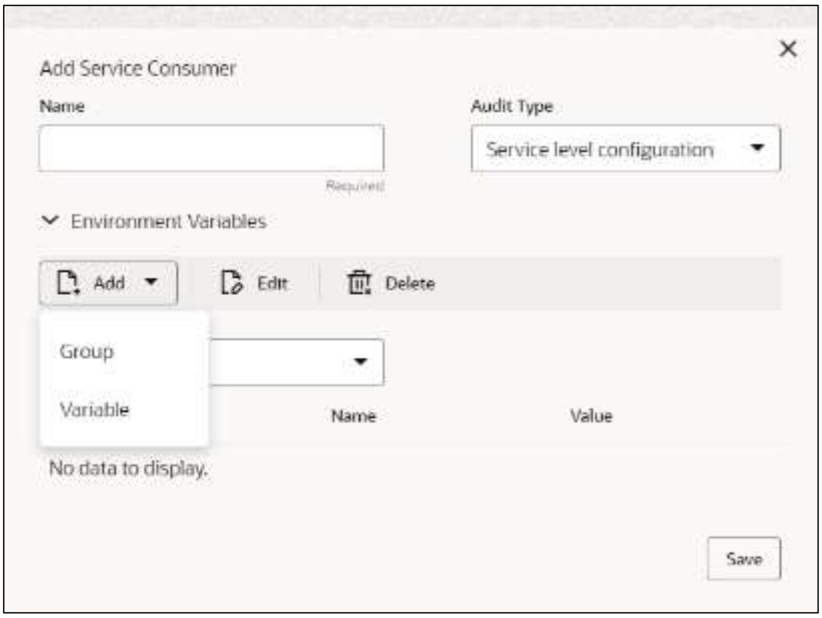


Figure 113: Environment Variables

Figure 114: Environment Variables

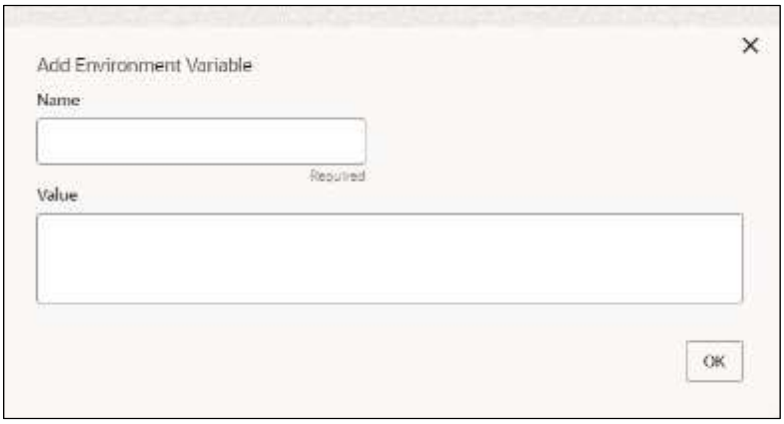


Table 115: Environment Variables

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Add	Menu Item				
Group	Menu option				Pops up add group dialog
Variable	Menu option				Pops up add variable dialog
Navigation: Service Consumer -> Environment Variables -> 3 dot icon (operation menu)					
Edit	menu option / icon				Pops up edit dialog
Delete	menu option / icon				Deletes group / variable
Environment Group / Variable					
Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255	

				• No numeric value at beginning and no space allowed	
Value	Text Area				Value can either be hardcoded or Velocity mapping.
OK	Button				Saves the group / variable and displays it in the list

3.7.1.3 Import

User can create a service consumer by importing the JSON file and manually selecting the service providers or select all providers that needs to be imported.

On **Service Consumers** screen, click **Import**.

Figure 115: Import

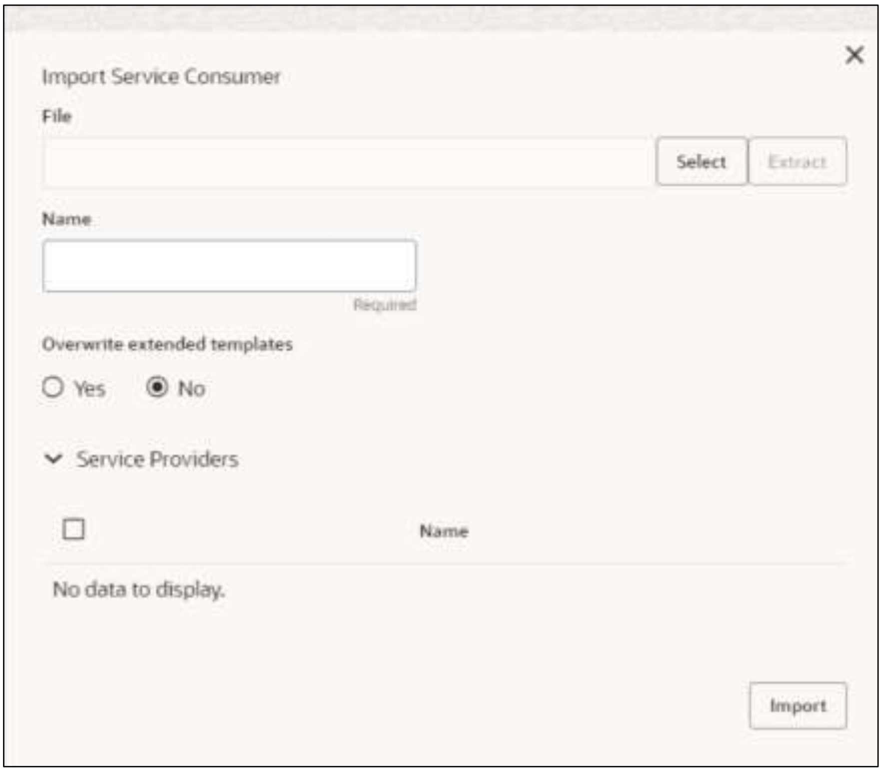


Table 116: Import

Component Name	Component Type	Is Mandatory	Data type	Validation	Condition	Comments
File	File picker	Yes		Allows only to select one file	Accepts only JSON file	Pops up file selection dialog box
Extract	Button	Yes				Extracts Consumer Name and Service Provider list from JSON file and displays it in the respective elements.

Component Name	Component Type	Is Mandatory	Data type	Validation	Condition	Comments
Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255 • No numeric value at beginning and no space allowed	Editable	Unique
Service Provider	Collapsible Header & Content					Displays the list of service providers that are present in JSON file
Import	Button					Imports Service Consumer

Note: Below data needs to be changed after importing consumer configuration file:

• Implementation Host and Port

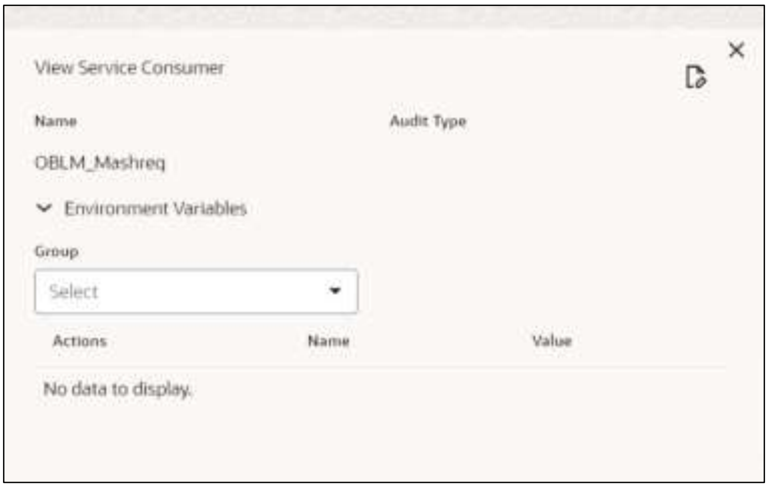
• Implementation Authentication Password

3.7.1.4 View

User can view consumer details and can also switch to edit form by clicking on edit icon.

On **Service Consumers** screen, click **Operation Menu (3 dot icon)**, and select **View.**

Figure 116: View

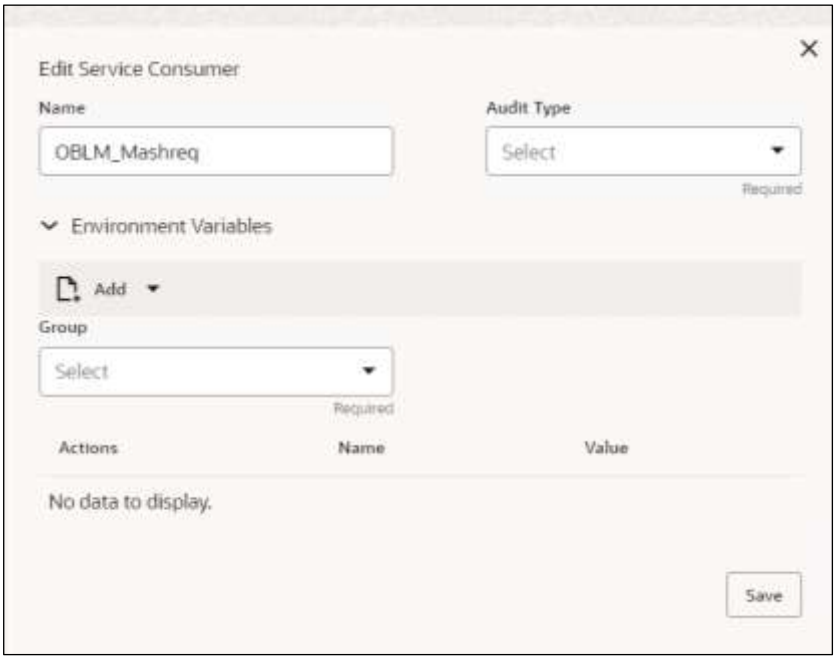


3.7.1.5 Edit

User can modify the consumer details.

On **Service Consumers** screen, click **Operation Menu (3 dot icon)**, and select **Edit**.

Figure 117: Edit



3.7.1.6 Delete

User can delete the consumer.

On **Service Consumers** screen, click **Operation Menu (3 dot icon)**, and select **Delete**.

Figure 118: Delete

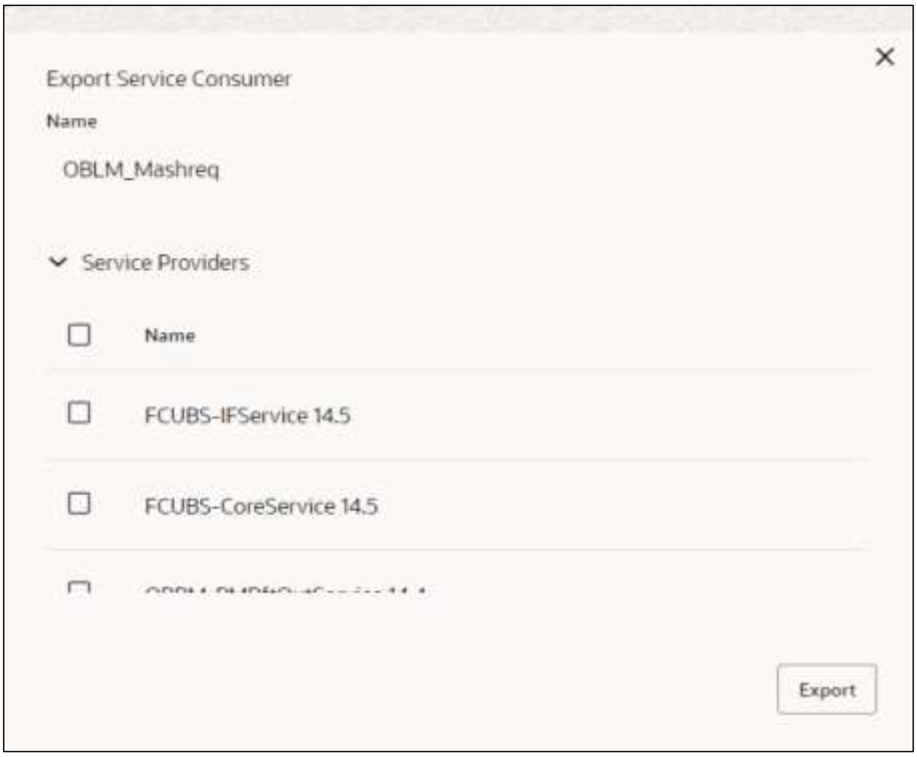
3.7.1.7 JSON Export

User can export the consumer configuration as JSON file.

On **Service Consumers** screen, click **Operation Menu (3 dot icon)**, and select **Export**

Then, Click **JSON**.

Figure 119: JSON Export



NOTE: You have an option to select service providers from the list that needs to be exported or can click on Select All option for all service providers.

JSON Export feature will export 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

3.7.1.8 SQL Export

User can export the consumer configuration as SQL file.

On **Service Consumers** screen, click **Operation Menu (3 dot icon)**, and select **Export**

Then, Click **SQL**.

Figure 120: SQL Export

NOTE: SQL Export feature will export entire configuration without Host, Port and Authentication Password details.

3.7.2 Service Providers

Service Providers are the product processors configure to process request send by oracle banking routing hub on behalf of service consumers.

The Service Provider comprises of destination integration details.

1. On **Home** screen, click **Core Maintenance,** under **Core Maintenance**, click **Routing Hub**.
2. Under **Routing Hub**, click **Service Consumers**, under **Service Consumers**, click **<Specific Service Consumer**.

→ The **Service Providers** screen displays.

Figure 121: Service Providers

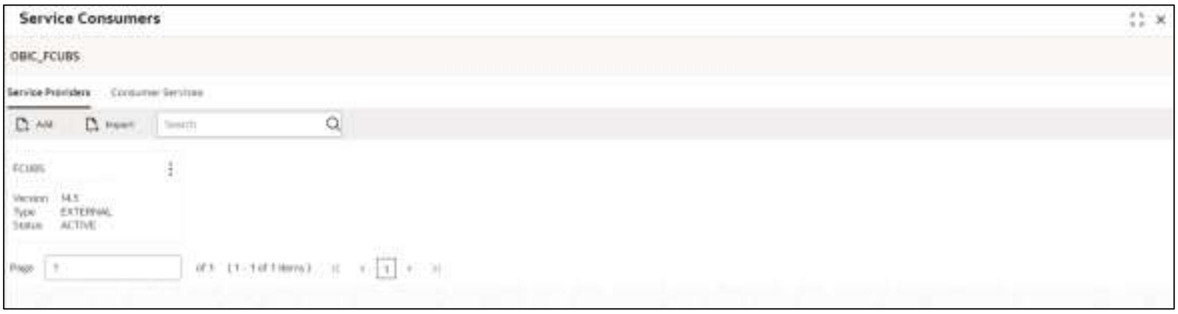


Figure 122: Service Providers

Table 117: Service Providers

Component Name	Component Type	Is Mandatory	Data type	Validation	Condition	Comments
<Service Consumer>	Button					Navigates back to Service Consumers
Add	Button					Pops up add dialog
Import	Button					Pops up import dialog

Search	Combo Box One					Provides search functionality with case insensitive (Service Provider Name)
Navigation: **Service Providers -> 3 dot icon (operation menu)**						
View	menu option				Non-editable	Pops up view dialog
Edit	menu option					Pops up edit dialog
Delete	menu option					
Export	menu option					Exports in JSON
Request Audit	menu option					Pops up request audit log

This section contains the following subsections:

- 3.7.2.1 Add
- 3.7.2.2 Headers
- 3.7.2.3 Service
- 3.7.2.4 WSDL
- 3.7.2.5 SWAGGER
- 3.7.2.6 Import
- 3.7.2.7 View
- 3.7.2.8 Edit
- 3.7.2.9 Delete
- 3.7.2.10 Export

3.7.2.1 Add

User can create service provider manually.

On **Service Providers** screen, click **Add** to create service providers.

Figure 123: Add

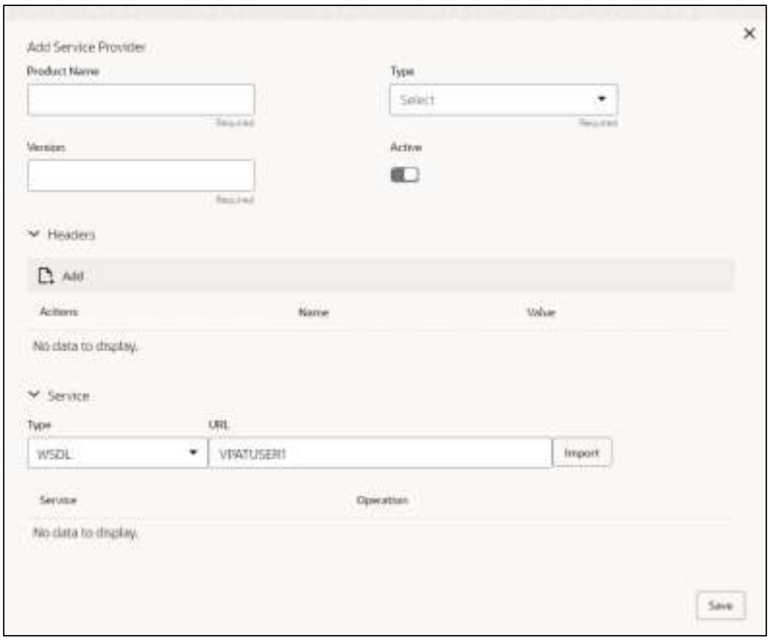


Table 118: Add

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Product Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255. • No numeric value at beginning and no space allowed.	Unique provider name
Type	Combo Box One	Yes			Predefined Values: INTERNAL / EXTERNAL

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Version	Text Box	Yes	Number	• Version cannot be blank • Specify 0 or more characters, up to a maximum of 255. • Specify only numeric or decimal values.	Unique provider version
Active	Switch				Predefined Values: ACTIVE / INACTIVE If provider is marked as inactive, then all related routes will be stopped.
Headers	Collapsible Header & Content				Provider specific headers
Service	Collapsible Header & Content				Provider specific service details
Save	Button				Saves the Service Provider

3.7.2.2 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.

These headers can be configured in oracle banking routing hub using the steps given below.

Figure 124: Headers

Figure 125: Headers

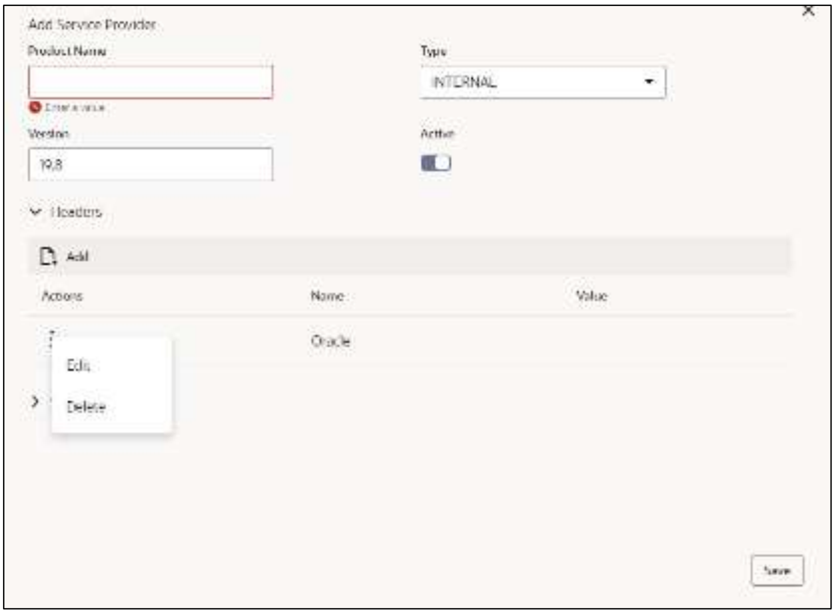


Table 119: Headers

Component Name	Component Type	Is Mandatory	Data type	Validation	Condition	Comments
Add	Button					Pops up add dialog
Navigation: **Service Providers -> Headers -> 3 dot icon (operation menu)**						

Component Name	Component Type	Is Mandatory	Data type	Validation	Condition	Comments
Edit	menu option					Pops up edit dialog
Delete	menu option					Deletes header
Navigation: **Service Providers -> Headers -> Add**						
Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255. • No numeric value at beginning and no space allowed.		
Value	Text Area	Yes	Alphanumeric with special characters	• Value cannot be blank • Specify 0 or more characters, up to a maximum of 255. • No space allowed.		Value can either be hardcoded or can be Velocity mapping.
OK	Button					Saves the header details and displays it in the list

3.7.2.3 Service

Figure 126: Service

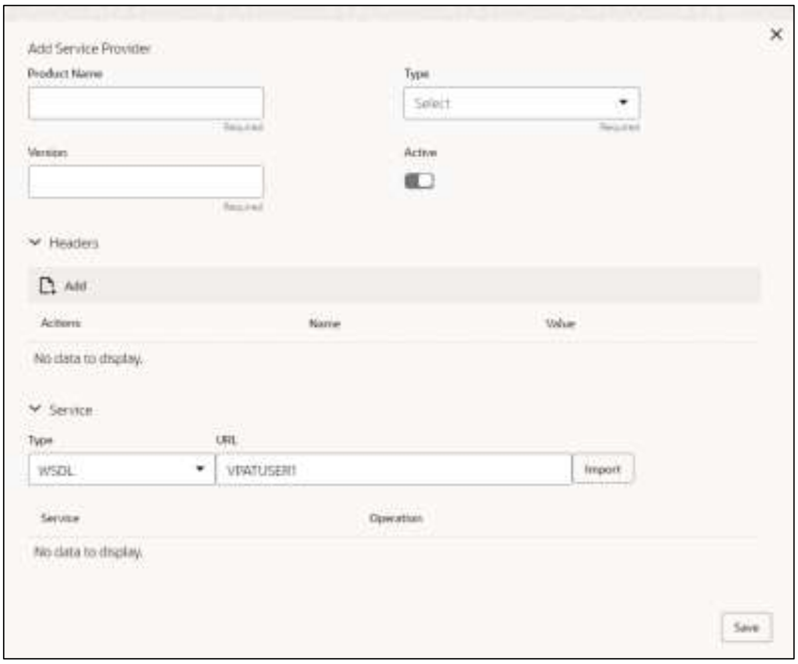


Table 120: Service

Component Name	Component Type	Is Mandatory	Comments
Type	Combo Box One	Yes	Predefined Values: WSDL / SWAGGER
URL	Text Box	Yes	Service URL of the file location
Gateway Prefix	Text Box		Gateway Prefix is context path of below formatted URL http://host:port/gateway-prefix/endpoint
Import	Button		Extracts the service information from URL and displays it in the Service list

3.7.2.4 WSDL

The Web Services Description Language (WSDL) is an XML-based interface description language that is used for describing the functionality offered by a web service.

Currently, non-SSL WSDL URL is only supported.

NOTE: In case there is a change in wsdl file, then same wsdl file need to be imported again in order to update the provided service information in routing hub.

3.7.2.5 SWAGGER

Swagger is an Interface Description Language for describing RESTful APIs expressed using JSON. Currently, Swagger 2.0 & OpenAPI 3.0 both are supported.

NOTE: In case there is a change in swagger file, then same swagger file need to be imported again in order to update the provided service information in routing hub.

3.7.2.6 Import

User can create a service provider by importing the JSON file.

On **Service Providers** screen, click **Import**.

Figure 127: Import

Table 121: Import

Component Name	Component Type	Is Mandatory	Validation	Condition	Comments
File	File picker	Yes	Allows only to select one file	Accepts only JSON file	Pops up file selection dialog box
Import	Button				Imports Service Provider

NOTE: Below data needs to be changed after importing provider configuration file:

- Implementation Host and Port
- Implementation Authentication Password

3.7.2.7 View

User can view provider details and can also switch to edit form by clicking on edit icon.

On **Service Providers** screen, click **Operation Menu (3 dot icon),** and click **View.**

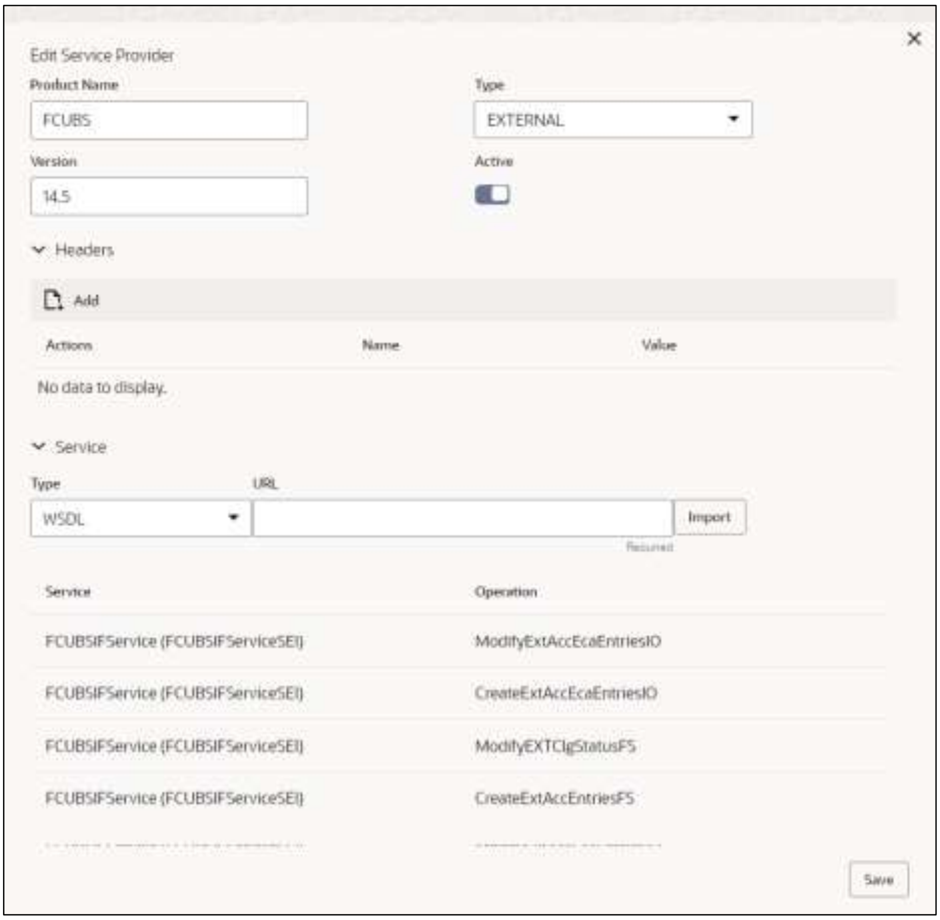
Figure 128: View Service Provider

3.7.2.8 Edit

User can modify the provider details.

On **Service Providers** screen, click **Operation Menu (3 dot icon),** and click **Edit.**

Figure 129: Edit



3.7.2.9 Delete

User can delete the provider.

On **Service Providers** screen, click **Operation Menu (3 dot icon),** and click **Delete.**

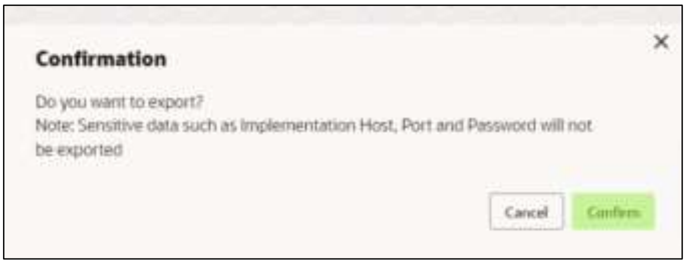
Figure 130: Delete

3.7.2.10 Export

User can export the provider configuration as JSON file.

On **Service Providers** screen, click **Operation Menu (3 dot icon),** and click **Export**.

Figure 131: Export



NOTE: Below data is not 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

3.7.3 Experian Configuration

3.7.3.1 Experian Fetch Credit Report

Figure 132: Experian Fetch Credit Report

Figure 133: Experian Fetch Credit Report

View Transformation
<FCUBS_HEADER>
<SOURCE>EXTSYS</SOURCE>
Extended Template
Response Headers
Actions
Name
Value
No data to display.
Response Transformation
Template Type
Template
VELOCITY
Mocking required?
Off
Mock Template
Extended Template

3.7.3.2 Experian Sandbox

Service Consumer is used to export details of fetch credit report from sandbox environment

Figure 134: Experian Sandbox

3.7.4 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.

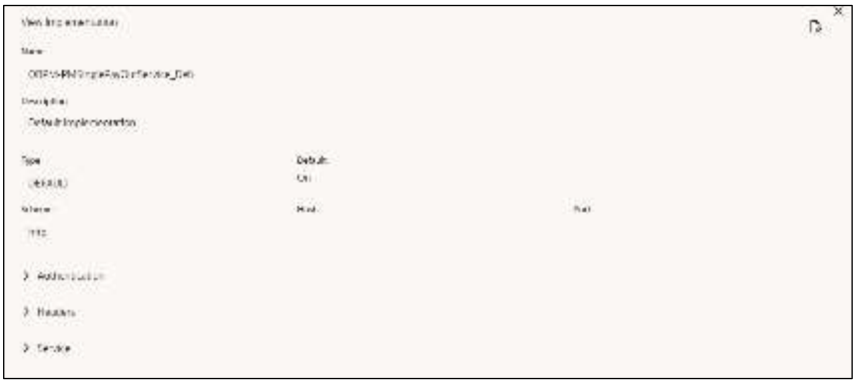
3.7.4.1 Equifax Fetch Credit Report

Figure 135: Equifax Fetch Credit Report

3.7.4.2 Equifax Sandbox

Service consumer exports details of fetch credit report from sandbox environment.

Figure 136: Equifax Sandbox



3.7.5 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.

3.7.5.1 Content Management Server

The Oracle content management server is used to store and manage documents. It can accept encoded strings of data and stores them in the provided extension format like (pdf, jpeg, png). The content management server allows to view the document online.

The latest available version is 12.2.1.4.

The cmc-document-service is a gateway to access the oracle content management server. Using this service, other applications can store, manage and process the document with ease.

3.7.5.2 Environment Configuration

To install cmc-document-services, additional configuration is added. This includes the moc domain.

Dflyway.domain.locations=db/migration/domain/plato,db/migration/domain/sms,db/migration/domain/moc,db/migration/domain/cmc

-Dflyway.domain.placeHolders.moc.cmc-comments-services.server.port=<MOC_PORT>

-Dflyway.domain.placeHolders.moc.cmc-document-services.server.port=<MOC_PORT>

-Dflyway.domain.placeHolders.dmsServiceUrl=<CONTENT_SERVER_URL>

-Dflyway.domain.placeHolders.dmsServiceUsrname=<CONTENT_SERVER_USERNAME>

-Dflyway.domain.placeHolders.dmsServicePwd=<CONTENT_SERVER_PASSWORD>

-Dflyway.domain.placeHolders.cmc-document-services.schema=<SCHEMA_NAME>

-Dflyway.domain.placeHolders.cmc-document-services.server.port=<SCHEMA_PORT>

-Dflyway.domain.placeHolders.cmc-document-services.username=<SCHEMA_USERNAME>

-Dflyway.domain.placeHolders.cmc-document-services.password=<SCHEMA_PASSWORD>

-Dflyway.domain.placeHolders.cmc-document-services.domain.jndi=jdbc/CMNCORE

-Dflyway.domain.placeHolders.cmc-document-services.jndi=jdbc/CMNCORE

-Dflyway.domain.placeHolders.cmc-document-services.db.jndi=jdbc/CMNCORE

-Dflyway.domain.placeHolders.cmc-document-services.jdbcUrl=jdbc:oracle:thin:@//<SCHEMA_IP>:<SCHEMA_PORT>/<SERVICE_NAME>

-Dflyway.domain.placeHolders.cmc-document-services.db.jdbcUrl=jdbc:oracle:thin:@//<SCHEMA_IP>:<SCHEMA_PORT>/<SERVICE_NAME>

3.7.6 Troubleshooting

3.7.6.1 Oracle FLEXCUBE Onboarding issues faced during cmc-obcbs-service and cmc-obrh-services integration

Experian password expired
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.

3.7.6.2 Unable to connect to external server

The 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.oracle.com
-Dhttps.proxyPort=80
https://confluence.oraclecorp.com/confluence/pages/viewpage.action?pageId=2863487960

3.7.6.3 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]

4 Decision Service

4.1 Overview

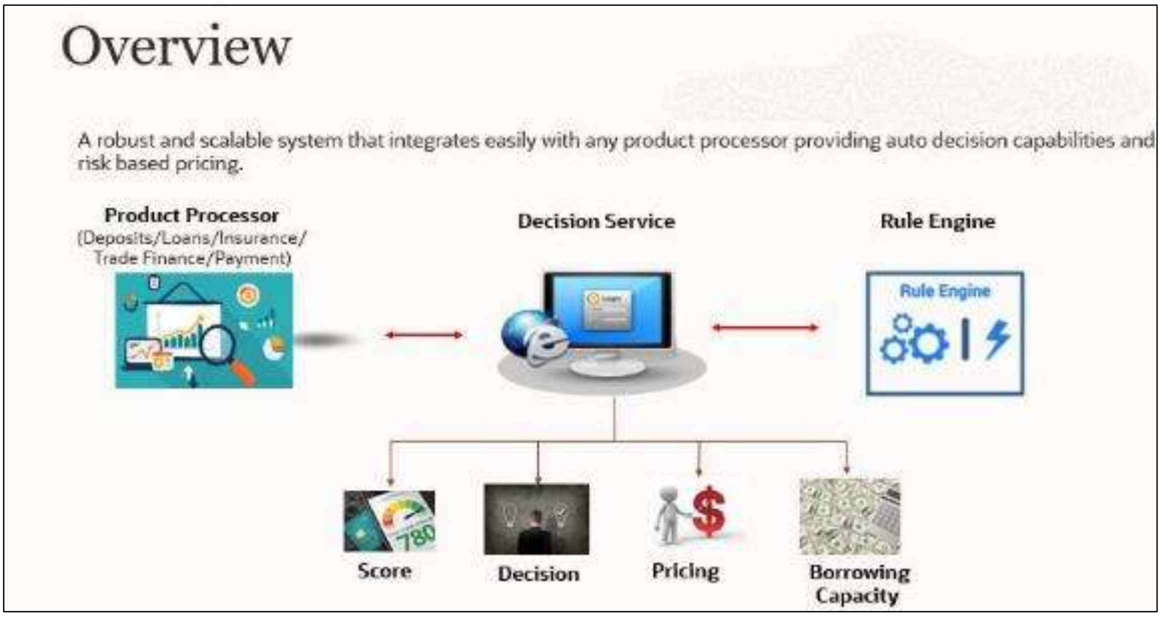
The decision service provides automatic decision-making capabilities that can allow lenders to develop simple business processes and strengthen the decision-making process.

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 137 : Decision Service Overview



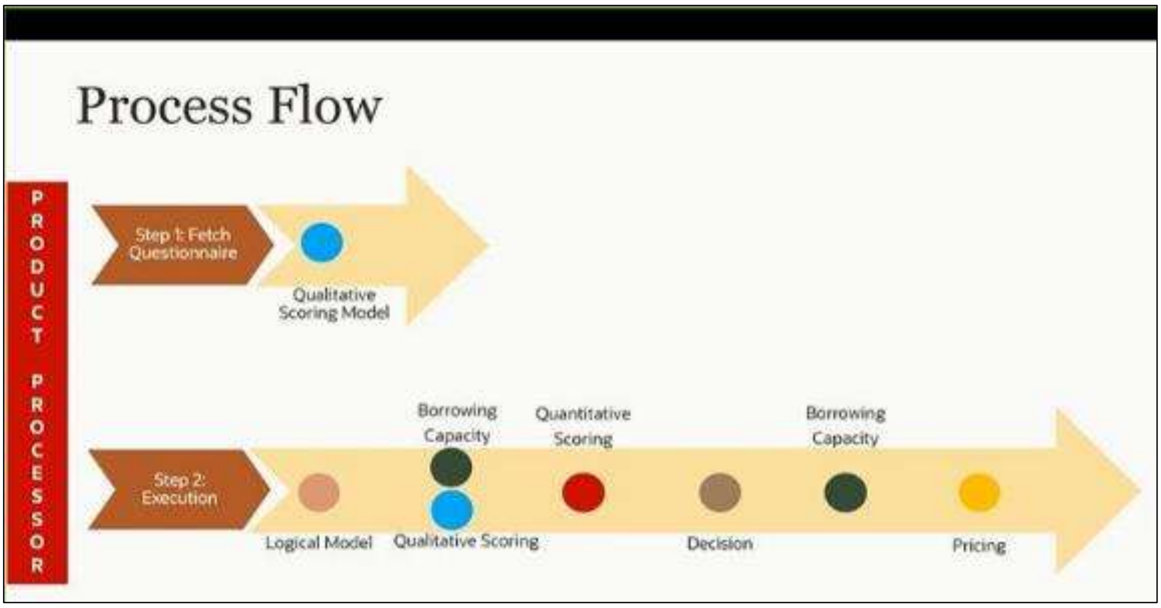
Decision service can be called from various product processor such as Collections, Deposits, Loans, Insurance, Trade Finance or Payment etc. This product processor calls the decision service, and the decision service intern uses the rule engine to configure various complex rules.

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.

4.2 Process Flow

The below diagram depicts the entire process flow of how decision service works.

Figure 138 : Decision Service Process Flow



4.2.1.1 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.

4.2.1.2 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 applicants 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.

4.2.1.3 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.

4.2.1.4 Qualitative Score

After borrowing capacity, the next step is qualitative scoring done using the feedback from the applicants for questionnaire.

4.2.1.5 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.

4.2.1.6 Decision and Grade

The decision on the application is done based on the quantitative and qualitative scores. The decision can be approved, 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.

4.2.1.7 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.

4.2.1.8 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.

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

4.3 System Parameter

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 section contains the following subsections:

- 4.3.1 Create System Parameter
- 4.3.2 View System Parameter

4.3.1 Create System Parameter

The **Create System Parameter** screen allows the user to create parameters by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision.**
2. Under **Credit Decision,** click **Maintenance**, under Maintenance, click **System Parameter**, under **System Parameter**, click **Create System Parameter.**

   → The **Create System Parameter** screen displays.

   Figure 139 : Create System Parameter

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

   The fields, which are marked as required, are mandatory. For more information on fields, refer to the field description table below.

Table 122 : Create System Parameter - Field Description

Field	Description
Basic Details	
Parameter Code	Select the parameter code from the drop-down list.
Parameter Description	Specify a short description for the parameter code.
Parameter Description	Specify a short description for the parameter code.
Value	Specify the value for the parameter code.

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

   The **System Parameter** is successfully created and can be viewed using the **View System Parameter** screen.

4.3.2 View System Parameter

The View System Parameter screen allows user to view the parameters created using the **Create System Parameter** screen. The status of the created system parameter is displayed as **Unauthorized** and **Open**. Once the checker authorizes the parameter, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **System Parameter**, under **System Parameter**, click **View System Parameter**.

→ The **View System Parameter** screen displays.

Figure 140 : View System Parameter

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

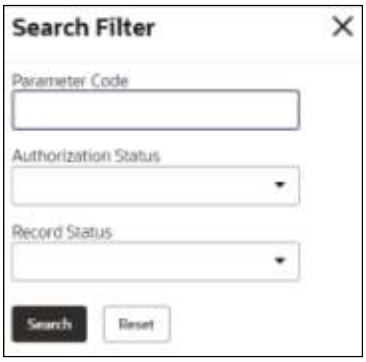
Table 123 : View System Parameter - Field Description

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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View System Parameter** screen, click  icon.

→ The **View System Parameter – Search** screen displays.

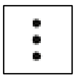
Figure 141 : View System Parameter - Search



4. On **View System Parameter – Search** screen, Specify the **Search Filter** to fetch the required system parameter.

Table 124 : View System Parameter – Search Filter - Field Description

Field	Description
Parameter Code	Specify the parameter code.
Authorization Status	Select the authorisation status of the parameters. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the parameters. The options are: • Open • Closed

5. Click **Search** to display the required system parameter.
6. On **View System Parameter** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created system parameter.
7. Click **Unlock** to modify the created system parameter.

→ The **System Parameter Maintenance – Modify** screen displays.

Figure 142 : System Parameter Maintenance – Modify

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

Table 125 : System Parameter Maintenance - Modify - Field Description

Field	Description
Basic Details	
Parameter Code	Displays the created system parameter code.
Parameter Description	Displays the description for the created system parameter code.
Product Processor	Displays the product processor of the created system parameter code. User can modify the same.
Value	Displays the value of the system parameter. User can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created system parameter.

→ The **System Parameter Maintenance – View** screen displays.

Figure 143 : System Parameter Maintenance – View

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

Table 126 : System Parameter Maintenance - View - Field Description

Field	Description
Basic Details	
Parameter Code	Displays the created system parameter code.
Parameter Description	Displays the created system parameter description.

Field	Description
Product Processor	Displays the product processor of the created system parameter.
Value	Displays the value for the created system parameter.

4.4 Lookup

Lookups are the service for mapping of keys and values that is used to enrich the description of the data displayed to the user. The lookup screen facilitates to define the contents for drop-down or list of value fields. Lookup fields are used throughout the system. The identified fields will only accept entries stored in this screen. Below are some examples of the lookup fields.

- Static/Enumeration values
  - Decision: Like Approve, Decline, Manual.
  - Color – like red, green etc. Color is used to highlight the decision i.e. Approve to be highlighted in Green, Reject can be highlighted in Red. The color 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 behavior based on decision.

This section contains the following subsections:

- 4.4.1 Create Lookup
- 4.4.2 View Lookup

4.4.1 Create Lookup

The **Create Lookup** screen allows the user to create lookup definitions by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance,** click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Lookup**, under **Lookup**, click **Create Lookup**.

→ The **Create Lookup** screen displays.

Figure 144 : Create Lookup Screen

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

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 127 : Create Lookups - Field Description

Field	Description
Basic Details	
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 an existing row.
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.

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

   The **Lookup** is successfully created and can be viewed using the **View Lookup** screen.

4.4.2 View Lookup

The **View Lookup** screen allows the user to view the lookup created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance,** click **Credit Decision**.
2. Under **Credit Decision,** click **Maintenance**, under **Maintenance**, click **Lookup**, under **Lookup**, click **View Lookup**.

   → The **View Lookup** screen displays.

   Figure 145 : View Lookup

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

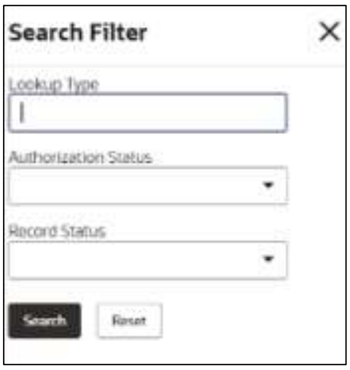
   Table 128 : View Product Processor - Field Description

Field	Description
Lookup Type	Displays the lookup type.
Description	Displays the description of the lookup.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Lookup** screen, click  icon.

   → The **View Lookup - Search** screen displays

Figure 146 : View Lookup - Search



4. On **View Lookup – Search** screen, Specify the **Search Filter** to fetch the required lookup.

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

   Table 129 : View Lookups - Search Filter - Field Description

Field	Description
Lookup Type	Displays 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 lookups. The options are: • Open • Closed

5. Click **Search** to display the required lookup.
6. On **View Lookup** screen, click ⋮ icon to **Unlock**, **Delete**, **Authorize**, or **View** the created lookup.
7. Click **Unlock icon** to modify the created lookup.

   → **The Lookup Maintenance – Modify** screen displays.

Figure 147 : Lookup Maintenance – Modify

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

Table 130 : Lookup Maintenance - Modify - Field Description

Field	Description
Basic Details	
Lookup Type	Displays the created lookup type.
Description	Displays the description of the created lookup. User can modify the same.
Lookup Codes	
+ button	Click to add a new row.
- button	Click to delete an existing row.
Lookup Code	Displays the lookup code for the created lookups. User can modify the same.
Description	Displays the description for the created lookups. User can modify the same.
Sort Order	Displays the sort order for the created lookups. User can modify the same.
Dependent Identifier	Displays the dependent identifier for the created lookups. User can modify the same.
Enable	Displays the lookup code if enabled for the created lookup. User can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created lookup code.

→ The **Lookup Maintenance – View** screen displays.

Figure 148 : Lookup Maintenance – View

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

Table 131 : Lookup Maintenance - View - Field Description

Field	Description
Basic Details	
Lookup Type	Displays the created lookup type.
Description	Displays the created lookup type description.
Lookup Codes	
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.

4.5 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 section contains the following subsections:

- 4.5.1 Create Product Processor
- 4.5.2 View Product Processor

4.5.1 Create Product Processor

The **Create Product Processor** screen allows the user to create product processor by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Product Processor**, under **Product Processor**, click **Create Product Processor**.

   → The **Create Product Processor** screen displays.

   Figure 149 : Create Product Processor

3. Specify the fields on **Create Product Processor** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

Table 132 : Create Product Processor - Field Description

Field	Description
Basic Details	
Product Processor Code	Specify the unique product processor code.
Product Processor Description	Specify the short description for the product processor.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.

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

   The **Product Processor** is created successfully and can be viewed using the **View Product Processor** screen.

4.5.2 View Product Processor

The **View Product Processor** screen allows the user to view the product processor created using the **Create Product Processor** screen. The status of the created product processor is displayed as **Unauthorized** and **Open**. Once the checker authorizes the product processor, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Product Processor**, under **Product Processor**, click **View Product Processor**.

   → The **View Product Processor** screen displays.

   Figure 150 : View Product Processor

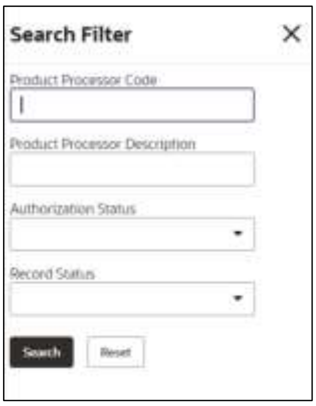
   Table 133 : View Product Processor - Field Description

Field	Description
Product Processor Code	Displays the product processor code.
Product Processor Description	Displays the product processor description.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Product Processor** screen, click  icon.

   → The **View Product Processor – Search** screen displays.

   Figure 151 : View Product Processor - Search

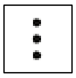
   

4. On **View Product Processor – Search** screen, Specify the **Search Filter** to fetch the required product processor.

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

Table 134 : View Product Processor- Search Filter - 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 options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the product processor. The options are: • Open • Closed

5. Click **Search** to display the required product processor.
6. On **View Product Processor** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created product processor.
7. Click **Unlock** to modify the created product processor.

→ The **Product Processor Maintenance – Modify** screen displays.

Figure 152 : Product Processor Maintenance – Modify

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

Table 135 : Product Processor Maintenance - Modify - Field Description

Field	Description
Basic Details	
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 created product processor. User can modify the same before authorization if it is future dated.
Expiry Date	Displays the expiry date of created product processor. User can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created product processor.

→ The **Product Processor Maintenance – View** screen displays.

Figure 153 : Product Processor Maintenance – View

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

Table 136 : Product Processor Maintenance - View - Field Description

Field	Description
Basic Details	
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.

4.6 Borrowing Capacity

Borrowing capacity describes the total amount the applicant is eligible to borrow. Maximum loan amount is used for loans, credit cards, and line of credit accounts. The maximum credit amount depends on several factors including the borrower's credit worthiness i.e., financial profile and debt to income, loan term, loan purpose, whether the loan is supported by a collateral etc.

Using this screen, we can link a rule for calculating borrowing capacity. We 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 section contains the following subsections:

- 4.6.1 Create Borrowing Capacity
- 4.6.2 View Borrowing Capacity

4.6.1 Create Borrowing Capacity

The **Create Borrowing Capacity** screen allows the user to define the borrowing capacity based on the various input.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Borrowing Capacity**, under **Borrowing Capacity**, click **Create Borrowing Capacity**.

→ The **Create Borrowing Capacity** screen displays.

Figure 154 : Create Borrowing Capacity

3. Specify the fields on **Create Borrowing Capacity** screen.

The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

Table 137 : Create Borrowing Capacity - Field Description

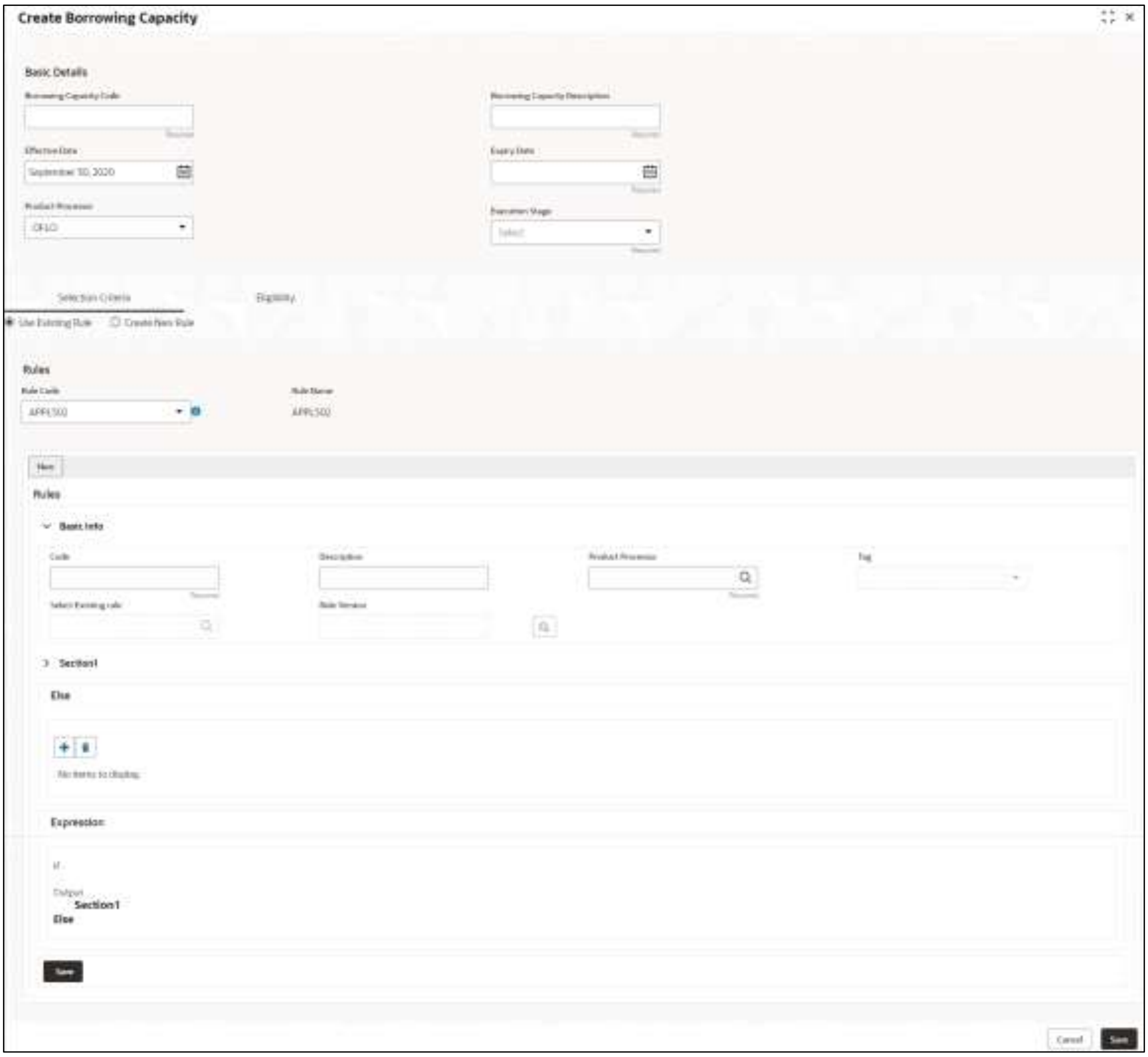
Field	Description
Basic Details	
Borrowing Capacity Code	Specify the unique borrowing code.
Borrowing Capacity Description	Specify a short description for the borrowing code.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the borrowing capacity is being defined.

Field	Description
Execution Stage	Select the required option for execution stage. The 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.

4. Click the **Selection Criteria** tab to define selection criteria rules.

   → The **Create Borrowing Capacity – Selection Criteria** screen displays.

   Figure 155 : Create Borrowing Capacity - Selection Criteria



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

Table 138 : Create Borrowing Capacity – Selection Criteria - Field Description

Field	Description
The following fields appear if you click the **Selection Criteria** Tab	
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rules	
Rule Code	Select the rule code from the drop-down list.
	Click this icon to get the information about the rule.
Rule Name	View the rule name.
Create New Rule	Select this option to create new rule.
Rules	
Code	Specify the rule code.
Description	Specify the rule description.
Select Existing Rule	Select existing rule from the drop-down list.
	Click to view the existing rule. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below fields appears once you click  icon.	
Rule ID	Displays the rule ID.
Rule Name	Displays the rule name.
Description	Displays the rule description.
Rule Version	Displays the rule version.
	Click to view the rule version. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below fields appears once you click  icon.	
Version	Displays the rule version.
Description	Displays the rule description.

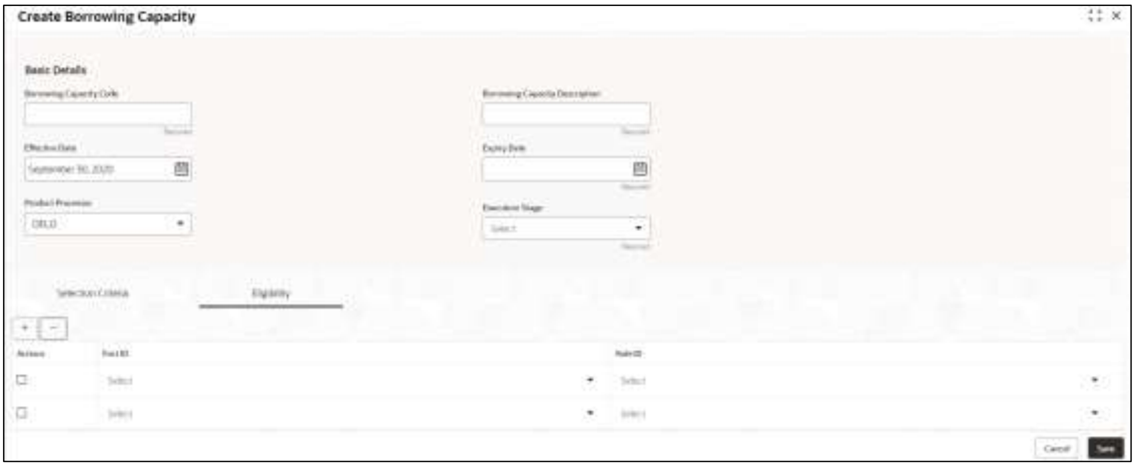
Field	Description
Creation Date	Displays the rule creation date.
Expression Builder	
+ Add Expression	Click to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once you select the fact/rules one more field opens adjacent to the output, update the same based on the selected output option.
Operator	Select the comparison operator from the drop-down list. The options are: • < • > • + • = • % • != • - • >= • <= • * • / • Contains • In • Matches • Notmatches • Notcontains • Notin
Data Type	Select the data type for the fact or rule. Once you select the data type one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Fact • Date The below option appears if the **Data Type** is selected as **Boolean**. • True • False

Field	Description
Output	Select the output from the drop-down list. Once you select the output one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Date • Fact The below option appears if the **Data Type** is selected as **Boolean**. • True • False
Expression	View the expression updated in the expression builder.

5. Click the **Eligibility** tab to define eligibility.

→ The **Create Borrowing Capacity – Eligibility** screen displays.

Figure 156 : Create Borrowing Capacity – Eligibility



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

Table 139 : Create Borrowing Capacity – Eligibility - Field Description

Field	Description
The following fields appear if you click the **Eligibility**	
+ button	Click to add a new row.
- button	Click to delete an existing row.
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.

Field	Description
	Click to get the information about the rule.

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

   The **Borrowing Capacity** is successfully created and can be viewed using the **View Borrowing Capacity** screen.

4.6.2 View Borrowing Capacity

The **View Borrowing Capacity** screen allows user to view the borrowing capacity created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Borrowing Capacity**, under **Borrowing Capacity**, click **View Borrowing Capacity**.

   → The **View Borrowing Capacity** screen displays.

   Figure 157 : View Borrowing Capacity

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

   Table 140: 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.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Borrowing Capacity** screen, click  icon.

   → The **View Borrowing Capacity – Search** screen displays.

Figure 158 : View Borrowing Capacity - Search

4. On **View Borrowing Capacity – Search** screen, Specify the **Search Filter** to fetch required borrowing capacity.

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

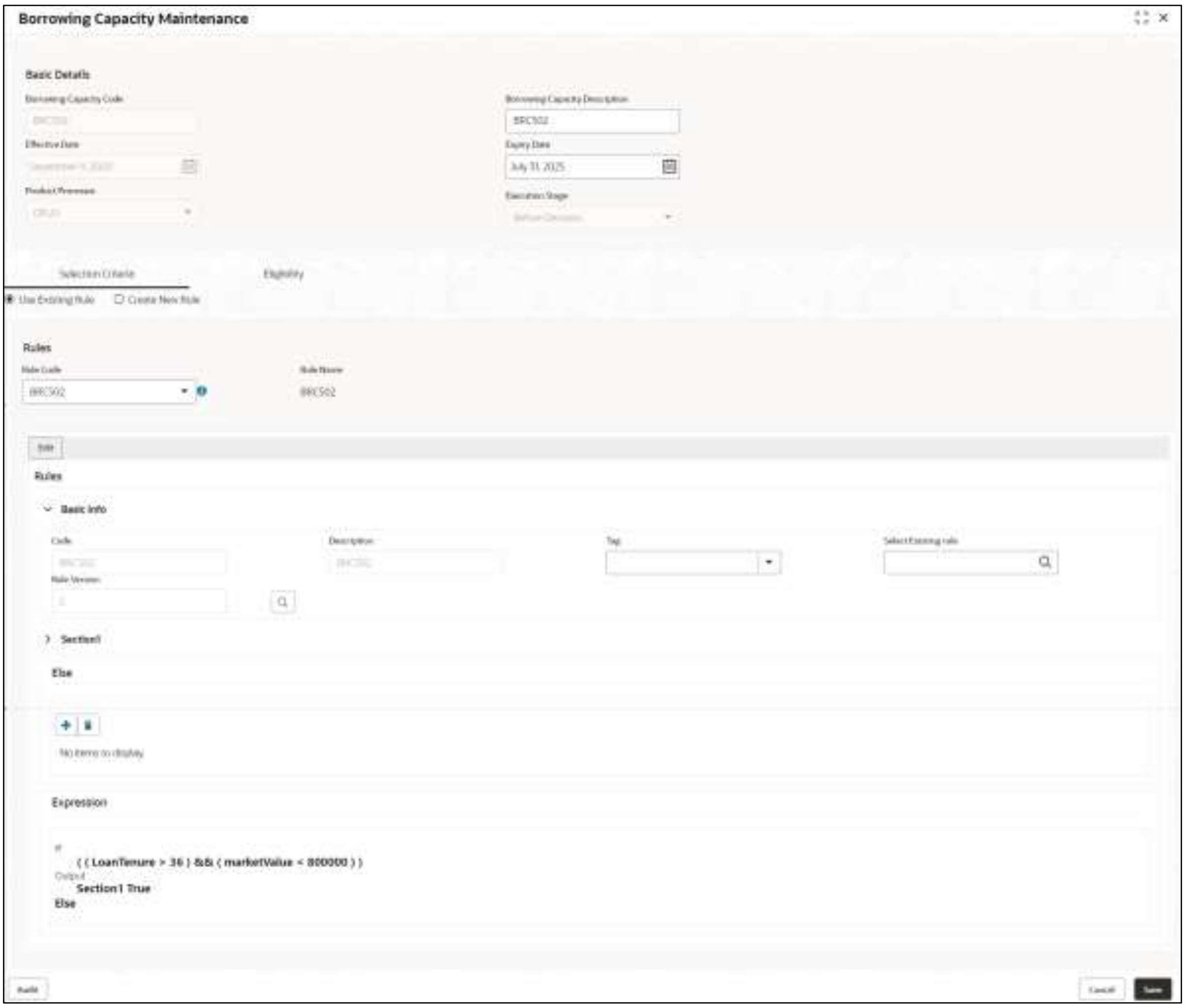
Table 141 : View Borrowing Capacity - Search Filter - Field Description

Field	Description
Borrowing Capacity Code	Specify the borrowing capacity code.
Borrowing Capacity Description	Specify the description of the borrowing capacity.
Authorization Status	Select the authorization status of the borrowing capacity. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the borrowing capacity. The options are: • Open • Closed

5. Click **Search** to display the required borrowing capacity.
6. **On View Borrowing Capacity** screen, click icon to **Unlock**, **Delete**, **Authorize**, or **View** the created borrowing capacity.
7. Click **Unlock** to modify the created borrowing capacity.

   → The **Borrowing Capacity Maintenance – Modify** screen displays.

Figure 159 : Borrowing Capacity Maintenance – Modify



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

Table 142: Borrowing Capacity Maintenance – Modify – Field Description.

Field	Description
Basic Details	
Borrowing Capacity Code	Displays the code for the created borrowing capacity.
Borrowing Capacity Description	Displays the description for the created borrowing capacity. User can modify the same.
Effective Date	Displays the effective date for the created borrowing capacity. User can modify the same if the date is future dated.
Expiry Date	Displays the expiry date for the created borrowing capacity. User can modify the same.

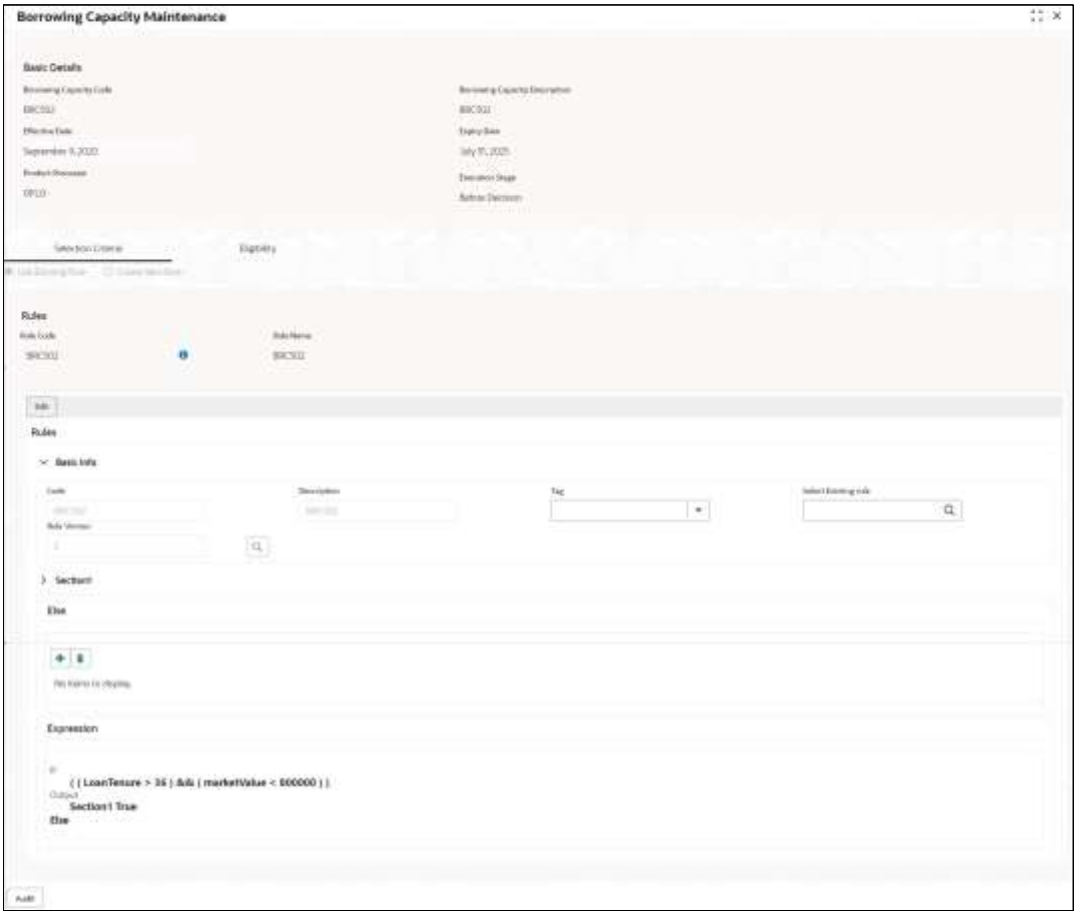
Field	Description
Product Processor	Displays the product processor of the created borrowing capacity.
Execution Stage	Displays the execution stage for the created borrowing capacity.
Selection Criteria	
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rules	
Rule Code	Displays the rule code.
	Click to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Indicates if the new rule is created.
Rules	
Code	Displays the rule code.
Description	Displays the rule description
Select Existing Rule	Displays the existing rule. User can modify the same.
Version	Displays the rule version.
Expression Builder	
Fact / Rules	Displays the fact/rules of the created borrowing capacity.
Operator	Displays the comparison operator of the created borrowing capacity.
Data Type	Displays the data type for the fact or rule of the created borrowing capacity.
Output	Displays the output of the created borrowing capacity.
Expression	Displays the expression updated in the expression builder of the created borrowing capacity.
Eligibility	
Fact ID	Displays the fact ID of the created borrowing capacity. User can modify the same.
Rule ID	Displays the rule ID of the created borrowing capacity. User can modify the same.

Field	Description
	Click to get the information about the rule.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created borrowing capacity.

→ The **Borrowing Capacity Maintenance – View** screen displays.

Figure 160 : Borrowing Capacity Maintenance – View



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

Table 143 : Borrowing Capacity Maintenance - View – Field Description.

Field	Description
Basic Details	
Borrowing Capacity Code	Displays the code for the created borrowing capacity.
Borrowing Capacity Description	Displays the description for the created borrowing capacity.

Field	Description
Effective Date	Displays the effective date for the created borrowing capacity.
Expiry Date	Displays the expiry date for the created borrowing capacity.
Product Processor	Displays the product processor for the created borrowing capacity.
Execution Stage	Displays the execution stage for the created borrowing capacity.
Selection Criteria	
Rules	
Use Existing Rule	Displays if the existing rule is linked to borrowing capacity.
Rule Code	Displays the rule code of the created borrowing capacity.
Rule Name	Displays the rule name of the created borrowing capacity.
Create New Rule	Displays if new rule is linked to the created borrowing capacity.
Rules	
Rule Code	Displays the rule code of the created borrowing capacity.
Description	Displays the rule description of the created borrowing capacity.
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
Fact / Rules	Displays the fact/rules of the created borrowing capacity.
Operator	Displays the comparison operator of the created borrowing capacity.
Data Type	Displays the data type for the fact or rule of the created borrowing capacity.
Output	Displays the output of the created borrowing capacity.
Expression	Displays the expression updated in the expression builder of the crated borrowing capacity.
Eligibility	
Fact ID	Displays the fact ID of the created borrowing capacity.
Rule ID	Displays the rule ID of the created borrowing capacity.
	Click to get the information about the rule.

4.7 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 section contains the following subsections:

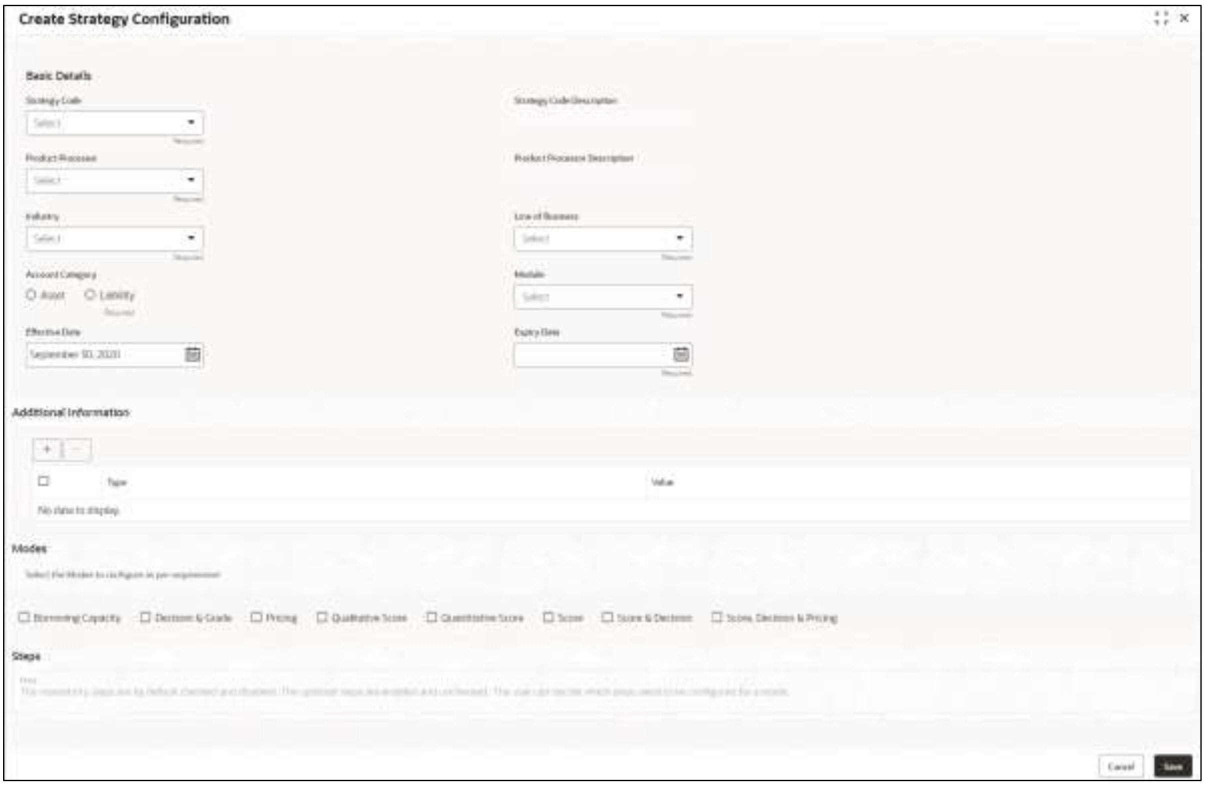
4.7.1 Create Strategy Configuration

The **Create Strategy Configuration** screen allows user to configure the strategy as per the requirement.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Strategy Configuration**, under **Strategy Configuration**, click **Create Strategy Configuration**.

   → The **Create Strategy Configuration** screen displays.

Figure 161 : Create Strategy Configuration



3. Specify the fields on Create **Strategy Configuration** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

Table 144 : Create Strategy Configuration - Field Description

Field	Description
Basic Details	
Strategy Code	Specify the unique strategy code.
Strategy Code Description	Displays the 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.

Field	Description
Industry	Select the industry type from the drop-down list. The values are configurable based on the lookup values maintained. The 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 options are: • Corporate • Retail • SMEnt
Account Category	Select the category from the drop-down list. The options are: • Asset • Liability
Module	Select the module from the drop-down list. The values are configurable based on the lookup values maintained. The options are: • Collection • Origination • Servicing
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Additional Information	
+ button	Click to add a new fact.
- button	Click to delete an existing row.
Type	Select the fact type from the drop-down list.

Field	Description
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 list. The options are: • Borrowing Capacity • Decision & Grade • Pricing • Qualitative Score • Quantitative Score • Score • Score & Decision • Score, Decision & Pricing If the **Module** is selected as **Collection**, then below options are available. The options are: • Decision and Grade • Qualitative Score • Quantitative Score • Score • Score and Decision
Steps	Steps are defined based on the modes selected. For 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.

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

   The **Strategy Configuration** is successfully created and can be viewed using the **View strategy Configuration** screen.

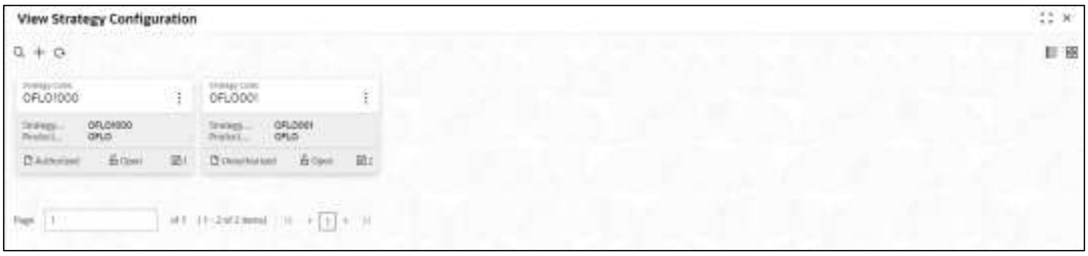
4.7.2 View Strategy Configuration

The **View Strategy Configuration** screen allows the user to view the strategy configuration created using the **Create Strategy Configuration** screen. The status of the created strategy configuration is displayed as **Unauthorized** and **Open**. Once the checker authorizes the parameter, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance,** click **Credit Decision**.
2. Under **Credit Decision,** click **Maintenance**, under **Maintenance**, click **Strategy Configuration**, under **Strategy Configuration**, click **View Strategy Configuration**.

→ The **View Strategy Configuration** screen displays.

Figure 162 : View Strategy Configuration



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

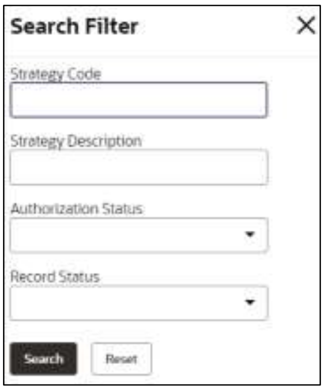
Table 145 : View Strategy Configuration - Field Description

Field	Description
Strategy Code	Displays the strategy code.
Strategy Description	Displays the strategy description.
Product Processor	Displays the product processor.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Strategy Configuration** screen, Click  icon.

→ The **View Strategy Configuration – Search** screen displays.

Figure 163 : View Strategy Configuration - Search

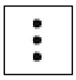


4. On **View Strategy Configuration – Search** screen, Specify the **Search Filter** to fetch the required strategy configuration.

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

   Table 146 : View Strategy Configuration – Search Filter - Field Description

Field	Description
Strategy Code	Specify the strategy code.
Strategy Description	Specify the strategy description.
Authorization Status	Select the authorization status of the parameters. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the parameters. The options are: • Open • Closed

5. Click **Search** to display the required strategy configuration.
6. On **View Strategy Configuration** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created strategy configuration.
7. Click **Unlock** to modify the created strategy configuration.

   → The **Strategy Configuration Maintenance – Modify** screen displays.

Figure 164 : Strategy Configuration Maintenance – Modify

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

Table 147 : Strategy Configuration Maintenance - Modify - Field Description

Field	Description
Basic Details	
Strategy Code	Displays the strategy code.
Strategy Code Description	Displays the 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.
Industry	Displays the industry for the created strategy configuration.
Line of Business	Displays the line of business 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. User can modify the same.
Additional Information	

Field	Description
Type	Displays the fact type for the created strategy configuration. User can modify the same.
Value	Displays the fact value for the created strategy configuration. User can modify the same.
Modes	Displays the modes defined for the created strategy configuration. User can modify the same.
Steps	Displays the steps defined for the created strategy configuration. User can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created strategy configuration.

→ The **Strategy Configuration Maintenance – View** screen displays.

Figure 165 : Strategy Configuration Maintenance – View

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

Table 148 : Strategy Configuration Maintenance - View - Field Description

Field	Description
Basic Details	
Strategy Code	Displays the strategy code.

Field	Description
Strategy Code Description	Displays the 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.
Industry	Displays the industry for the created strategy configuration.
Line of Business	Displays the line of business 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.
Additional Information	
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.

4.8 Scoring Feature

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 section contains the following subsections:

- 4.8.1 Create Scoring Feature
- 4.8.2 View Scoring Feature

4.8.1 Create Scoring Feature

The **Create Scoring Feature** screen allows user to define scoring feature for determining the credit score. This score applies to applications during origination and based on the information received from the product processor.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision** click, **Maintenance**, under **Maintenance**, click **Scoring Feature**, under **Scoring Feature**, click **Create Scoring Feature**.

   → The **Create Scoring Feature** screen displays.

   Figure 166 : Create Scoring Feature

3. Specify the fields on **Create Scoring Feature** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 149 : Create Scoring Feature - Field Description

Field	Description
Basic Details	
Feature Code	Specify the unique feature code.

Field	Description
Feature Description	Specify a short description for the feature.
Product Processor	Specify the product processor for which the feature is being created.
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 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	Displays the fact name for the selected fact. 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	Displays the rule name for the selected rule. This field is enabled if the **Rule** is selected as **Yes**.

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

   The **Scoring Feature** is successfully created and can be viewed using the **View Scoring Feature** screen.

4.8.2 View Scoring Feature

The **View Scoring Feature** screen allows user to view the scoring feature created using the **Create Scoring Feature** screen. The status of the uploaded feature is displayed as **Unauthorized** and **Open**. Once the checker authorizes the model, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision,** click **Maintenance**, under **Maintenance,** click **Scoring Feature**, under **Scoring Feature**, click **View Scoring Feature**.

→ The **View Scoring Feature** screen displays.

Figure 167 : View Scoring Feature

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

Table 150 : View Scoring Feature - Field Description

Field	Description
Feature Code	Displays the feature code.
Feature Description	Displays the feature description.
Product Processor	Displays the product processor.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Scoring Feature** screen, click  icon.

→ The **View Scoring Feature – Search** screen displays.

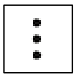
Figure 168 : View Scoring Feature - Search

4. On **View Scoring Feature – Search** screen, Specify the **Search Filter** to fetch the required scoring feature.

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

   Table 151 : View Scoring Feature - Search Filter - Field Description

Field	Description
Feature Code	Displays the feature code.
Feature Description	Displays the feature description.
Authorization Status	Select the authorization status of the feature. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the feature. The options are: • Open • Closed

5. Click **Search** to display the required scoring feature.
6. On **View Scoring Feature** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created scoring feature.
7. Click **Unlock** to modify the created scoring feature.

   → The **Scoring Feature Maintenance – Modify** screen displays.

Figure 169 : Scoring Feature Maintenance – Modify

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

Table 152 : Scoring Feature Maintenance – Modify - Field Description

Field	Description
Basic Details	
Feature Code	Displays the feature code.
Feature Description	Displays the feature description. User can modify the same.
Product Processor	Displays the product processor for the created scoring feature.
Rule	Displays the rule defined to the feature. User can modify the same.
Rule Code	Displays the rule code of the feature. User can modify the same. This field is displayed if the **Rule** is selected as **Yes**.
	Click to get the information about the rule.
Rule Name	Displays the rule name of the feature. This field is displayed if the **Rule** is selected as **Yes**.
Fact Code	Displays the fact code of the feature. User can modify the same. This field is displayed if the **Rule** is selected as **No**.
Fact Name	Displays the fact name of the feature. This field is displayed if the **Rule** is selected as **No**.

4.9 Quantitative Scoring Model

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 section contains the following subsections:

- 4.9.1 Create Quantitative Scoring Model
- 4.9.2 View Quantitative Scoring Model

4.9.1 Create Quantitative Scoring Model

The **Create Quantitative Scoring Model** screen allows user to define quantitative scoring model based on the various scoring parameters. The parameters driving the scoring models are configurable. You can create quantitative scoring model by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Quantitative Scoring Model**, under **Quantitative Scoring Model**, click **Create Quantitative Scoring Model**.

   → The **Create Quantitative Scoring Model** screen displays.

Figure 170 : Create Quantitative Scoring Model

3. Specify the fields on **Create Quantitative Scoring Model** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

Table 153 : Create Quantitative Scoring Model - Field Description

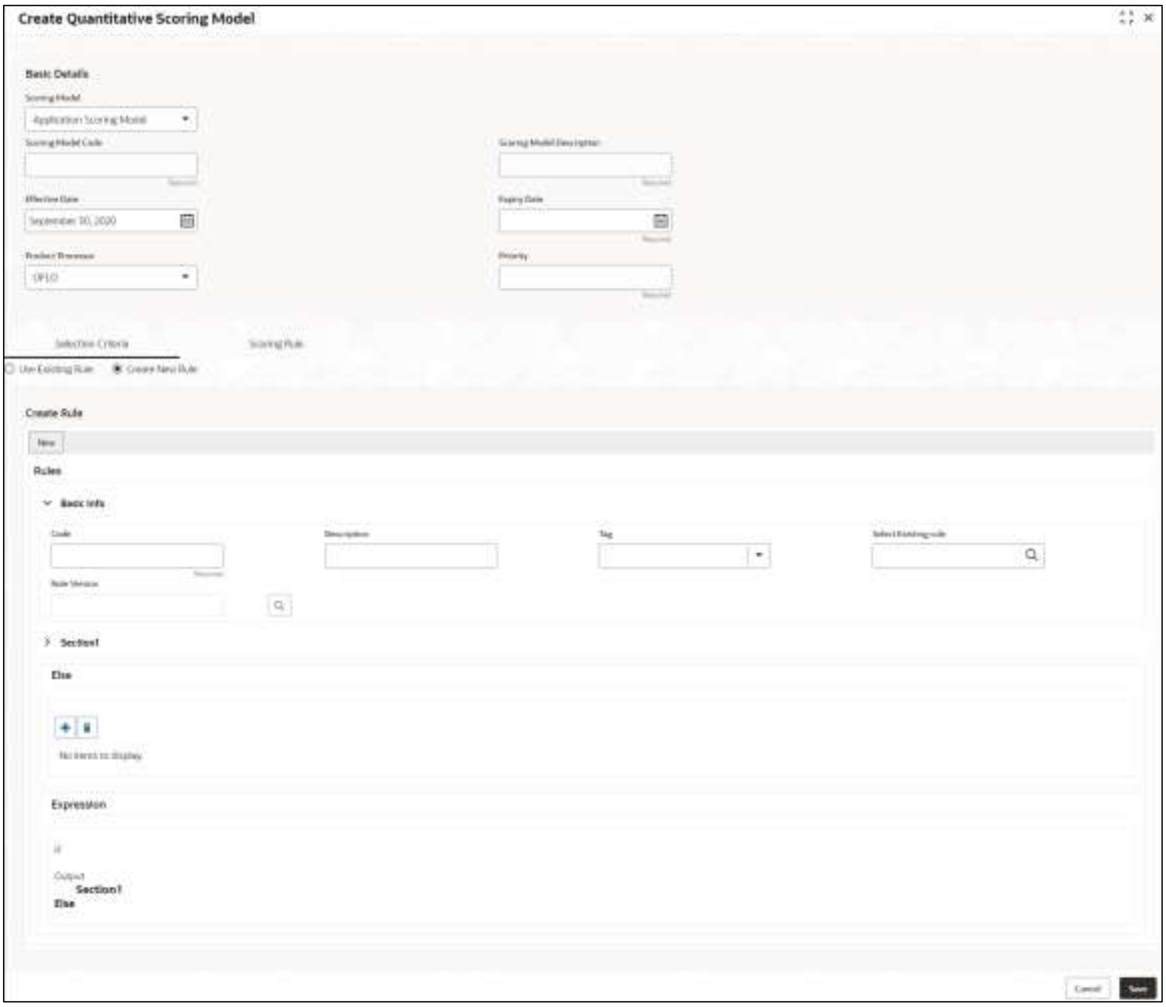
Field	Description
Basic Details	

Field	Description
Scoring Model	Select the scoring model from the drop-down list. The 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.

4. Click the **Selection Criteria** tab to define scoring model.

→ The **Create Quantitative Scoring Model – Selection Criteria** screen displays.

Figure 171 : Create Quantitative Scoring Model – Selection Criteria



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

Table 154 : 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.
Rules	
Rule Code	Select the rule code from the drop-down list.
	Click 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.
Rules	
Code	Specify the new rule code.

Field	Description
Description	Specify the rule description.
Select Existing Rule	Select the existing rule from the drop-down list.
	Click to view the existing rule. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below field appears once you click icon.	
Rule ID	Displays the rule ID.
Rule Name	Displays the rule name.
Description	Displays the rule description.
Rule Version	Displays the rule version
	Click to view the existing rule version. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below fields appears once you click icon.	
Version	Displays the rule version.
Description	Displays the rule description.
Creation Date	Displays the rule creation date.
Expression Builder	
+ button	Click to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once you select the fact/rules one more field opens adjacent to it, update the same based on the selected option.

Field	Description
Operator	Select the comparison operator from the drop-down list. The options are: • < • > • + • = • % • != • - • >= • <= • * • / • Contains • In • Matches • Notmatches • Notcontains • Notin
Data Type	Select the data type for the fact or rule. Once you select the data type one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Fact • Date The below option appears if the **Data Type** is selected as **Boolean**. • True • False

Field	Description
Output	Select the output from the drop-down list. Once you select the output one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Date • Fact The below option appears if the **Data Type** is selected as **Boolean**. • True • False
Expression	Displays the expression updated in the expression builder.

5. Click the **Scoring Rule** tab to define the rule. This tab is enabled if **Application Scoring Model** is selected.

→ The **Create Quantitative Scoring Model – Scoring Rule** screen displays.

Figure 172 : Create Quantitative Scoring Model – Scoring Rule

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

Table 155 : Create Quantitative Scoring Model - Scoring Rule - Field Description

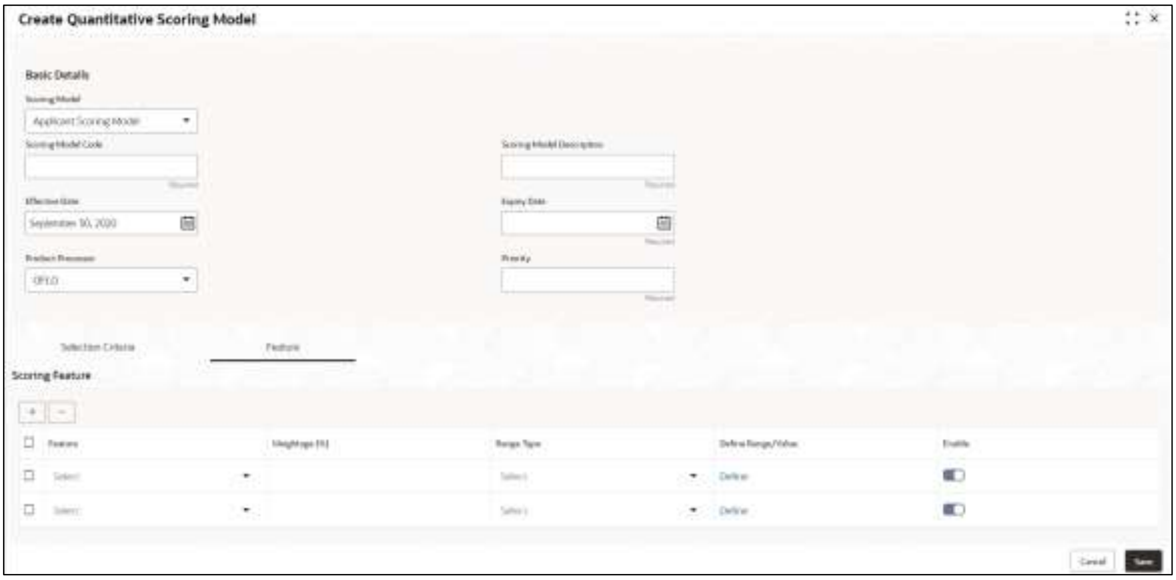
Field	Description
Score	
Rule Code	Select the rule code from the drop-down list.

Field	Description
	Click to get the information about the rule.
Rule Name	Displays the rule name of the rule code.

6. 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 173 : Create Quantitative Scoring Model – Feature



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

Table 156 : Create Quantitative Scoring Model – Feature - Field Description

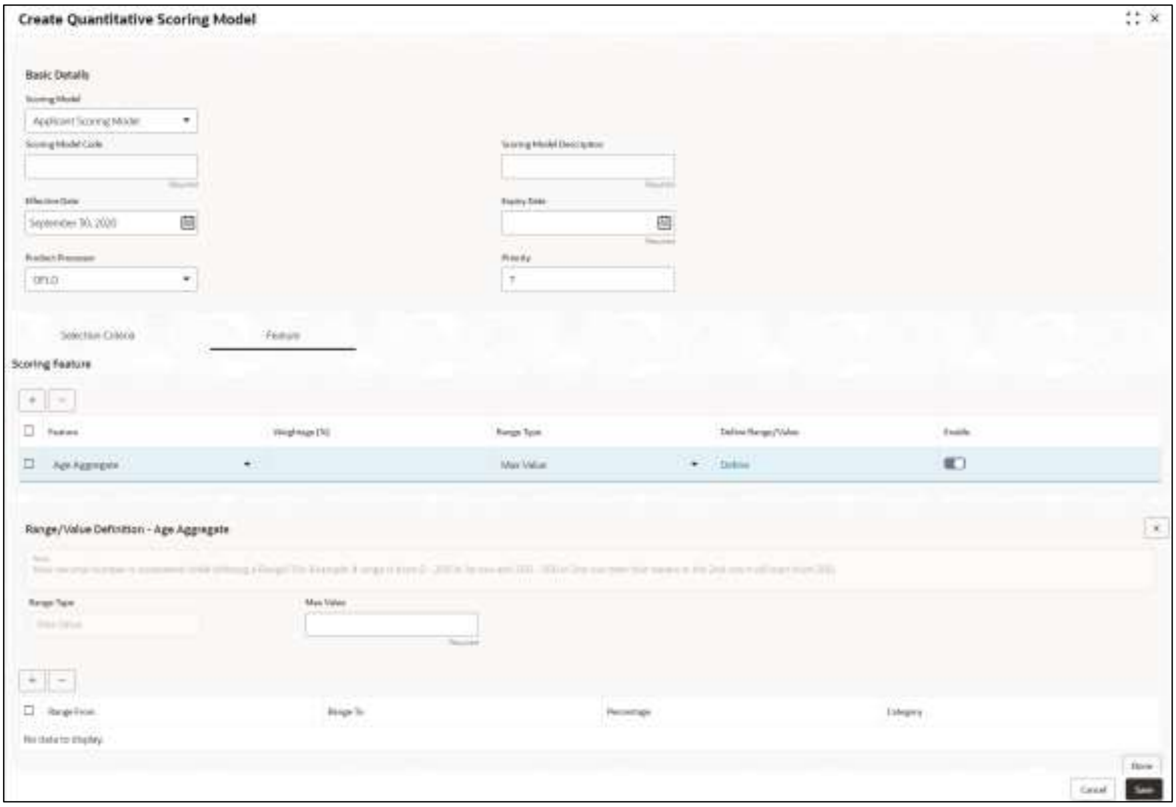
Field	Description
Scoring Feature	
+ button	Click to add a new row.
- button	Click to delete an existing row.
Feature	Select the feature from the drop-down list.
Weightage (%)	Specify the weightage to be assigned to each feature code.

Field	Description
Range Type	Select the range type from the drop-down list. The options are: • Max Value • Param Percent% • Value For **Applicant Scoring Model** this field is editable.
Define Range/Value	Click to define the feature.
Enable	By default, this option is enabled. Indicates if the scoring parameter is enabled or not.

7. 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 scores the below screen appears.

→ The **Create Quantitative Scoring Model – Define Link – Numeric Feature** screen displays.

Figure 174 : Create Quantitative Scoring Model – Define Link – Numeric Feature



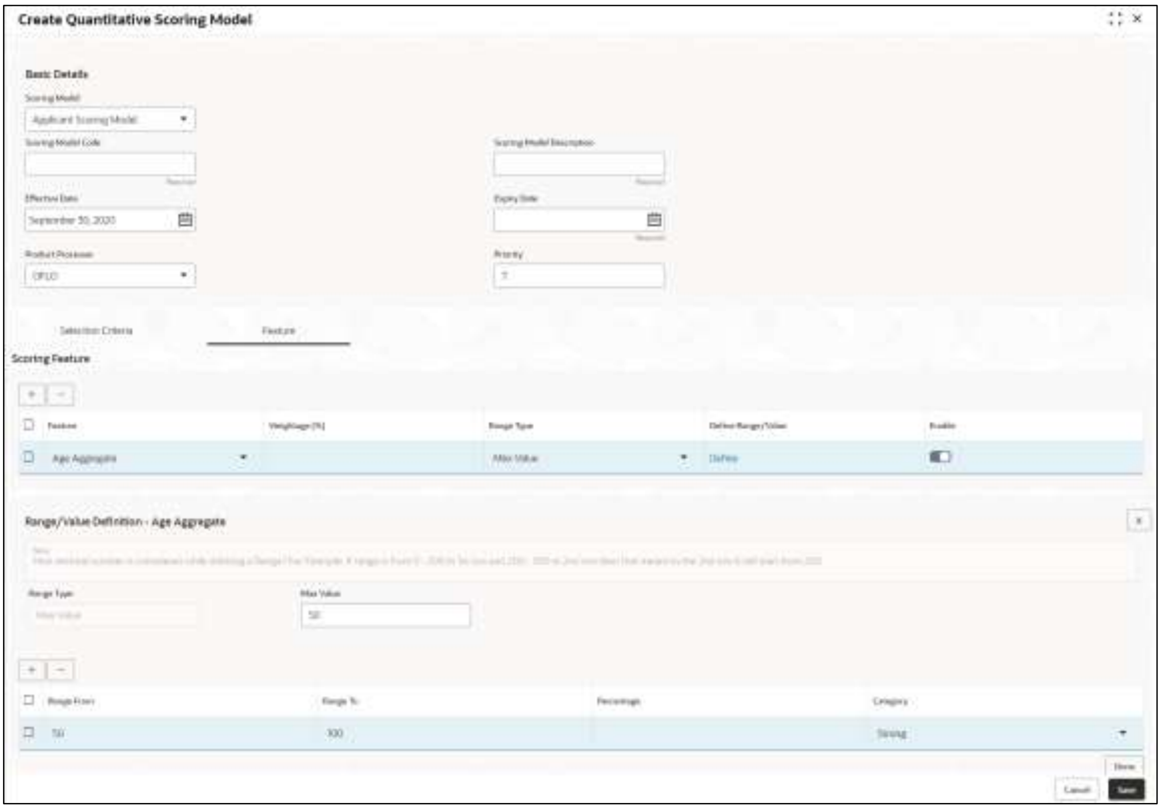
For more information on fields, refer to the field description table below.

Table 157: Create Quantitative Scoring Model – Define Link – Numeric Feature - Field Description

Field	Description
Range/Value Definition	
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 %.
+ button	Click to add a new row.
- button	Click to delete an existing row.
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 options are: • Strong • Medium • Weak

8. In case the data type of feature is alphanumeric such as Employment Category the below screen appears.

Figure 175: Create Quantitative Scoring Model - Define Link – Alphanumeric Feature



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

Table 158: Create Quantitative Scoring Model – Define Link – Alphanumeric Feature - Field Description

Field	Description
Range/Value Definition	
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.
+ button	Click to add a new row.
- button	Click to delete an existing row.
Value	Specify the value of the feature.
Score	Specify the score assigned for each range value.

Field	Description
Category	Specify the category for each range or value from the drop-down list. The 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.

4.9.2 View Quantitative Scoring Model

The **View Quantitative Scoring Model** screen allows the user to view the quantitative scoring Model created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Quantitative Scoring Model**, under **Quantitative Scoring Model**, click **View Quantitative Scoring Model**.

→ The **View Quantitative Scoring Model** screen displays.

Figure 176 : View Quantitative Scoring Model

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

Table 159 : View Quantitative Scoring Model - Field Description

Field	Description
Scoring Model Code	Displays the scoring model code.
Scoring Model Description	Displays the scoring model description.
Product Processor Code	Displays the product processor code.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Quantitative Scoring Model** screen, click  icon.

→ The **View Quantitative Scoring Model – Search** screen displays.

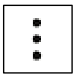
Figure 177 : View Quantitative Scoring Model - Search

4. On **View Quantitative Scoring Model – Search** screen, Specify the **Search Filter** to fetch the required quantitative scoring model.

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

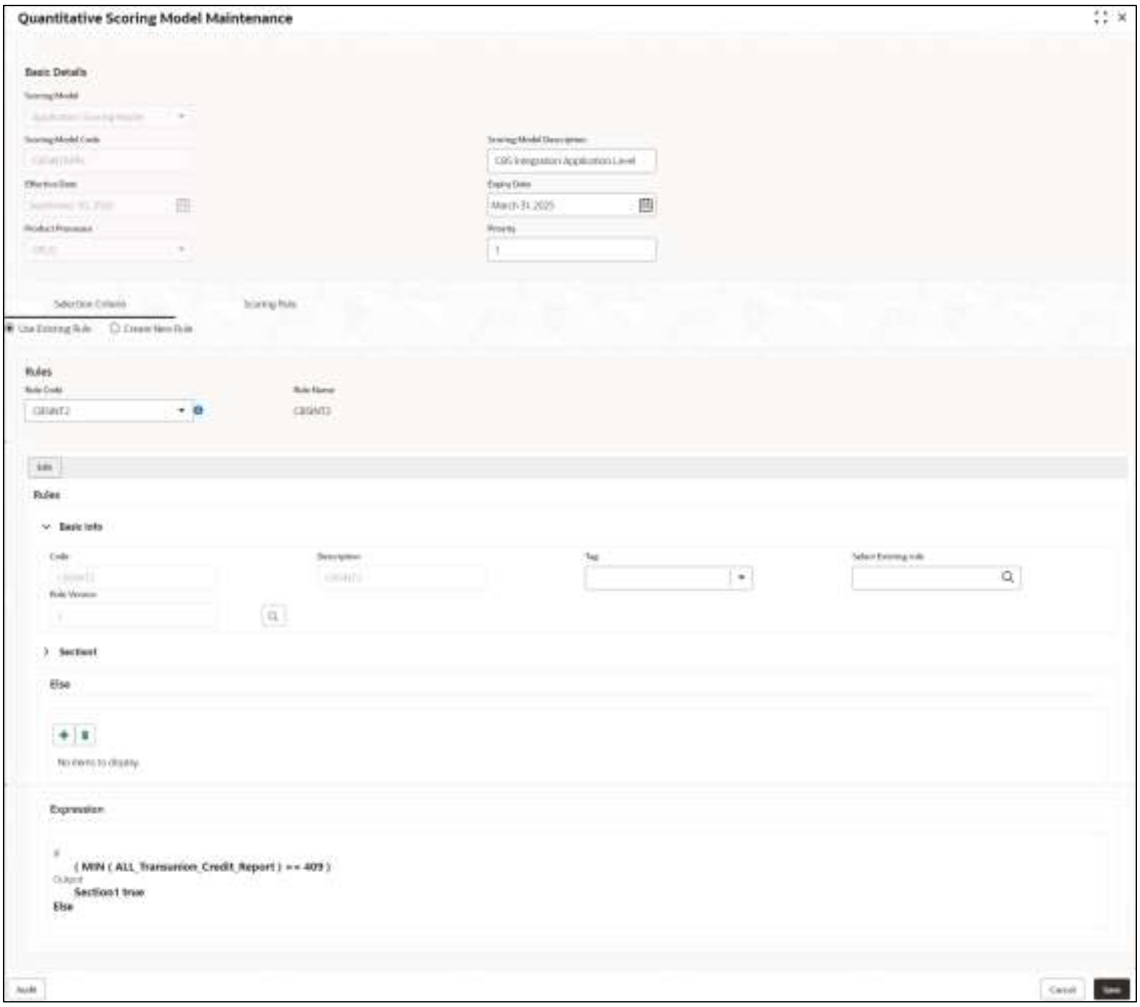
   Table 160 : View Quantitative Scoring Model – Search Filter - Field Description

Field	Description
Scoring Model Code	Specify the scoring model code.
Scoring Model Description	Specify the scoring model description.
Authorization Status	Select the authorization status of the model. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the model. The options are: • Open • Closed

5. Click **Search** to display the required quantitative scoring model.
6. On **View Quantitative Scoring Model** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created quantitative scoring model.
7. Click **Unlock** to modify the created quantitative scoring model.

   → The **Quantitative Scoring Model Maintenance – Modify** screen displays.

Figure 178 : Quantitative Scoring Model Maintenance – Modify



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

Table 161 : Quantitative Scoring Model Maintenance – Modify - Field Description

Field	Description
Basic Details	
Application Scoring Model	Displays the application scoring model.
Scoring Model Code	Displays the scoring model code for the created quantitative scoring model.
Scoring Model Description	Displays the scoring model description for the created quantitative scoring model. User can modify the same
Effective Date	Displays the effective date for the created quantitative scoring model. User can modify the same before authorization.

Field	Description
Expiry Date	Displays the expiry date of the created quantitative scoring model. User can modify the same.
Product Processor	Displays the product processor for the created quantitative scoring model.
Priority	Displays the priority of the created quantitative scoring model. User can modify the same.
Selection Criteria	
Use Existing Rule	Indicates if the existing rule is linked. User can modify the same
Rules	
Rule Code	Displays the rule code for the created quantitative scoring model. User can modify the same.
	Click 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. User can modify the same.
Rules	
Code	Specify the new rule code for quantitative scoring model.
Description	Specify the rule description for the quantitative scoring model.
Select existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click to add new expression.
Fact / Rules	Displays the fact or rule for the created quantitative scoring model.
Operator	Displays the comparison operator for the created quantitative scoring model.
Data Type	Displays the data type for the fact or rule for the created quantitative scoring model.

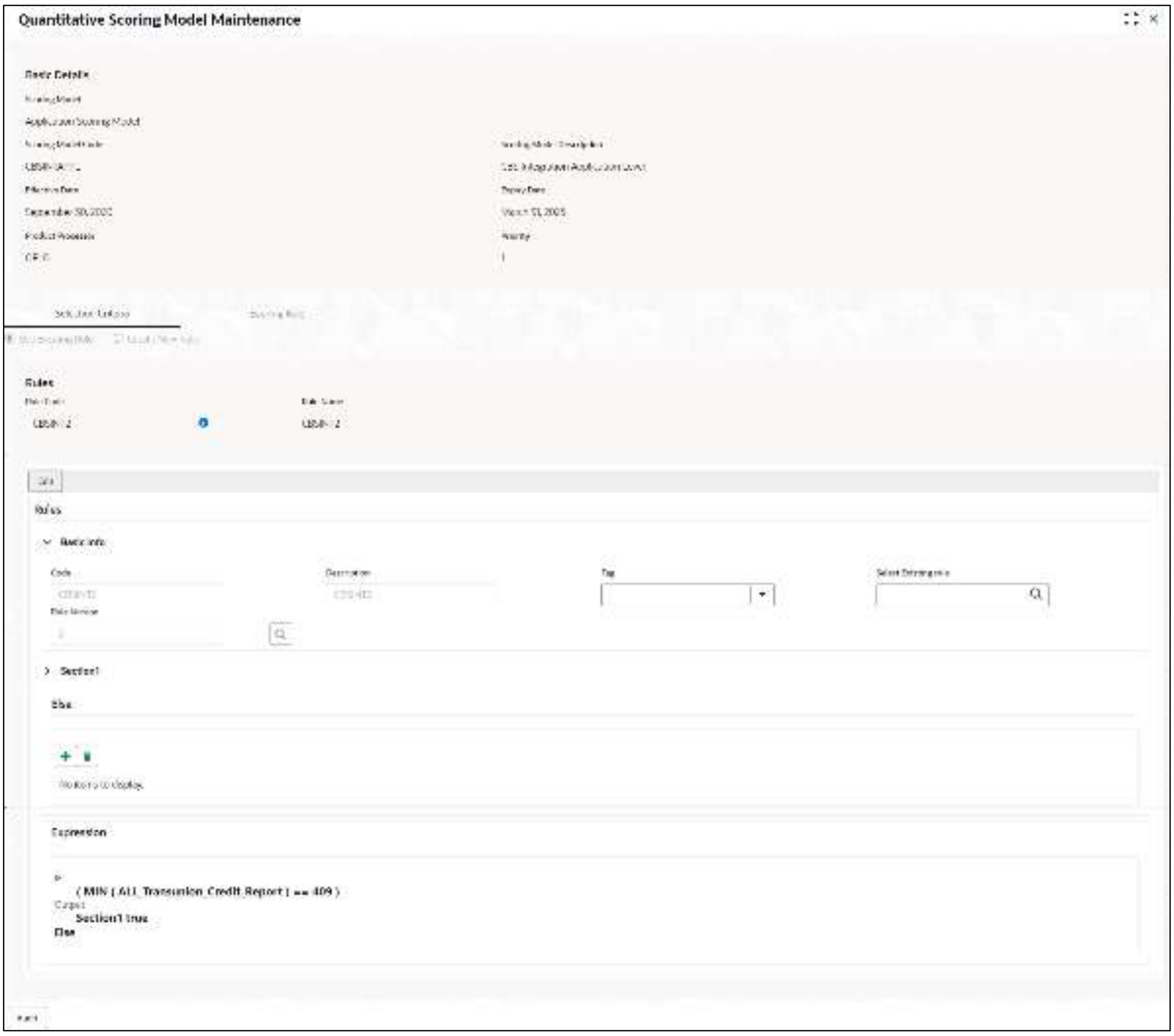
Field	Description
Output	Displays the output for the created quantitative scoring model.
Expression	Displays the expression updated in the expression builder for the created quantitative scoring model.
Feature This tab is enabled for the **Applicant Scoring Model.**	
Scoring Feature	
+ button	Click to add new row.
- icon	Click to delete an existing row.
Feature	Displays the feature for the created quantitative scoring model.
Weightage (%)	Displays the weightage assigned to each feature for the created quantitative scoring model. User can modify the same.
Range Type	Displays the range type for the created quantitative scoring model. The options are: • Max Value • Param Percent% • Value
Define Range/Value	Displays the range/value defined for the created quantitative scoring model.
Range From	Displays the minimum range of value based on which scoring is done. User can modify the same.
Range To	Displays the maximum range of value based on which scoring is done. User can modify the same.
Score	Displays the score assigned for each range or value. User can modify the same.

Field	Description
Category	Displays the category for each range or value for the created quantitative scoring model. The options are: • Strong • Medium • Weak User can modify the same.
Enable	Displays the parameter for the created quantitative scoring model. User can modify the same.
Scoring Rule This tab is enabled for the **Application Scoring Model.**	
Score	
Rule Code	Displays the rule code for the created quantitative scoring model.
	Click to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created quantitative scoring model.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created quantitative scoring model.

→ The **Quantitative Scoring Model Maintenance – View** screen displays.

Figure 179 : Quantitative Scoring Model Maintenance – View



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

Table 162 : Quantitative Scoring Model Maintenance – View - Field Description

Field	Description
Basic Details	
Scoring Model	Displays the scoring Model for the created quantitative scoring model.
Scoring Model Code	Displays the scoring model code for the created quantitative scoring model.
Scoring Model Description	Displays the scoring model description for the created quantitative scoring model.
Effective Date	Displays the effective date for the created quantitative scoring model.
Expiry Date	Displays the expiry date of the created quantitative scoring model.
Product Processor	Displays the product processor for the created quantitative scoring model.

Field	Description
Priority	Displays the priority of the created quantitative scoring model.
Selection Criteria	
Use Existing Rule	Indicates if the existing rule is linked.
Rules	
Rule Code	Displays the rule code for the created quantitative scoring model.
	Click 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.
Rules	
Code	Specify the new rule code for quantitative scoring model.
Description	Specify the rule description for the quantitative scoring model.
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click to add new expression.
Fact / Rules	Displays the fact or rule for the created quantitative scoring model.
Operator	Displays the comparison operator for 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.**	
Scoring Feature	
+ button	Click to add new row.
- button	Click to delete an existing row.

Field	Description
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. The options are: • Max Value • Param Percent% • Value
Define Range/Value	Displays the range/value defined for the created quantitative scoring model.
Range From	Displays the minimum range of value based on which scoring is done.
Range To	Displays the maximum range of value based on which scoring is done.
Score	Displays the score assigned for each range or value.
Category	Displays the category for each range or value for the created quantitative scoring model. The options are: • Strong • Medium • Weak
Enable	Displays the parameter for the created quantitative scoring model.
Scoring Rule This tab is enabled for the **Application Scoring Model.**	
Score	
Rule Code	Displays the rule code for the created quantitative scoring model.
	Click to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created quantitative scoring model.

4.10 Decision Grade Matrix

The **Decision Grade Matrix** screen allows the user to define the decision and grade based on the score calculated by the scoring model.

This section contains following subsections:

4.10.1 Create Decision Grade Matrix

The **Create Decision Grade Matrix** screen allows user to create decision and grade matrix by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance,** click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Decision Grade Matrix**, under **Decision Grade Matrix**, click **Create Decision Grade Matrix**.

→ The **Create Decision Grade Matrix** screen displays.

Figure 180 : Create Decision Grade Matrix

3. Specify the fields on **Create Decision Grade Matrix** screen.

The fields, which are mentioned with required, are mandatory. For more information on fields, refer to the field description table below.

Table 163: Create Decision and Grade Matrix - Field Description

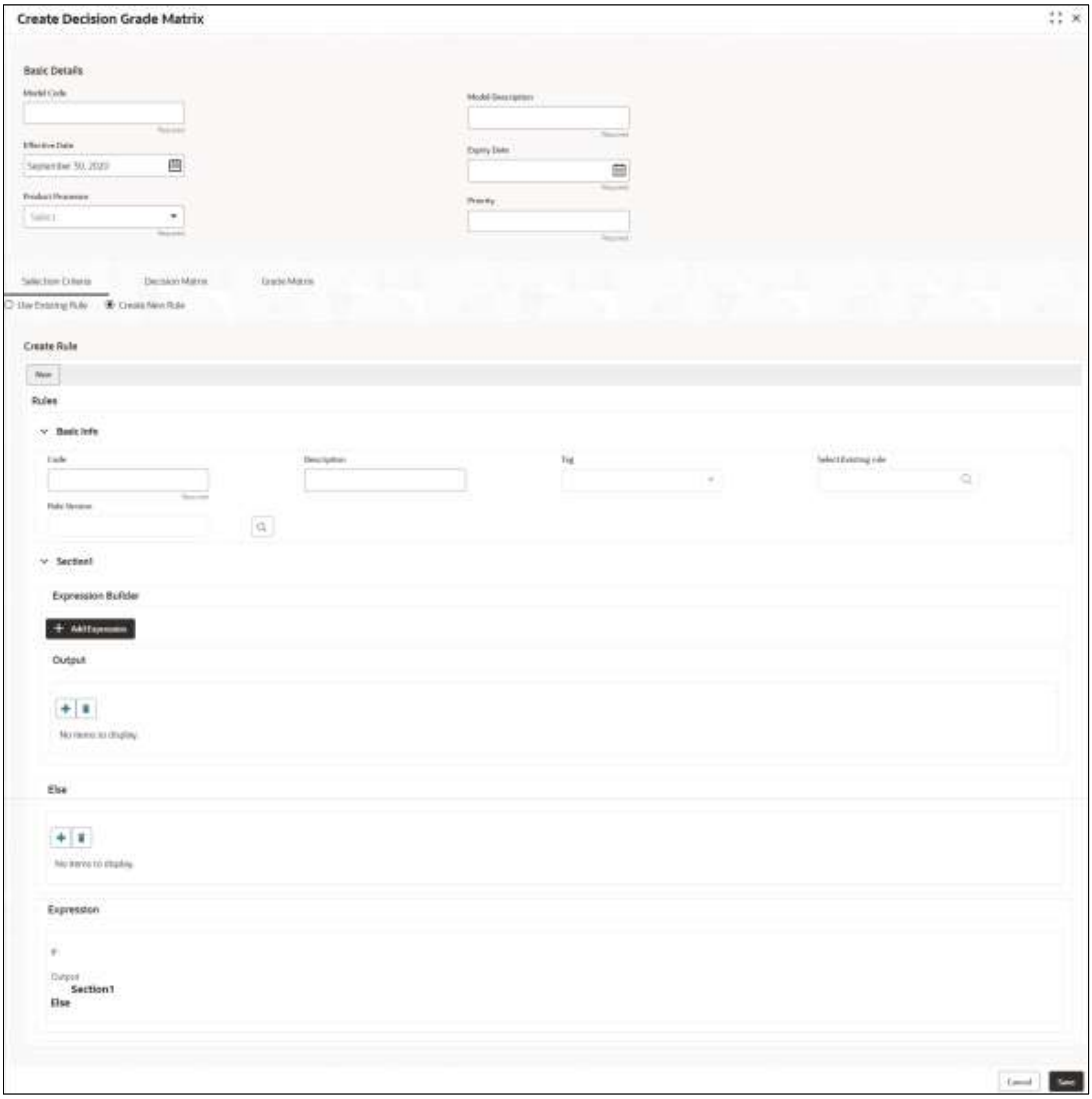
Field	Description
Basic Details	
Model code	Specify the unique model code.
Model Description	Specify a short description for the model.

Field	Description
Effective Date	Select the effective date.
Expiry Date	Select 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.

4. Click the **Selection Criteria** tab to configure the parameters based on which decision model is to be resolved.

   → The **Create Decision Grade Matrix – Selection Criteria** screen displays.

Figure 181 : Create Decision Grade Matrix – Selection Criteria



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

Table 164 : Decision and Grade Matrix - Selection Criteria - Field Description

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rules	
Rule Code	Select the rule code from the drop-down list.
	Click to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Select this option to create new rule.
Rules	
Code	Specify the new rule code.
Description	Specify the rule description.
Select Existing Rule	Select the existing rule from the drop-down list.
	Click to view the existing rule. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below field appears once you click  icon.	
Rule ID	Displays the rule ID.
Rule Name	Displays the rule name.
Description	Displays the rule description.
Rule Version	Displays the rule version.
	Click icon to view the list of rule versions. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below field appears once you click  icon.	
Version	Displays the rule version.
Description	Displays the rule description.
Creation Date	Displays the rule creation date.

Field	Description
Expression Builder	
+ button	Click to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once you select the fact/rules one more field opens adjacent to it, update the same based on the selected option.
Operator	Select the comparison operator from the drop-down list. The options are: • < • > • + • = • % • != • - • >= • <= • * • / • Contains • In • Matches • Notmatches • Notcontains • Notin

Field	Description
Data Type	Select the data type for the fact or rule. Once you select the data type one more field opens adjacent to it, update the same based on the selected option. The 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 you select the output one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Date • Fact The below option appears if the **Data Type** is selected as **Boolean**. • True • False
Expression	Displays the expression updated in the expression builder.

5. Click the **Decision Matrix** tab to define decision on the application. Select the feature for which the decision needs to be maintained like Quantitative/Qualitative.

→ The **Create Decision Grade Matrix - Decision Matrix** screen displays.

Figure 182 : Create Decision Grade Matrix - Decision Matrix

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

Table 165 : Create Decision Grade Matrix – Decision Matrix - Field Description

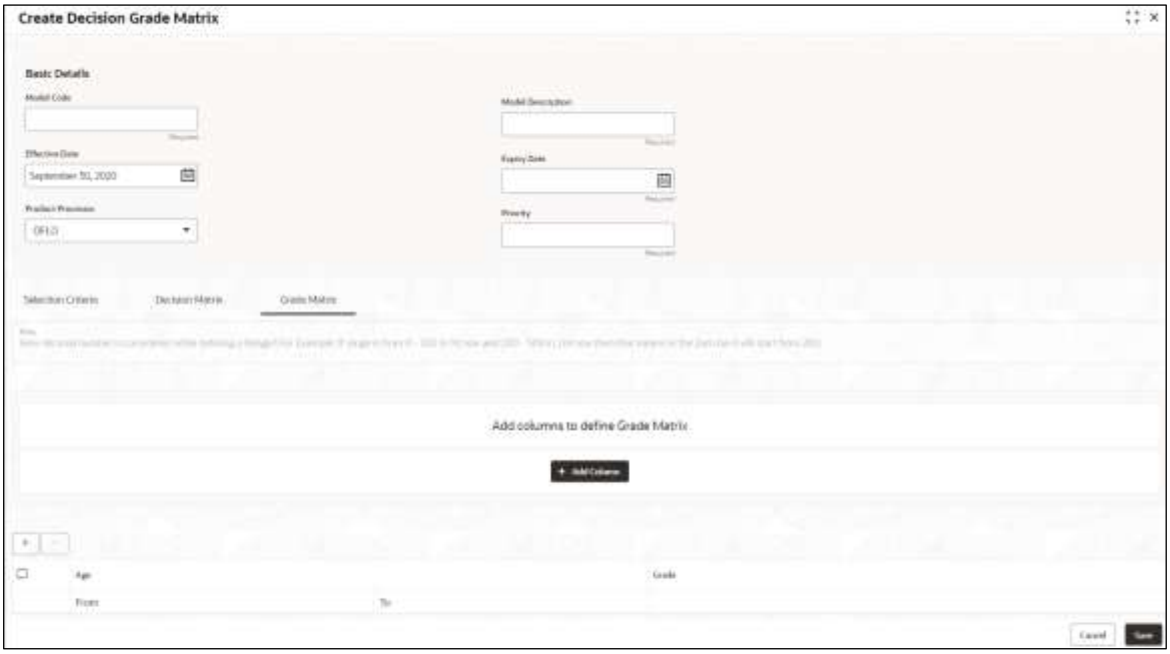
Field	Description
The following fields appear if you click **Decision Matrix** Tab.	
Add Column	Click for addition of features for which decision has to be maintained. On click of **Add Column**, all the features are shown in the drop-down list. Select the feature to be added. Click save to add the feature. If the feature is numeric type, two columns get 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 has been added. User can click Cancel to close the window.
Link a Rule?	User can link a rule to the features. The options are: • **Yes**: If this option is selected, system displays the list of rules and based on rule mapped the decision is provided. • **No:** If this option is selected, system displays the list of decision lookup values.
+ button	Click to add a new row.
- button	Click to delete an existing row.
Score From	Specify the minimum range of score for the decision.
Score To	Specify the maximum range of score for the decision.

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 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 update as **Yes**.

6. Click the **Grade Matrix** tab to assign the grade to the application that is used during the pricing of the application. Select the feature for which the grade needs to be maintained like Quantitative/Qualitative.

   → The **Create Decision Grade Matrix – Grade Matrix** screen displays.

   Figure 183 : Create Decision Grade Matrix – Grade Matrix



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

Table 166 : Create Decision Grade Matrix – Grade Matrix - Field Description

Field	Description
The following fields appear if you click **Grade Matrix** tab.	

Field	Description
Add Column	Click for addition of 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 get 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 has been added. User can click Cancel to close the window.
Link a Rule?	User can link a rule to the features. The options are: • **Yes**: If this option is selected, system displays the list of rules and based on rule mapped the decision is provided. • **No**: If this option is selected, system displays the list of decision lookup values.
+ button	Click to add a new row.
- button	Click to delete an existing row.
Score From	Specify the minimum range of the score for the grade.
Score To	Specify the maximum range of the 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 options are: • A • B • C
Value	In case the data type of feature is numeric such as Age, FICO score the below field appears., specify the value for which the grade has to be maintained.
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 **Save** to save the details.

   The **Decision Grade Matrix** is successfully created and can be viewed using the **View Decision and Grade Matrix** screen.

4.10.2 View Decision Grade Matrix

The **View Decision Grade Matrix** screen allows the user to view the decision grade matrix created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Decision Grade Matrix**, under **Decision Grade Matrix**, click **View Decision Grade Matrix**.

   → The **View Decision Grade Matrix** screen displays.

   Figure 184 : View Decision Grade Matrix

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

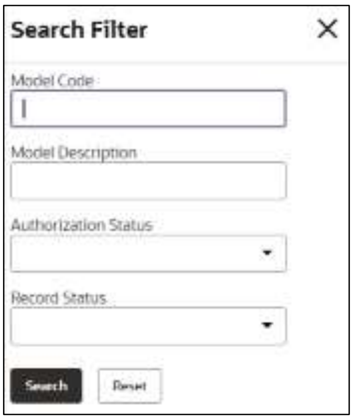
   Table 167 : View Decision Grade Matrix - Field Description

Field	Description
Model Code	Displays the model code.
Model Description	Displays the description of the model.
Product Processor	Displays the product processor for which the model is created.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Decision Grade Matrix screen,** click  icon.

   → The **View Decision Grade Matrix – Search** screen displays.

Figure 185 : View Decision Grade Matrix- Search

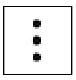


4. On **View Decision Grade Matrix – Search** screen, Specify the **Search Filter** to fetch the required decision grade matrix.

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

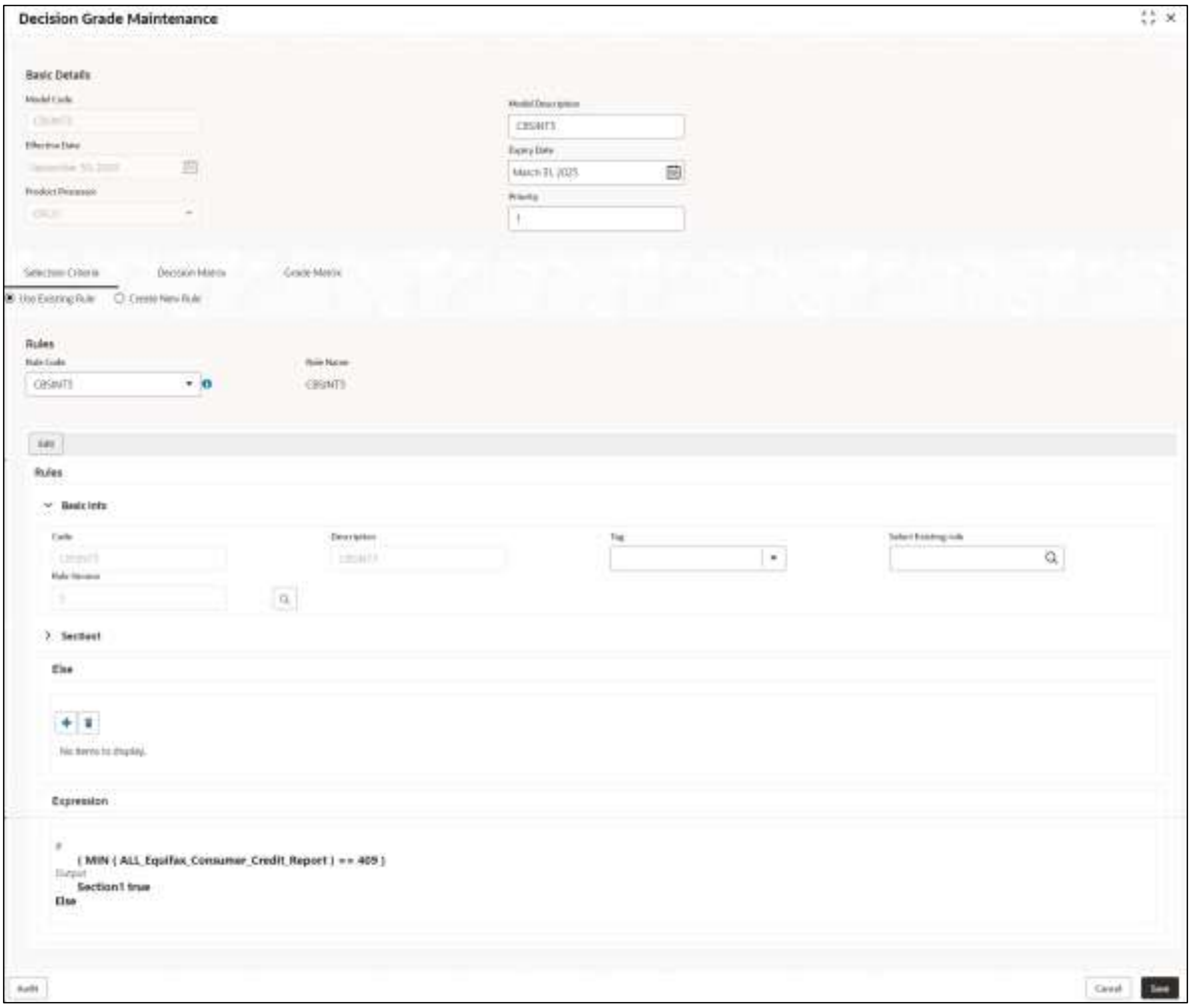
   Table 168 : View Decision Grade Matrix – Search Filter - Field Description

Field	Description
Model Code	Displays the model code.
Model Description	Displays the model description.
Authorization Status	Select the authorization status of the model. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the model. The options are: • Open • Closed

5. Click **Search** to display the required decision grade matrix.
6. On **View Decision Grade Matrix** screen**,** click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created decision grade matrix.
7. Click **Unlock** to modify the created decision grade matrix.

   → The **Decision Grade Maintenance – Modify** screen displays.

Figure 186 : Decision Grade Maintenance – Modify



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

Table 169 : View Decision Grade Matrix – Modify - Field Description

Field	Description
Basic Details	
Model Code	Displays the model code for created decision grade matrix.
Model Description	Displays the description of the model for the created decision grade matrix. User can modify the same.
Effective Date	Displays the effective date of the model for the created decision grade matrix.
Expiry Date	Displays the expiry date of the model for the created decision grade matrix. User can modify the same.

Field	Description
Product Processor	Displays the product processor for the created decision grade matrix.
Priority	Displays the priority of the model for the created decision grade matrix. User can modify the same.
Selection Criteria	
Use Existing Rule	Indicates if the existing rule is linked.
Rules	
Rule Code	Displays the rule code of the created decision grade matrix. User can modify the same.
	Click to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Displays the rule code for the created decision grade matrix. User can modify the same.
Rules	
Code	Specify the new rule code for decision grade matrix.
Description	Specify the rule description for the decision grade matrix.
Select Existing Rule	Displays the existing rule. User can modify the same.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click 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 quantitative scoring model.

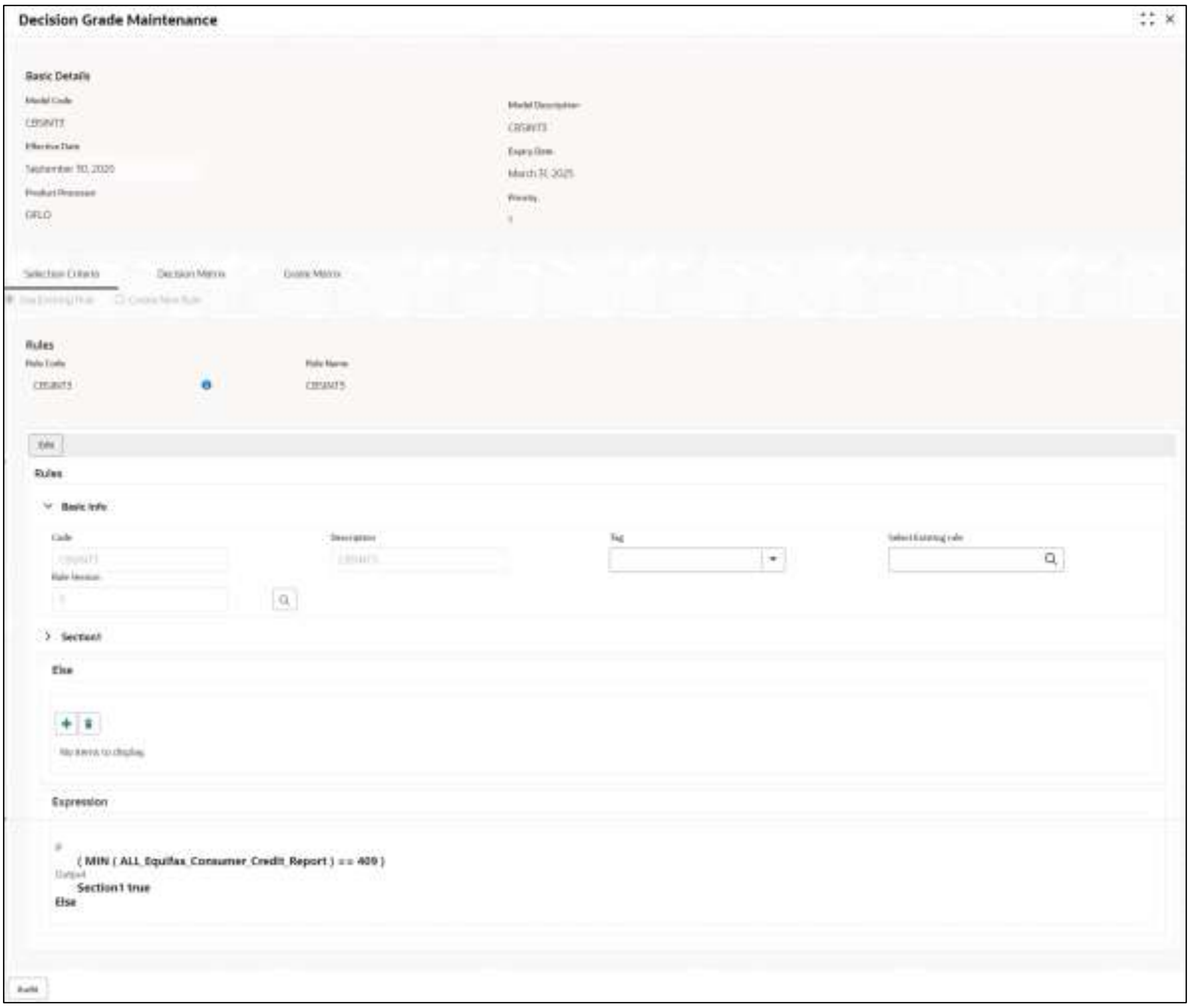
Field	Description
Decision Matrix	
Add Column	Click to add addition of features for which decision has to be maintained.
Link a Rule?	User can link a rule to the features. The options are: • **Yes**: This option displays the list of rules and based on rule mapped the decision is provided. • **No**: This option displays the list of decision lookup values.
+ button	Click to add new row.
- button	Click to delete row.
Score From	Displays the minimum range of score for the decision. User can modify the same.
Score To	Displays the maximum range of score for the decision. User can modify the same.
Decision	Displays the decision of an application. The values are configurable based on the look up values maintained The options are: • Approved • Manual • Rejected User can modify the same.
Rule	Displays the rule based on which decision is to be made. This field is enabled if **Link a Rule?** Option is updated as **Yes**.
Grade Matrix	
Add Column	Click to add addition of features for which decision has to be maintained.
Link a Rule?	User can link a rule to the features. The options are: • **Yes**: This option displays the list of rules and based on the rule's mapped decision is provided. • **No**: this option displays the list of decision lookup values.

Field	Description
+ button	Click to add new row.
S- button	Click to delete row.
Score From	Displays the minimum range of score for the grade. User can modify the same.
Score To	Displays the maximum range of score for the grade. User can modify the same.
Grade	Displays the grade of the application based on the score scored. The values are configurable based on the look up values maintained. The options are: • A • B • C User can modify the same.
Rule	Displays the rule based on which decision is to made. This field is enabled if **Link a Rule?** Option is updated as **Yes**.

8. Click **Save** to update the modified field.
9. Click **View** to view the created decision grade matrix.

→ The **Decision Grade Maintenance – View** screen displays.

Figure 187 : Decision Grade Maintenance – View



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

Table 170 : Decision Grade Maintenance – View - Field Description

Field	Description
Basic Details	
Model Code	Displays the model code for the created decision grade matrix.
Model Description	Displays the description for the created decision grade matrix.
Effective Date	Displays the effective date for the created decision grade matrix.
Expiry Date	Displays the expiry date for the created decision grade matrix.
Product Processor	Displays the product processor for the created decision grade matrix.
Priority	Displays the priority for the created decision grade matrix.
Selection Criteria	
Use Existing Rule	Indicates if the existing rule is linked.

Field	Description
Rules	
Rule Code	Displays the rule code of the created decision grade matrix.
	Click to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Displays if new rule is linked to the created decision grade matrix.
Rules	
Code	Specify the new rule code for decision grade matrix.
Description	Specify the rule description for the decision grade matrix.
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click 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 quantitative scoring model.
Decision Matrix	
Add Column	Click to add addition of features for which decision has to be maintained.
Link a Rule?	Displays if the rule is linked to the feature or not.
+ button	Click to add a new row.
- button	Click to delete a row.
Score From	Displays the minimum range of score for the decision.
Score To	Displays the maximum range of score for the decision.

Field	Description
Decision	Displays the decision of an application. The values are configurable based on the look up values maintained The options are: • Approved • Manual • Rejected
Rule	Displays the rule based on which decision is made. This field is enabled if **Link a Rule?** Option is updated as **Yes**.
Grade Matrix	
Add Column	Click to add addition of features for which decision has to be maintained.
+ button	Click to add a new row.
- button	Click to delete a row.
Score From	Displays the minimum range of score for the grade.
Score To	Displays the maximum range of score for the grade.
Grade	Displays the grade of the application based on the score scored. The values are configurable based on the look up values maintained. The options are: • A • B • C
Rule	Displays the rule based on which decision is made. This field is enabled if **Link a Rule?** Option is updated as **Yes**.

4.11 Pricing

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 section contains the following subsections:

- 4.11.1 Create Pricing Model
- 4.11.2 View Pricing Model

4.11.1 Create Pricing Model

The **Create Pricing Model** screen allows user to create pricing model based on various pricing parameter by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Pricing**, under **Pricing**, click **Create Pricing Model**.

   → The **Create Pricing Model** screen displays.

   Figure 188 : Create Pricing Model

3. Specify the fields on **Create Pricing Model** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 171 : Create Pricing Model – Field Description

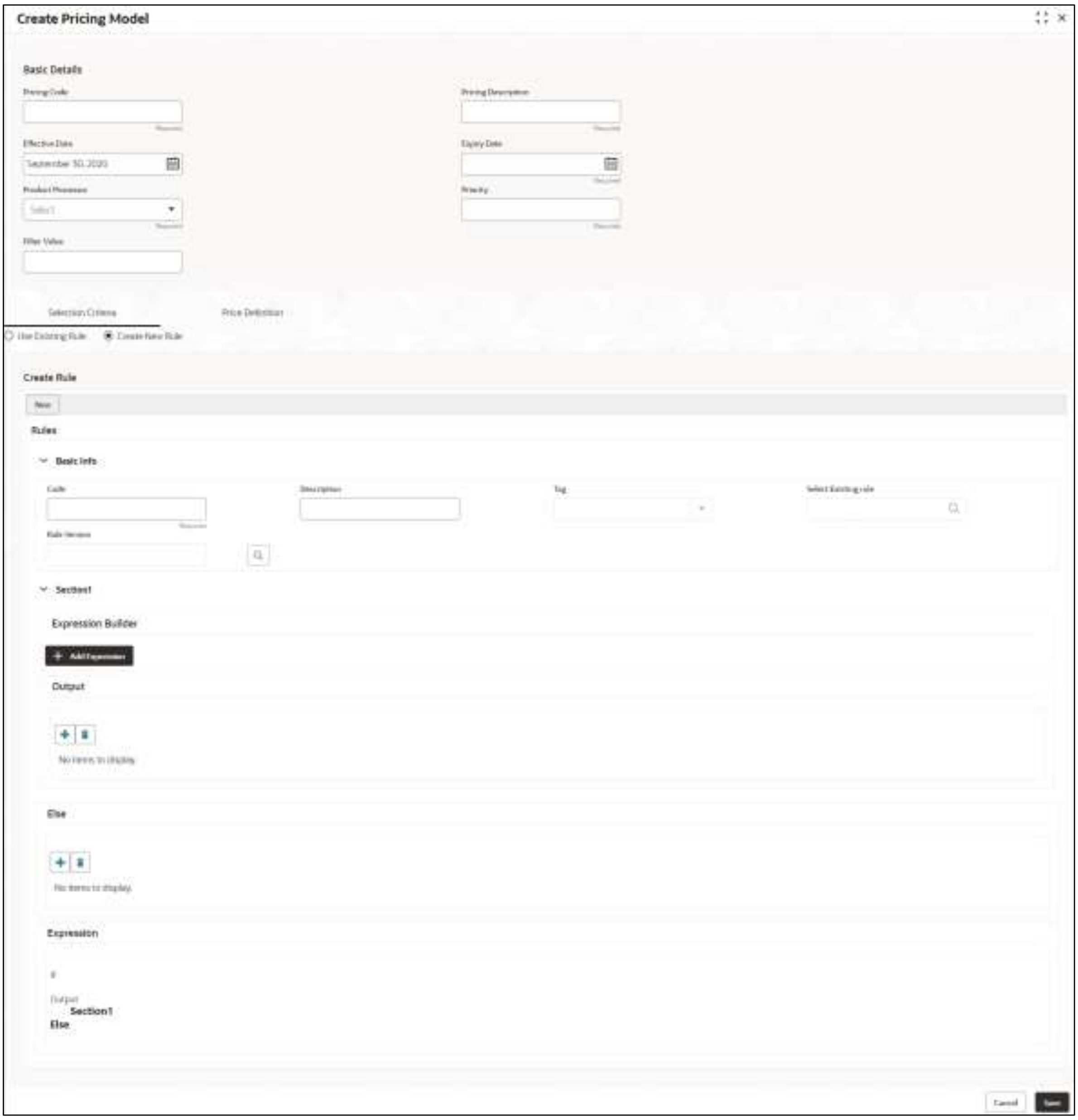
Field	Description
Basic Details	

Field	Description
Pricing Code	Specify the unique pricing code.
Pricing Description	Specify a short description for the pricing.
Effective Date	Select the effective date.
Expiry Date	Select the expiry date.
Product Processor	Specify the product processor for which the pricing is being defined.
Priority	Specify the priority of the pricing.

4. Click the **Selection Criteria** tab to define pricing.

→ The **Create Pricing Model - Selection Criteria** screen displays.

Figure 189 : Create Pricing Model - Selection Criteria



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

Table 172 : 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.
Rules	
Rule Code	Select the rule code from the drop-down list.
	Click to get the information about the rule.

Field	Description
Rule Name	Displays the rule name.
Create New Rule	Select this option to create new rule.
Rules	
Code	Displays the rule code.
Description	Displays the rule description.
Select existing Rule	Select the existing rule from the drop-down list.
Rule Version	Displays the rule version.
	Click to view the existing rule. **Note:** This is used when existing rule is to be used for some modification like copy of existing rule.
The below field appears once you click  icon.	
Rule ID	Displays the rule ID.
Rule Name	Displays the rule name.
Description	Displays the rule description.
Rule version	Displays the rule version.
	Click to view the existing rule version. **Note:** This is used when existing rule is to be used for some modification like copy of existing rule.
The below field appears once you click  icon.	
Version	Displays the rule version.
Description	Displays the rule description.
Creation Date	Displays the rule creation date.
Expression Builder	
+ button	Click icon to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once you select the fact/rules one more field opens adjacent to it, update the same based on the selected option.

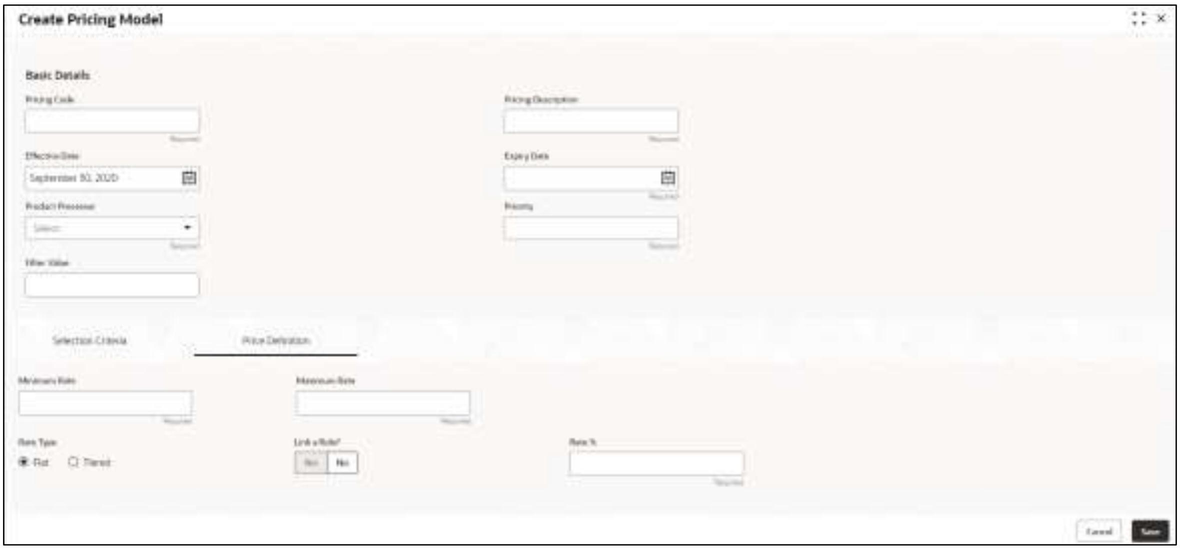
Field	Description
Operator	Select the comparison operator from the drop-down list. The options are: • < • > • + • = • % • != • - • >= • <= • * • / • Contains • In • Matches • Notmatches • Notcontains • Notin
Data Type	Select the data type for the fact or rule. Once you select the data type one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Fact • Date The below option appears if the **Data Type** is selected as **Boolean**. • True • False

Field	Description
Output	Select the output from the drop-down list. Once you select the output one more field opens adjacent it, update the same based on the selected option. The options are: • Text • Number • Boolean • Date • Fact The below option appears if the **Data Type** is selected as **Boolean**. • True • False
Expression	Displays the expression updated in the expression builder.

5. Click the **Price Definition** tab to define pricing.

→ The **Create Pricing Model – Price Definition (Flat)** screen displays.

Figure 190 : Create Pricing Model – Price Definition (Flat)



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

Table 173 : Create Pricing Model – Price Definition (Flat) – Field Description

Field	Description
Minimum Rate	Specify the minimum rate applicable for the defined pricing code.

Field	Description
Maximum Rate	Specify the maximum rate applicable for the defined pricing code.
Rate Type	Specify the rate type from the drop-down list. The options are: • Flat • Tiered
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 appears 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**.

If the **Rate Type** is selected as **Tiered,** the user can link the list of features

6. Click **Add Columns** button.

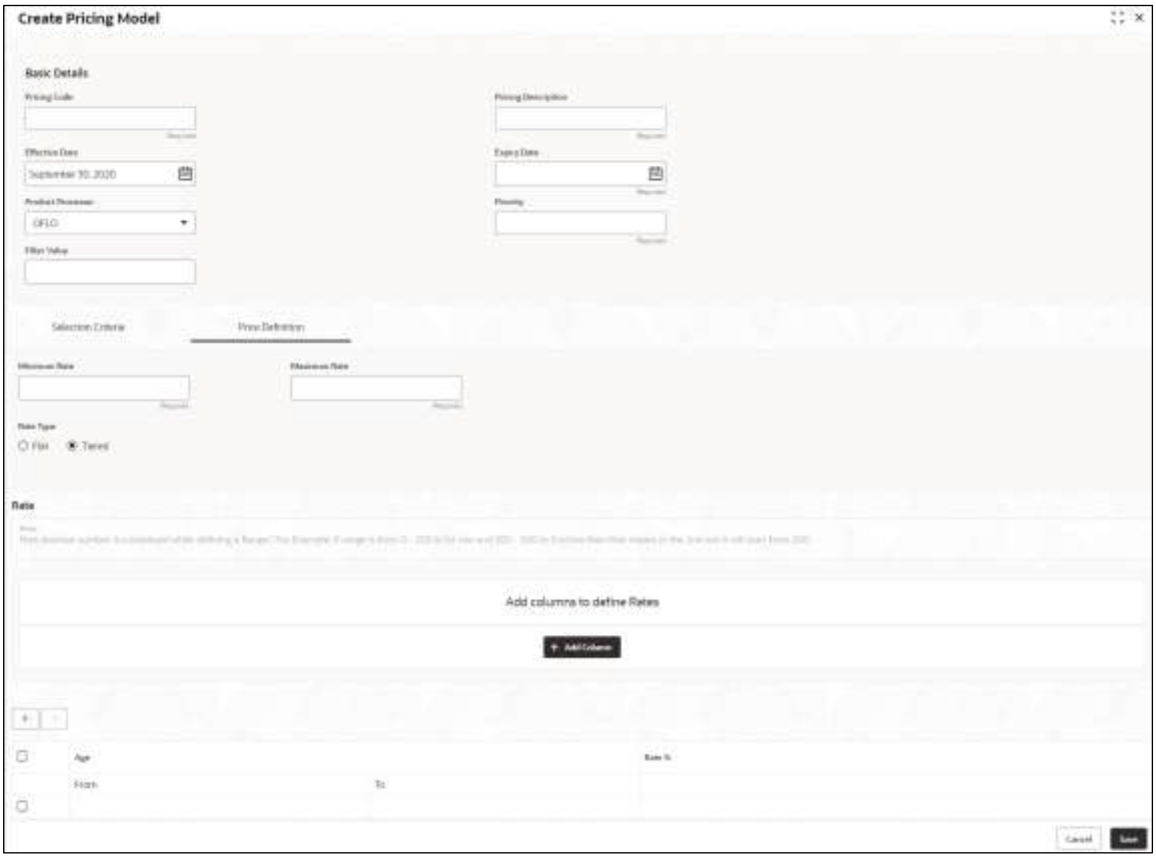
→ The **Add Features** popup screen displays.

Figure 191 : Add Features

7. Select the feature names from the list. ('n' number of features can be selected)
8. Select the option whether to **Link a Rule** for defining the interest rate.
9. Click **Save** to link the list of features for defining the tiered interest rate.

→ The **Create Pricing Model – Price Definition (Tiered)** screen displays.

Figure 192 : Create Pricing Model – Price Definition (Tiered)



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

Table 174 : Create Pricing Model – Price Definition (Tiered) – 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	Specify the rate type from the drop-down list. The options are: • Flat • Tiered
The below field appears if you select the **Rate Type** option as **Tiered**. The below columns are available as Facts in a drop down and you need to select the same.	
<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.

Field	Description
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**.

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

    The **Pricing Model** is successfully created and can be viewed using **View Pricing Model** Screen.

4.11.2 View Pricing Model

The **View Pricing Model** screen allows the user to view the pricing model created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance,** click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Pricing**, under **Pricing**, click **View Pricing Model**.

   → The **View Pricing Model** screen displays.

Figure 193 : View Pricing Model

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

Table 175 : View Pricing Model - Field Description

Field	Description
Pricing Code	Displays the pricing code.
Pricing Description	Displays the description of the pricing model.
Product Processor	Displays the product processor for which the pricing model is created.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Pricing Model** screen**,** click  icon.

→ The **View Pricing Model – Search** screens displays.

Figure 194 : View Pricing Model - Search

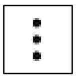
4. On **View Pricing Model – Search** screen, Specify the **Search Filter** to fetch the required pricing model.

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

   Table 176 : View Pricing Model - Search Filter - Field Description

Field	Description
Pricing Code	Displays the pricing code.
Pricing Description	Displays the description of the pricing model.
Authorization Status	Select the authorization status of the model. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the model. The options are: • Open • Closed

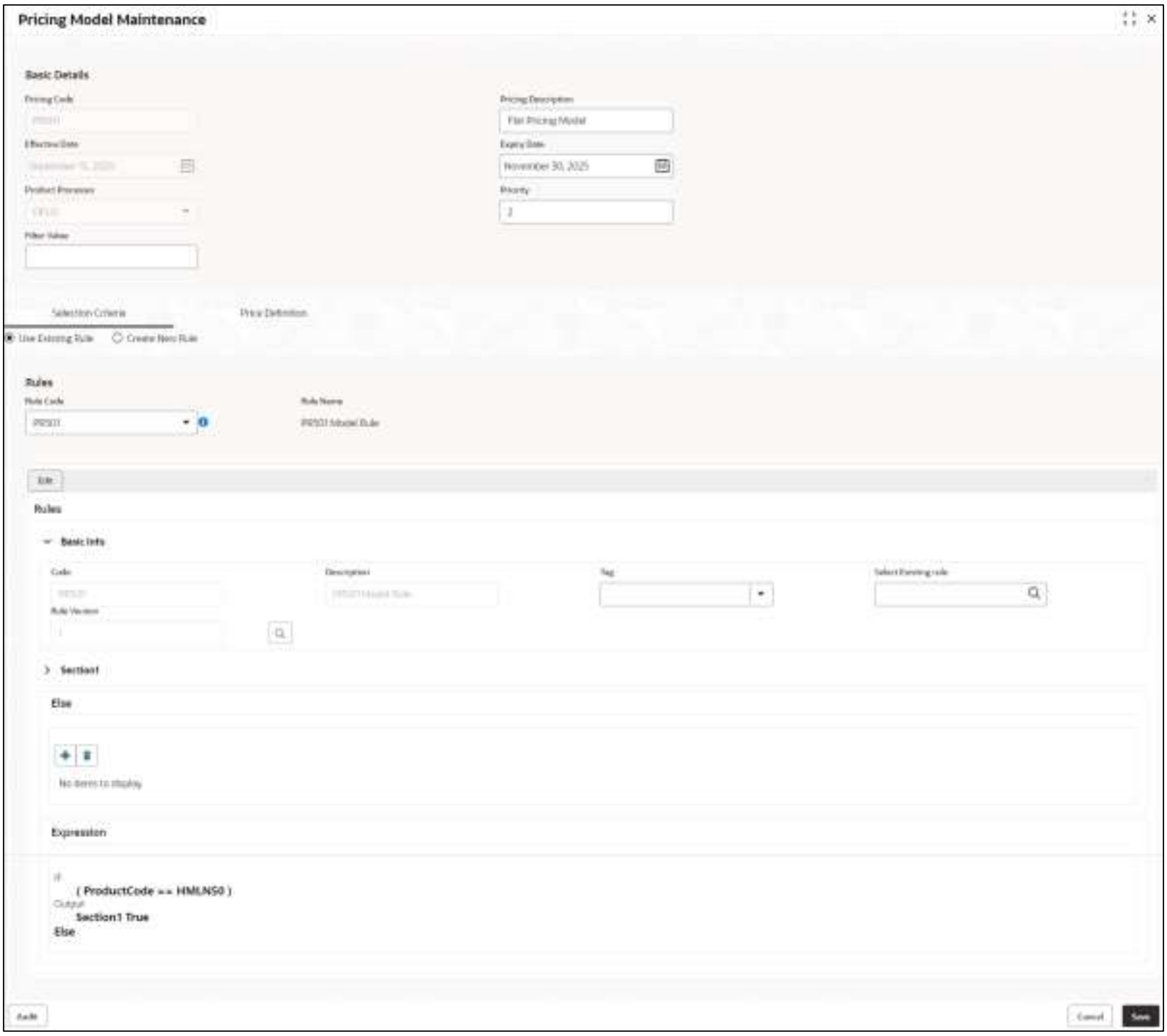
5. Click **Search** to display the required pricing model.

6. On **View Pricing Model** screen**,** click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created pricing model.

7. Click **Unlock** to modify the following fields.

→ The **Pricing Model Maintenance – Modify** screen displays.

Figure 195 : Pricing Model Maintenance – Modify



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

Table 177 : Pricing Model Maintenance – Modify - Field Description

Field	Description
Basic Details	
Pricing Code	Displays the pricing code for created pricing model.
Pricing Description	Displays the description of the pricing for the created pricing model. User can modify the same.
Effective Date	Displays the effective date of the pricing for the created pricing model.
Expiry Date	Displays the expiry date of the pricing for the created pricing model. User can modify the same.

Field	Description
Product Processor	Displays the product processor for the created pricing model.
Priority	Displays the priority of the pricing for the created pricing model. User can modify the same.
Selection Criteria	
Use Existing Rule	Indicates if the existing rule is linked.
Rules	
Rule Code	Displays the rule code of the created pricing model. User can modify the same.
	Click to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Displays if new rule is linked to the pricing model. User can modify the same.
Rules	
Code	Specify the new rule code for the created pricing model.
Description	Specify the rule description for the created pricing model.
Select Existing Rule	Displays the existing rule. User can modify the same.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click to add new expression.
Fact / Rules	Displays the fact/rules 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 of the created pricing model.
Output	Displays the output of the created pricing model.
Expression	Displays the expression updated in the expression builder of the created pricing model.
Pricing Definition	

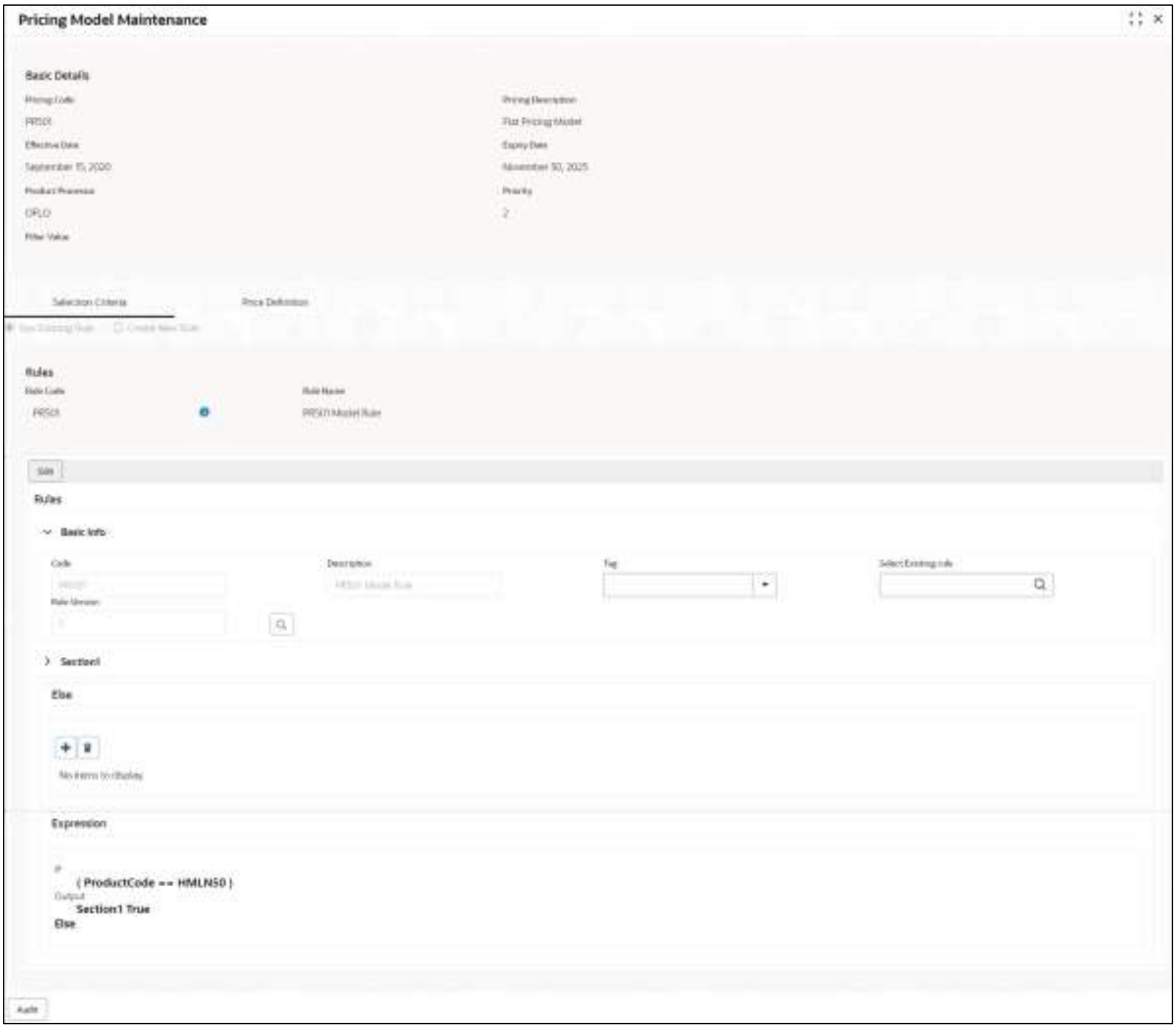
Field	Description
Minimum Rate	Displays the minimum rate applicable for the defined pricing model. User can modify the same.
Maximum Rate	Displays the maximum rate applicable for the defined pricing model. User can modify the same.
Rate Type	Displays the rate type from the drop-down list. The options are: • Flat • Tiered User can modify the same.
Rate %	Displays the interest rate application for the defined pricing. User can modify the same. This field appears once you select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.
Rule	Displays the rule for the defined pricing. User can modify the same. This field appears once you select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.
The below field appears if the rate type is updated as **Tiered**. The below columns are available as “Facts” in a drop down. User can modify the same.	
<Numeric Feature> From	Displays the minimum numeric value of feature to which the interest rate is applicable. User can modify the same.
<Numeric Feature> To	Displays the maximum numeric value of feature to which the interest rate is applicable. User can modify the same.
<Character Feature> Value	Displays the alphabetic value for which the interest rate is applicable. User can modify the same.

Field	Description
Rate %	Displays the interest rate applicable for the defined tier. User can modify the same. 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. User can modify the same. This field appears once you select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **Yes**.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created pricing model.

→ The **Pricing Model Maintenance – View** screen displays.

Figure 196 : Pricing Model Maintenance – View



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

Table 178 : Pricing Model Maintenance – View - Field Description

Field	Description
Basic Details	
Pricing Code	Displays the pricing code for created pricing model.
Pricing Description	Displays the description of the pricing for the created pricing model.
Effective Date	Displays the effective date of the pricing for the created pricing model.
Expiry Date	Displays the expiry date of the pricing for the created pricing model.
Product Processor	Displays the product processor for the created pricing model.
Priority	Displays the priority of the pricing for the created pricing model.
Selection Criteria	
Use Existing Rule	Indicates if the existing rule is linked.
Rules	
Rule Code	Displays the rule code of the created pricing model.
	Click to get the information about the rule.
Rule Name	Displays the rule name for the created pricing model.
Create New Rule	Displays if new rule is linked to the pricing model.
Rules	
Code	Displays the new rule code for created pricing model.
Description	Displays the rule description for the created pricing model.
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click to add a new expression.
Fact / Rules	Displays the fact/rules 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 of the created pricing model.
Output	Displays the output of the created pricing model.

Field	Description
Expression	Displays the expression updated in the expression builder of the created pricing model.
Pricing Definition	
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 rate type from the drop-down list. The options are: • Flat • Tiered
Rate %	Displays the interest rate application for the defined pricing. This field appears once you select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.
Rule	Displays the rule for the defined pricing. This field appears once you select the **Rate Type** option as **Flat** and **Link a Rule?** option as **Yes**.
The below field appears if the rate type is updated as **Tiered**. The below columns are available as “Facts” in a drop down.	
<Numeric Feature> From	Displays the minimum numeric value of feature to which the interest rate is applicable.
<Numeric Feature> To	Displays the maximum numeric value of feature to which the interest rate is applicable.
<Character Feature> Value	Displays the alphabetic value for which the interest rate is applicable.
Rate %	Displays 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	Displays the rule for the defined tier. This field appears once you select the **Rate Type** option as **Tiered** and **Link a Rule?** option as **Yes**.

4.12 Validation Model

During credit decision, the 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. Based on the configuration, the system will run all the rules configured or stop execution of the further rules, if any rule fails and decline the request.

This section contains the following subsections:

4.12.1 Create Validation Model

The **Create Validation Model** screen allows user to create validation model based on the various input. User can configure the strategy as per the requirement.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenanc**e, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Validation Model**, under **Validation Model**, click **Create Validation Model**.

   → The **Create Validation Model** screen displays.

   Figure 197 : Create Validation Model

3. Specify the fields on **Create Validation Model** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 179 : Create Validation Scoring Model - Field Description

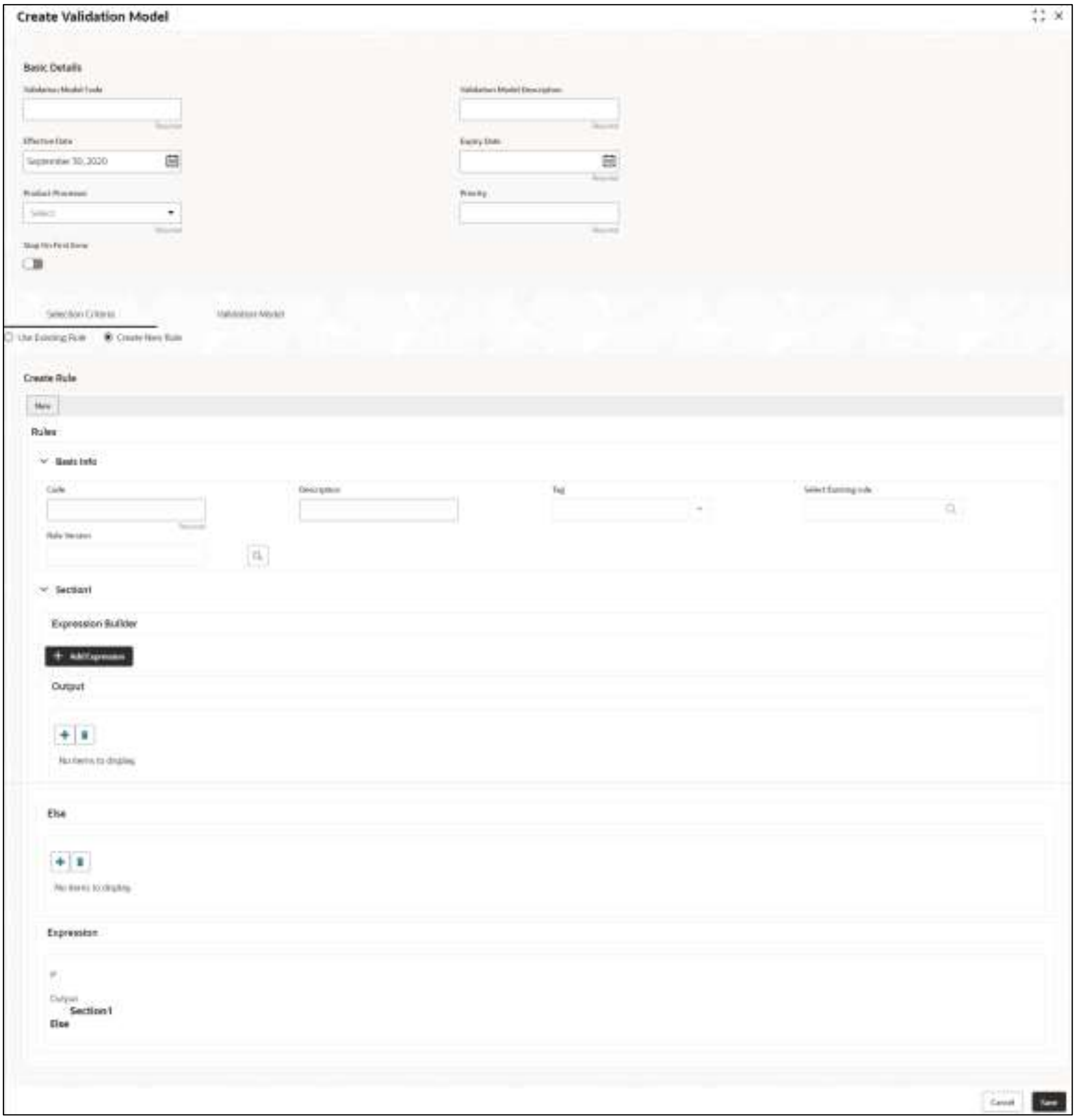
Field	Description
Basic Details	
Validation Model Code	Specify the unique validation model code.
Validation Model Description	Specify a short description for the validation model.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Product Processor	Specify the product processor for which the validation model is being defined.
Priority	Specify the priority for the validation model.

Field	Description
Stop on Failure	By default, this option is disabled. Indicates whether system should stop execution of rules if any rules fail or continue ahead with the remaining rules as per the sequence.

4. Click the **Selection Criteria** tab to define selection criteria rules for validation model.

→ The **Create Validation Model - Selection Criteria** screen displays.

Figure 198 : Create Validation Model - Selection Criteria



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

Table 180 : Create Validation Model – Selection Criteria - Field Description

Field	Description
The following fields appear if you click the **Selection Criteria** Tab	

Field	Description
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rules	
Rule Code	Select the rule code from the drop-down list.
	Click to get the information about the rule.
Rule Name	View the rule name.
Create New Rule	Select this option to create new rule.
Rules	
Code	Specify the rule code.
Description	Specify the rule description.
Select Existing Rule	Select the existing rule from the drop-down list.
	Click to view the existing rule.
Below field appears once you click the  icon.	
Rule ID	Displays the rule ID.
Rule Name	Displays the rule name.
Description	Displays the rule description.
Rule Version	Displays the rule version.
	Click to view the list of rule versions. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
The below field appears once you click the  icon.	
List of Versions	
Version	Displays the rule version.
Description	Displays the rule description.

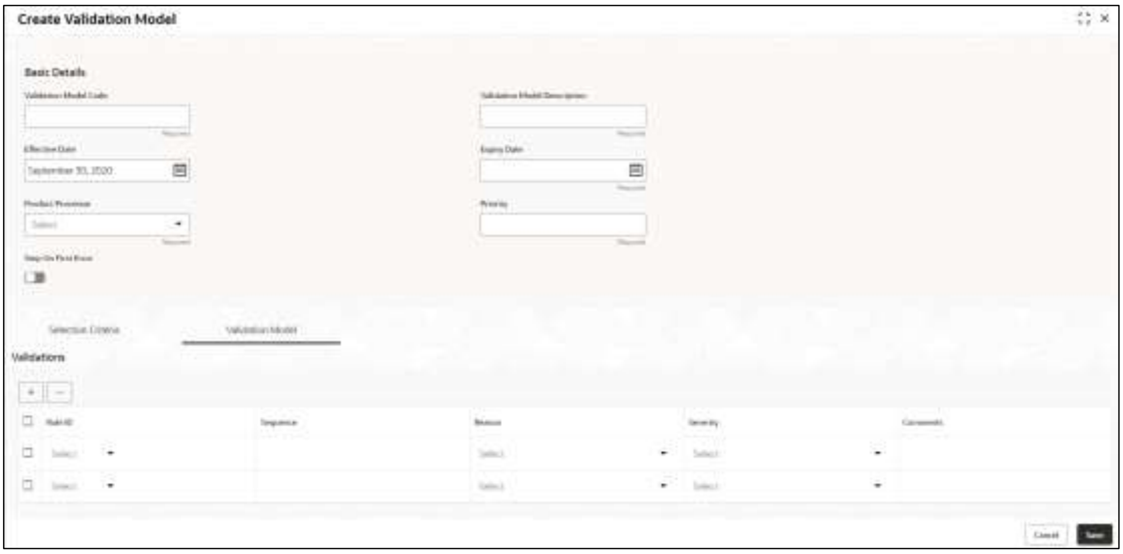
Field	Description
Creation Date	Displays the rule creation date. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Expression Builder	
+ button	Click to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once you select the fact/rules one more field opens adjacent to it, update the same based on the selected option.
Operator	Select the comparison operator from the drop-down list. The options are: • < • > • + • = • % • != • - • >= • <= • * • / • Contains • In • Matches • Notmatches • Notcontains • Notin

Field	Description
Data Type	Select the data type for the fact or rule. Once you select the data type one more field opens adjacent to the output, update the same based on the selected output option. The 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 you select the output one more field opens adjacent to the output, update the same based on the selected output option. The options are: • Text • Number • Boolean • Date • Fact The below option appears if the **Data Type** is selected as **Boolean**. • True • False
Expression	View the expression updated in the expression builder.

5. Click the **Validation Model** tab to define various validation modelling rules.

→ The **Create Validation Model – Validation Model** screen displays.

Figure 199 : Create Validation Model – Validation Model



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

Table 181 : Create Validation Model – Validation Model - Field Description

Field	Description
The following fields appear if you click the **Validation Model** Tab	
+ button	Click to add a new row.
- button	Click to delete an existing row.
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 to get the information about the rule.
Sequence	Specify the sequence of execution of rules.
Reason	Select the reason from the drop-down list.
Severity	Select the severity from the drop-down list.
Comments	Specify the comments.

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

The **Validation Model** is successfully created and can be viewed using the **View Validation Model** screen.

4.12.2 View Validation Model

The **View Validation Model** screen allows the user to view the validation model created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Validation Model**, under **Validation Model**, click **View Validation Model**.

→ The **View Validation Model** screen displays.

Figure 200 : View Validation Model

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

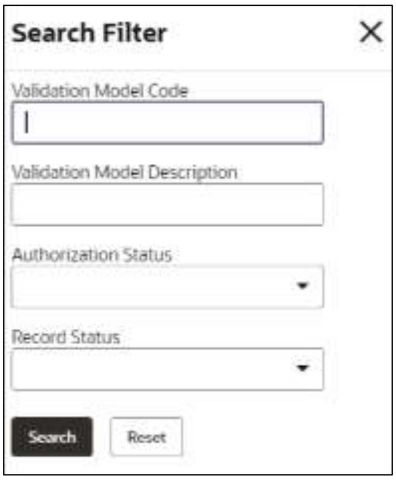
Table 182: View Validation Model – Field Description.

Field	Description
Validation Model Code	Displays the validation model code.
Validation Model Description	Displays the validation model description.
Product Processor Code	Displays the product processor code.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Validation Model** screen, click  icon.

→ The **View Validation Model – Search** screen displays.

Figure 201 : View Validation Model - Search



4. On **View Validation Model – Search** screen, Specify the **Search Filter** to fetch the required validation model.

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

Table 183 : View Validation Model - Search Filter - Field Description

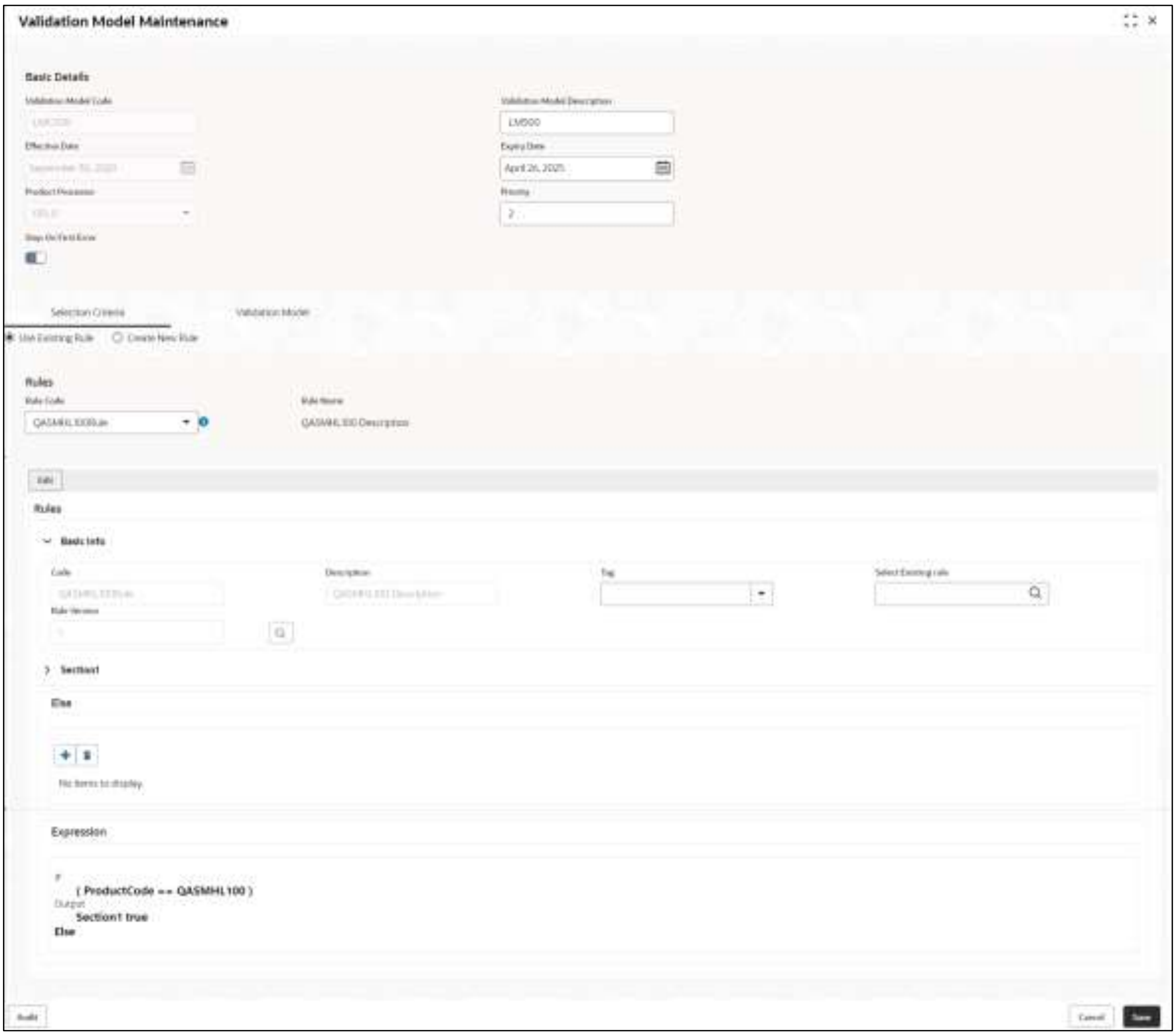
Field	Description
Validation Model Code	Specify the validation model code.
Validation Model Description	Specify the description of the validation model.

Field	Description
Authorization Status	Select the authorization status of the validation model. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the validation model. The options are: • Open • Closed

5. Click **Search** to display the required validation model.
6. On **View Validation Model** screen**,** click icon to **Unlock**, **Delete**, **Authorize**, or **View** the created validation model.
7. Click **Unlock** to modify the created validation model.

→ The **Validation Model Maintenance – Modify** screen displays.

Figure 202 : Validation Model Maintenance - Modify



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

Table 184: Validation Model Maintenance – Modify – Field Description.

Field	Description
Basic Details	
Validation Model Code	Displays the created validation model code.
Validation Model Description	Displays the description for the created validation model. User can modify the same.
Effective Date	Displays the effective date for the created validation model. User can modify the same if the date is future dated.
Expiry Date	Displays the expiry date for the created validation model. User can modify the same.

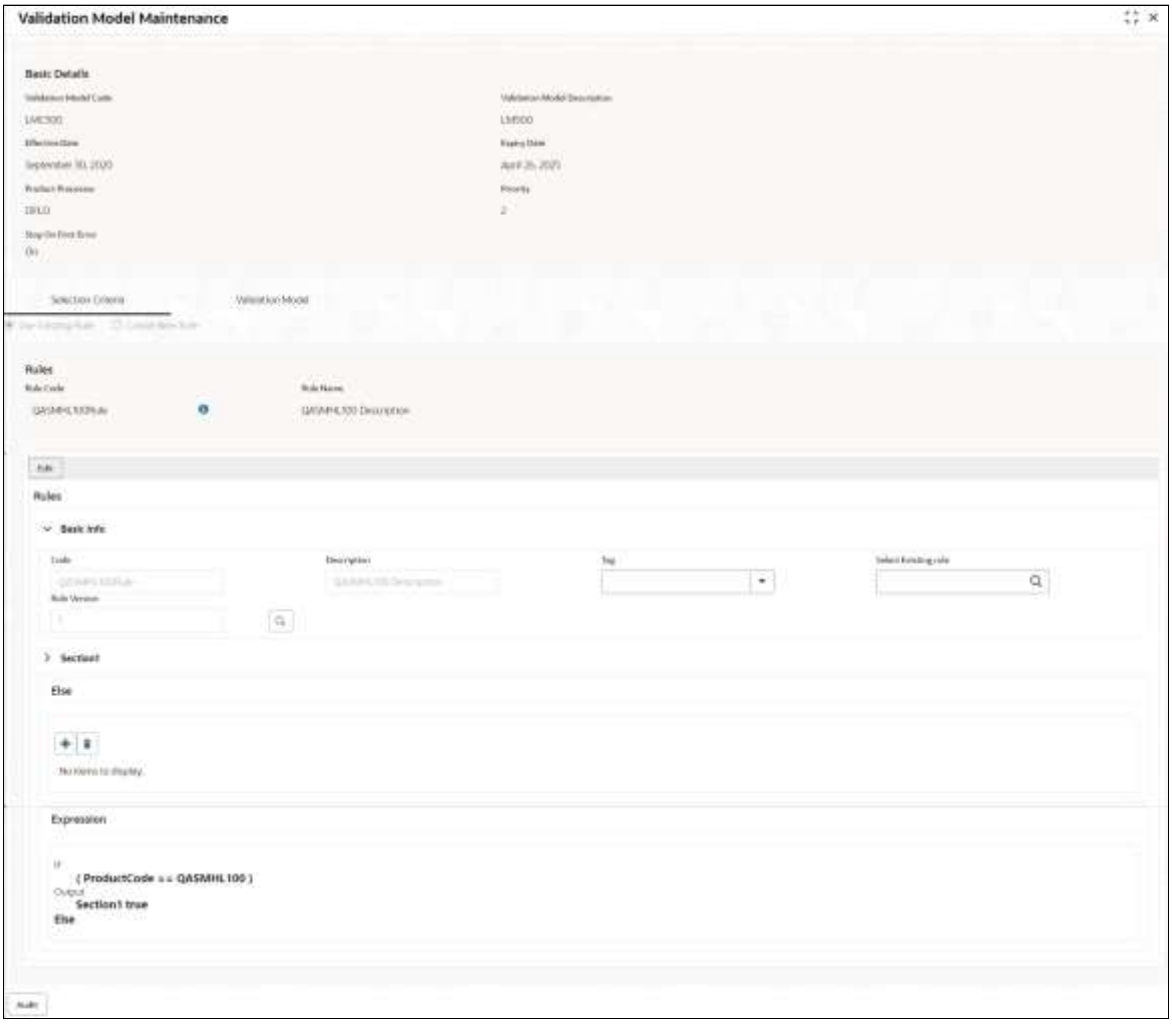
Field	Description
Product Processor	Displays the product processor of the created validation model.
Priority	Displays the priority of the validation model. User can modify the same.
Stop On Failure	Indicates whether system should stop execution of rules if any rules fails or continue ahead with the remaining rules as per the sequence.
Selection Criteria	
Use Existing Rule	By default, this option is enabled. Indicates if the existing rule is linked.
Rules	
Rule Code	Displays the rule code.
	Click to get the information about the rule.
Rule Name	Displays the rule name.
Create New Rule	Indicates if the new rule is created.
Rules	
Code	Displays the rule code.
Description	Displays the rule description
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
Fact / Rules	Displays the fact/rules 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 of the created validation model.
Output	Displays the output of the created validation model.
Expression	Displays the expression updated in the expression builder of the crated validation model.
Validation Model	
Rule ID	Displays the rule ID of the created validation model. You can modify the same.

Field	Description
	Click to get the information about the rule.
Sequence	Displays the sequence of the created validation model. User can modify the same.
Reason	Displays the reason of the created validation model. User can modify the same.
Severity	Displays the severity of the created validation model. User can modify the same.
Comments	Displays the comments of the created validation model. User can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created validation model.

→ The **Validation Model Maintenance – View** screen displays.

Figure 203 : Validation Model Maintenance - View



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

Table 185 : Validation Model Maintenance - View – Field Description.

Field	Description
Basic Details	
Validation Model Code	Displays the created validation model code.
Validation Model Description	Displays the created validation model description.
Effective Date	Displays the effective date.
Expiry Date	Displays the expiry date.
Product Processor	Displays the product processor of the created validation model.
Priority	Displays the priority of the validation model.
Selection Criteria	

Field	Description
Rules	
Use Existing Rule	Displays if the existing rule is linked to validation model.
Rule Code	Displays the rule code of the created validation model.
Rule Name	Displays the rule name of the created validation model.
Create New Rule	Displays if new rule is linked to the validation model.
Rules	
Code	Displays the rule code of the created validation model.
Description	Displays the rule description of the created validation model.
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
Fact / Rules	Displays the fact/rules 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 of the created validation model.
Output	Displays the output of the created validation model.
Expression	Displays the expression updated in the expression builder of the crated validation model.
Validation Model	
Rule ID	Displays the rule ID of the created validation model.
Sequence	Displays the sequence of the created validation model.
Reason	Displays the reason of the created validation model.
Severity	Displays the severity of the created validation model.
Comments	Displays the comments of the created validation model.

4.13 Qualitative Scoring Model

Financial institution uses 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 section contains the following subsections:

4.13.1 Create Qualitative Scoring Model

The **Create Qualitative Scoring Model** screen allows user to define qualitative scoring model based on the various scoring parameters.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision,** click **Maintenance**, under **Maintenance**, click **Qualitative Scoring Model**, under **Qualitative Scoring model**, click **Create Qualitative Scoring Model.**

   → The **Create Qualitative Scoring Model** screen displays.

   Figure 204 : Create Qualitative Scoring Model

3. Specify fields on **Create Qualitative Scoring Model** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 186 : Create Qualitative Scoring Model - Field Description

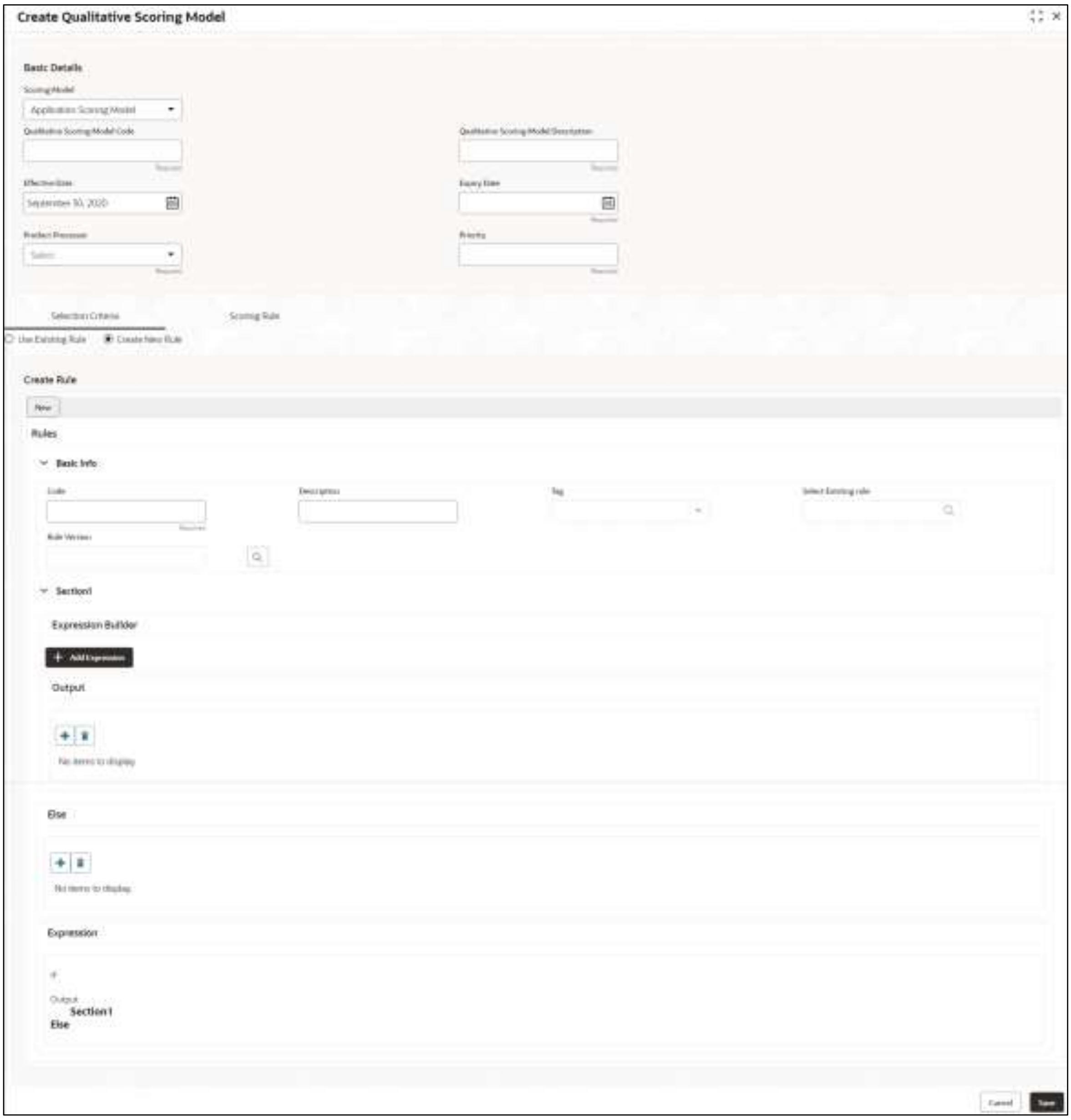
Field	Description
Basic Details	
Scoring Model	Select the scoring model from the drop-sown list. The options are: • Application Scoring Model • Applicant Scoring Model
Scoring Model code	Specify the unique scoring model code.
Scoring Model Description	Specify a short description for the scoring model.

Field	Description
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.

4. Click the **Selection Criteria** tab to define qualitative scoring model.

→ The **Create Qualitative Scoring Model – Selection Criteria** screen displays.

Figure 205 : Create Qualitative Scoring Model – Selection Criteria



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

Table 187 : 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.
Rules	
Rule Code	Select the rule code from the drop-down list.
	Click 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.
Rules	
Code	Specify the rule code.
Description	Specify the rule description.
Select Existing Rule	Select the existing rule from the drop-down list.
	Click to view the existing rule. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below fields appears once you click  icon.	
Rule ID	Displays the rule ID.
Rule Name	Displays the rule name.
Description	Displays the rule description.
Rule Version	Displays the rule version.
	Click to view the existing rule version. Note: This is used when existing rule is to be used for some modification like copy of existing rule.
Below fields appears once you click  icon.	
Version	Displays the rule version.
Description	Displays the rule description.
Creation Date	Displays the rule creation date.
Expression Builder	

Field	Description
+ button	Click to add new expression.
Fact / Rules	Select the fact or rule from the drop-down list. Once you select the fact/rules one more field opens adjacent to tit, update the same based on the selected option.
Operator	Select the comparison operator from the drop-down list. The options are: • < • > • + • = • % • != • - • >= • <= • * • / • Contains • In • Matches • Notmatches • Notcontains • Notin

Field	Description
Data Type	Select the data type for the fact or rule. Once you select the data type one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Fact • Date The below option appears if the **Data Type** is selected as **Boolean**. • True • False
Output	Select the output from the drop-down list. Once you select the output one more field opens adjacent to it, update the same based on the selected option. The options are: • Text • Number • Boolean • Date • Fact The below option appears if the **Data Type** is selected as **Boolean**. • True • False
Expression	Displays the expression updated in the expression builder.

5. Click the **Scoring Rule** tab to define the rules. This tab is enabled if **Application Scoring Model** is selected.

   → The **Create Qualitative Scoring Model - Scoring Rule** screen displays.

   Figure 206 : Create Qualitative Scoring Model - Scoring Rule

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

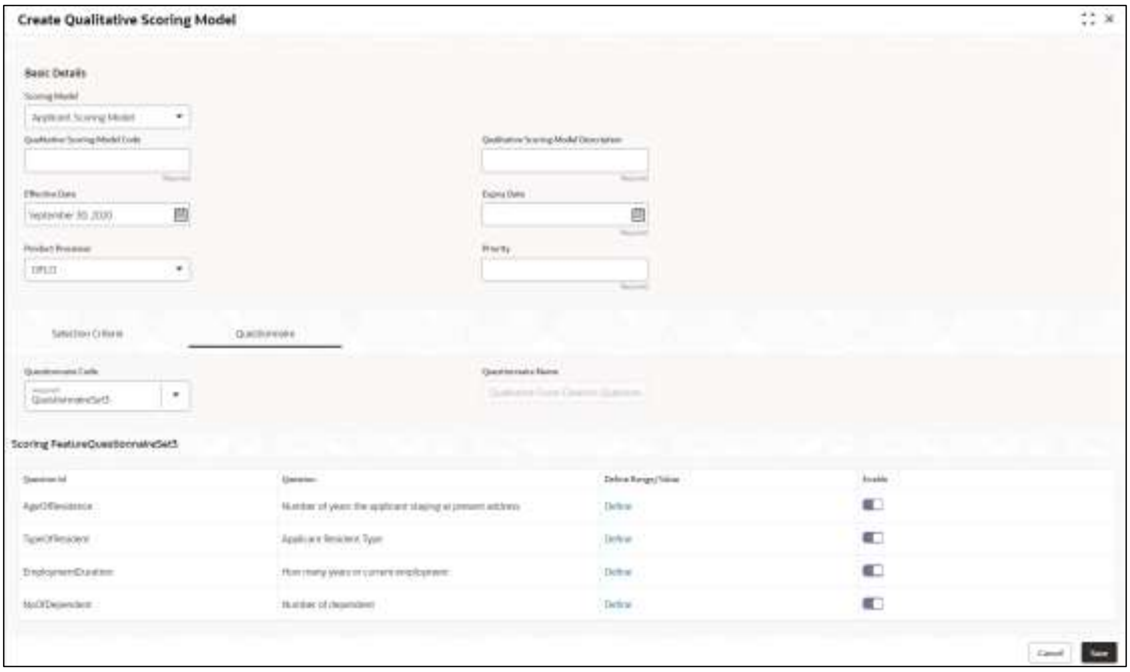
Table 188 : Create Qualitative Scoring Model - Scoring Rule - Field Description

Field	Description
Score	
Rule Code	Select the rule code from the drop-down list.
	Click to get the information about the rule.
Rule Name	Displays the rule name of the rule code.

6. 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 207 : Create Qualitative Scoring Model - Questionnaire



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

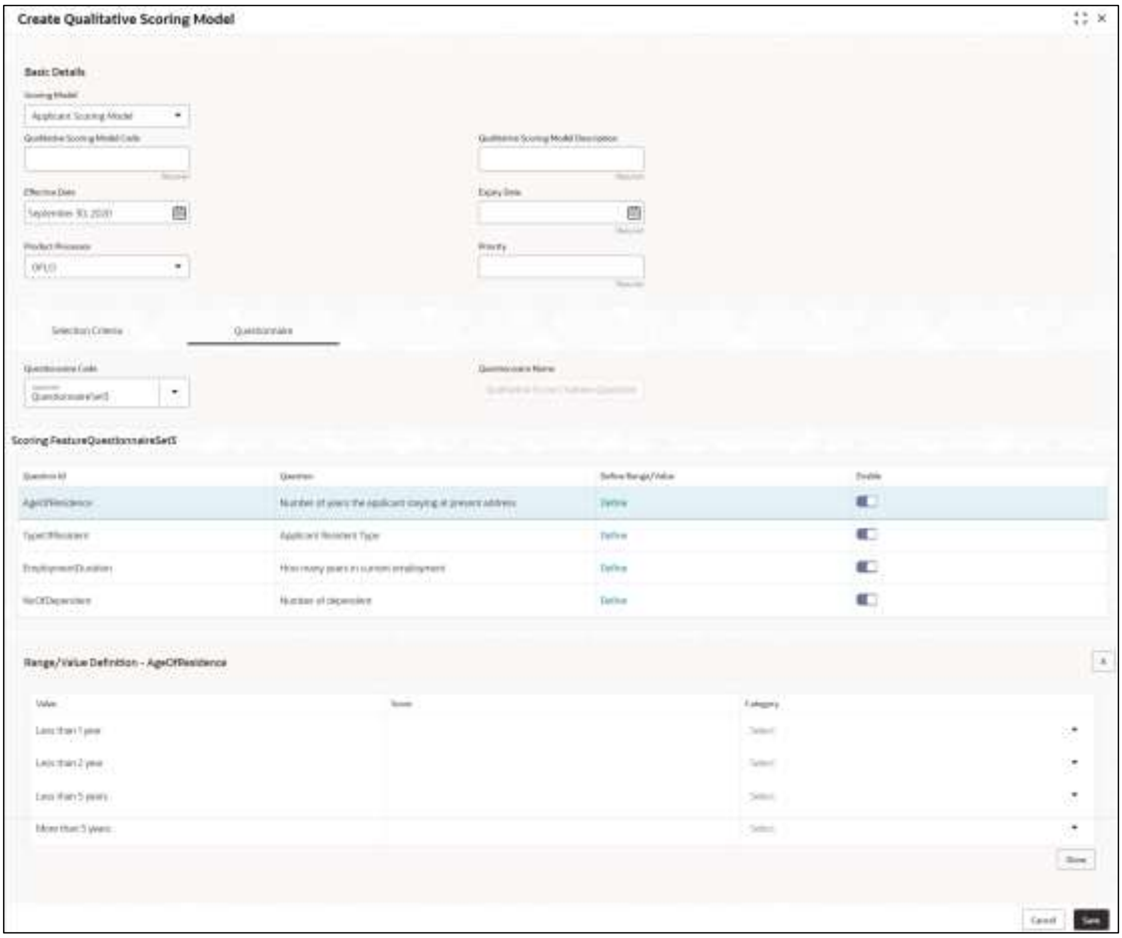
Table 189 : Create Qualitative Scoring Model – Questionnaire - Field Description

Field	Description
Score	
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 to define the score for the expected response.
Enable	By default, this option is enabled. Indicates if the question ID is enabled or not.

7. Click the **Define** link to define a range or absolute values for questions.

→ The **Create Qualitative Scoring Model - Define Link** screen displays.

Figure 208 : Create Qualitative Scoring Model - Define Link



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

Table 190: Create Qualitative Scoring Model - Define Link – Numeric Feature - Field Description

Field	Description
Range/Value Definition	
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 options are: • Strong • Medium • Weak

8. Click **Done** to save the data and close the range panel.
9. Click **Save** to save the details.

The **Qualitative Scoring Model** is successfully created and can be viewed using the **View Qualitative Scoring Model** screen.

4.13.2 View Qualitative Scoring Model

The **View Qualitative Scoring Model** screen allows user to view the qualitative scoring model created using the **Create Qualitative Scoring Model** screen. The status of the created model is displayed as **Unauthorized** and **Open**. Once the checker authorizes the model, the status is updated to **Authorized** and **Open.**

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Qualitative Scoring Model**, under **Qualitative Scoring Model**, click **View Qualitative Scoring Model.**

   → The **View Qualitative Scoring Model** screen displays.

Figure 209 : View Qualitative Scoring Model

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

Table 191: View Qualitative Scoring Model – Field Description.

Field	Description
Scoring Model Code	Displays the scoring model code.
Scoring Model Description	Displays the scoring model description.
Product Processor Code	Displays the product processor code.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Qualitative Scoring Model** screen**,** click  icon.

   → The **View Qualitative Scoring Model – Search** screen displays.

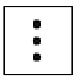
Figure 210 : View Qualitative Scoring Model - Search

4. On **View Qualitative Scoring Model – Search** screen, Specify the **Search Filter** to fetch the required qualitative scoring model.

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

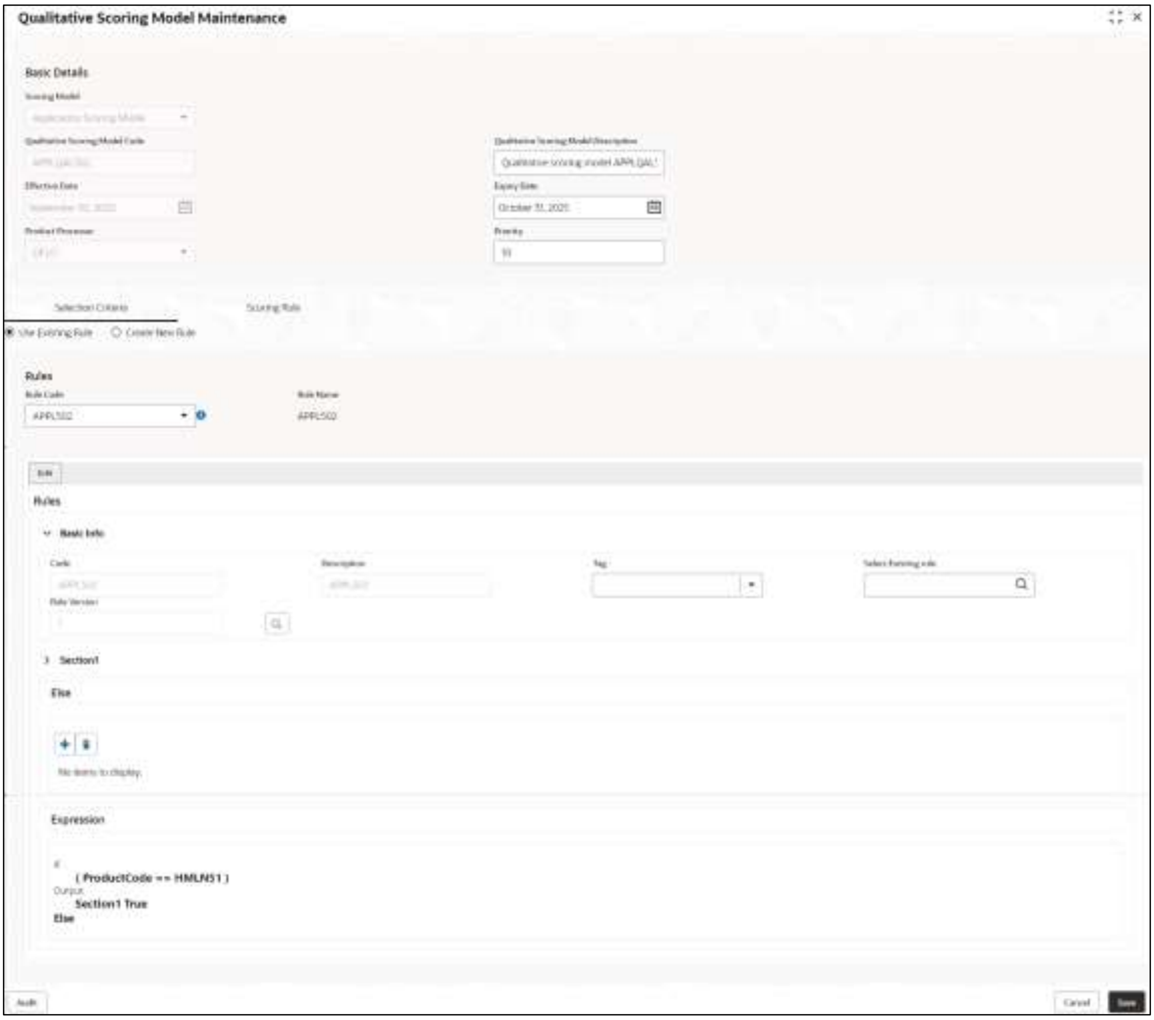
   Table 192 : View Qualitative Scoring Model - Search Filter - Field Description

Field	Description
Scoring Model Code	Specify the scoring model code.
Scoring Model Description	Specify the scoring model description.
Authorization Status	Select the authorization status of the scoring model. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the scoring model. The options are: • Open • Closed

5. Click **Search** to display the required qualitative scoring model.
6. On **View Qualitative Scoring Model** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created qualitative scoring model.
7. Click **Unlock** to modify the created qualitative scoring model.

→ The **Qualitative Scoring Model Maintenance – Modify** screen displays.

Figure 211 : Qualitative Scoring Model Maintenance - Modify



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

Table 193: Qualitative Scoring Model Maintenance – Modify – Field Description.

Field	Description
Basic Details	
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. User can modify the same.
Effective Date	Displays the effective date of the created qualitative scoring model. User can modify the same before authorization.

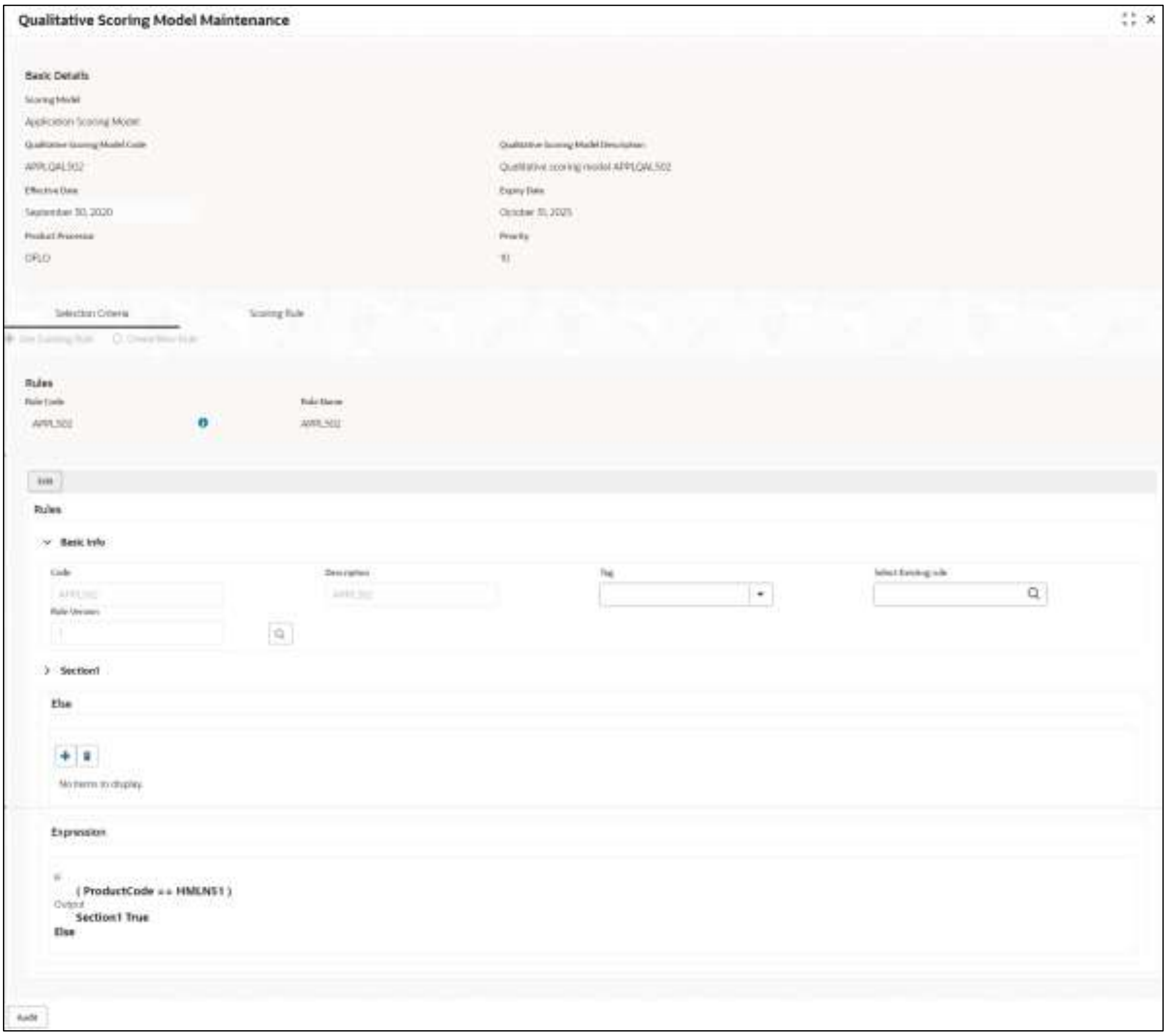
Field	Description
Expiry Date	Displays the expiry date of the created qualitative scoring model. User can modify the same.
Product Processor	Displays the product processor for the created qualitative scoring model.
Priority	Displays the priority of the created qualitative scoring model. User can modify the same.
Selection Criteria	
Use Existing Rule	Indicates if the existing rule is linked. User can modify the same.
Rules	
Rule Code	Displays the rule code for the created qualitative scoring model. User can modify the same.
	Click to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created qualitative scoring model.
Rules	
Code	Displays the rule code.
Description	Displays the rule description.
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click to add new expression.
Fact / Rules	Displays the fact or rule for the created qualitative scoring model.
Operator	Displays the comparison operator for 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.

Field	Description
Scoring Rule Applicable for the **Application scoring Model.**	
Score	
Rule Code	Displays the rule code for the created qualitative scoring model. User can modify the same.
Rule Name	Displays the rule name for the created qualitative scoring model.
Questionnaire Applicable for **Applicant Scoring Model.**	
Score	
Questionnaire Code	Displays the questionnaire code for the created qualitative scoring model. User can modify the same.
Questionnaire Name	Displays 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. User can modify the same.
Value	Displays the defined value for the created qualitative scoring model.
Score	Displays the score for the created qualitative scoring model. User can modify the same.
Category	Displays the category for the created qualitative scoring model. User can modify the same.
Enable	Displays if the question ID is enabled or not.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created qualitative scoring model.

→ The **Qualitative Scoring Model Maintenance – View** screen displays.

Figure 212 : Qualitative Scoring Model Maintenance - View



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

Table 194 : Qualitative Scoring Model Maintenance - View – Field Description.

Field	Description
Basic Details	
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.
Expiry Date	Displays the expiry date of the created qualitative scoring model.
Product Processor	Displays the product processor for the created qualitative scoring model.

Field	Description
Priority	Displays the priority of the created qualitative scoring model.
Selection Criteria	
Rules	
Use Existing Rule	Indicates if the existing rule is linked.
Rules	
Rule Code	Displays the rule code for the created qualitative scoring model.
	Click to get the information about the rule.
Rule Name	Displays the rule name of the rule code for the created qualitative scoring model.
Create New Rule	Indicates if the new rule is created.
Rules	
Rule Code	Displays the rule code of the created qualitative scoring model.
Description	Displays the rule description of the created qualitative scoring model.
Select Existing Rule	Displays the existing rule.
Rule Version	Displays the rule version.
Expression Builder	
+ button	Click this icon to add new expression.
Fact / Rules	Displays the fact/rules 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 of the created qualitative scoring model.
Output	Displays the output of the created qualitative scoring model.
Expression	Displays the expression updated in the expression builder of the crated qualitative scoring model.
Scoring Rule Applicable for the **Application scoring Model.**	
Score	
Rule Code	Displays the rule code for the created qualitative scoring model.

Field	Description
Rule Name	Displays the rule name for the created qualitative scoring model.
Questionnaire Applicable for **Applicant Scoring Model.**	
Score	
Questionnaire Code	Displays the questionnaire code for the created qualitative scoring model.
Questionnaire Name	Displays 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.

4.14 Questionnaire

Credit analysis includes analysis of more information and data. Considering that, some of them have quantitative character and others qualitative, credit analysis is 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 section contains the following subsections:

- 4.14.1 Create Questionnaire
- 4.14.2 View Questionnaire

4.14.1 Create Questionnaire

The **Create Questionnaire** screen allows the user to define qualitative questionnaire based on the various parameters. This questionnaire can be further linked to define qualitative scoring model.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Questionnaire**, under **Questionnaire**, click **Create Questionnaire**.

   → The **Create Questionnaire** screen displays.

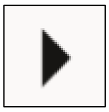
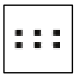
   Figure 213 : Create Questionnaire

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

   The fields, which are marked with asterisk, are mandatory. For more information on fields, refer to the field description table below.

   Table 195 : Create Questionnaire – Field Description

Field	Description
Basic Details	
Questionnaire Code	Specify the unique 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 for 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 option is: • 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.

Field	Description
Answer Option	Specify all the expected response for the question configured.
Add	Click to add the expected response to the question.
Update	Click Update to edit the response.
Remove	Click to remove the response.
Required	By default, this option is enabled. Indicates whether the question is mandatory or optional.
Done	Click to save the data.
Preview	Click **Preview** to view the questions configured for the questionnaire along with the response choice.
	Click to view the responses configured for the questionnaire.
	Click to move the position of the questions.
	Click to expand, copy, or remove question.
	Click to copy the question.
	Click to remove the question.
Add Question	Click to add another question.

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

   The **Questionnaire** is successfully created and can be viewed using **View Questionnaire** screen.

4.14.2 View Questionnaire

The **View Questionnaire** screen allows user to view the questionnaire created 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**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Questionnaire**, under **Questionnaire**, click **View Questionnaire**.

→ The **View Questionnaire** screen displays.

Figure 214 : View Questionnaire

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

Table 196: View Borrowing Capacity – Field Description.

Field	Description
Questionnaire Code	Displays the questionnaire code.
Questionnaire Description	Displays the questionnaire description.
Product Processor Code	Displays the product processor code for which the questionnaire is created.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Questionnaire** screen**,** click  icon.

→ The **View Questionnaire – Search** screen displays.

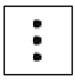
Figure 215 : View Questionnaire - Search

4. On **View Questionnaire – Search** screen, Specify the **Search Filter** to fetch the required questionnaire.

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

   Table 197 : View Questionnaire - Search Filter - Field Description

Field	Description
Questionnaire Code	Specify the questionnaire code.
Questionnaire Description	Specify the questionnaire description.
Authorization Status	Select the authorization status of the questionnaire. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the questionnaire. The options are: • Open • Closed

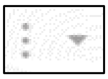
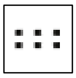
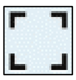
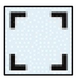
5. Click **Search** to display the required questionnaire.
6. On **View Questionnaire** screen**,** click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created questionnaire.
7. Click **Unlock** to modify the created questionnaire.

   → The **Questionnaire Maintenance – Modify** screen displays.

Figure 216 : Questionnaire Maintenance - Modify

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

Table 198: Questionnaire Maintenance – Modify – Field Description

Field	Description
Basic Details	
Questionnaire Code	Displays the questionnaire code.
Questionnaire Description	Displays the questionnaire description. User can modify the description.
Product Processor	Displays the product processor for the created questionnaire.
Category	Displays the category of the created questionnaire. User can modify the category.
Preview	Click to view the questions configured for the questionnaire along with the response choice.
	Click to expand, copy, or remove question.
	Click to move the position of the questions.
	Click to see the question details.
The following fields are displayed once you click this  icon.	
Question Code	Displays the question code for the created questionnaire.

Field	Description
Question Description	Displays the question code for the created questionnaire. User can modify the same.
Select-Type	Displays the type of questionnaire.
Short Name	Displays the short name of the created questionnaire. User can modify the same
Answer Code	Displays the answer code.
Answer Option	Displays all the expected response for the question configured. User can modify or delete the same.
Required	Displays if the question is mandatory or optional. User can modify the same.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created questionnaire.

→ The **Questionnaire Maintenance – View** screen displays.

Figure 217 : Questionnaire Maintenance - View

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

Table 199 : Questionnaire Maintenance - View – Field Description.

Field	Description
Basic Details	
Eligibility Code	Displays the eligibility code for the created questionnaire.
Eligibility Description	Displays the description for the created questionnaire.

Field	Description
Effective Date	Displays the effective date for the created questionnaire.
Expiry Date	Displays expiry date for the created questionnaire.
Product Processor	Displays product processor for the created questionnaire.
Execution Stage	Displays the execution stage for the created questionnaire.
Selection Criteria	
Rules	
Use Existing Rule	Displays if the existing rule is linked to questionnaire.
Rule Code	Displays the rule code of the created questionnaire.
Rule Name	Displays the rule name of the created questionnaire.
Create New Rule	Displays if new rule is linked to the questionnaire.
Rules	
Rule Code	Displays the rule code of the created questionnaire.
Description	Displays rule description of the created questionnaire.
Expression Builder	
Fact / Rules	Displays the fact/rules of the created questionnaire.
Operator	Displays the comparison operator of the created Questionnaire.
Data Type	Displays the data type for the fact or rule of the created Questionnaire.
Output	Displays the output of the created questionnaire.
Expression	Displays the expression updated in the expression builder of the crated questionnaire.
Eligibility	
Fact ID	Displays the fact ID of the created questionnaire.
Rule ID	Displays the rule ID of the created questionnaire.
	Click this to get the information about the rule.

4.15 Counter

In many scenarios, charges are levied based on the number of transactions like ATM Transaction, Branch Cash Withdrawal etc. System should be able to give charge benefit based on the count of transaction.

To support the charge based on count, PDS will be enhanced where the Count of transaction will be maintained for an event which later can be used to give relationship pricing

This section contains the following subsections:

- 4.15.1 Create Counter
- 4.15.2 View Counter

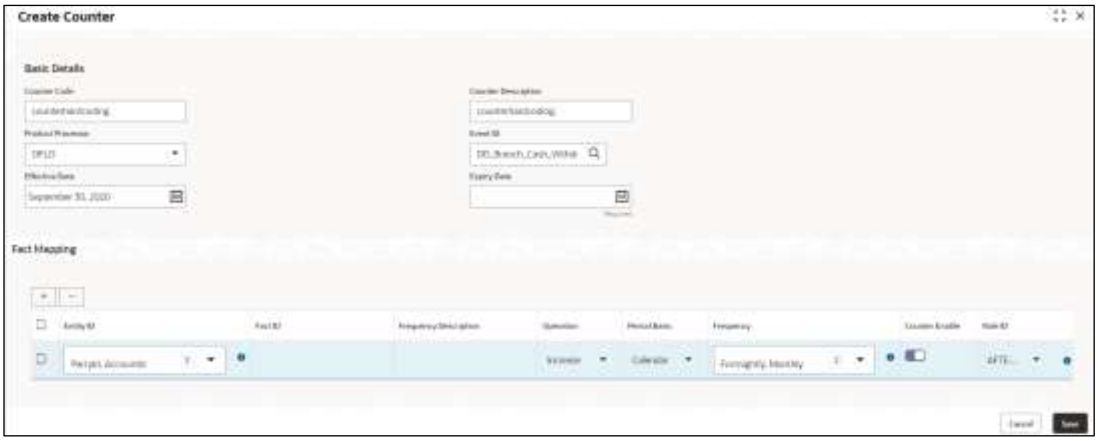
4.15.1 Create Counter

The **Create Counter** screen allows the user to create parameters by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**, under **Maintenance**, click **Counter**, under **Counter**, click **Create Counter**.

   → The **Create Counter** screen displays.

Figure 218 : Create Counter

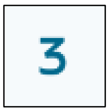


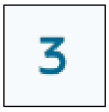
3. Specify the fields on **Create Counter** screen.

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

Table 200 : Create Counter - Field Description

Field	Description
Basic Details	
Counter Code	Specify the unique code for the counter.

Field	Description
Counter Description	Specify a short description for the code.
Product Processor	Select the product processor from the drop-down list for which code is being created.
Event ID	Click on  icon and select the id from the list.
Below fields appears once you click  icon.	
Code	Displays the event code.
Description	Displays the description for the code.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Fact Mapping	
Entity ID	Select the options from the drop-down list. The options are: • PartyId • AccountId • CollateralId
	Displays the number of entity id's selected.
	Click this icon to get the information about the rule.
Fact ID	Specify the fact id for the selected entity.
Frequency Description	Specify the description of the fact id.
Operation	Select the value from the drop-down list. The options are: • Increase • Decrease

Field	Description
Period Basis	Select from the drop-down list. The options are: • Calendar • Anniversary
Frequency	Select the value from the drop-down list. The options are: • Daily • Weekly • Monthly • Quarterly • Half yearly • Yearly
	Displays the number of frequencies selected.
	Click this icon to get the information about the rule.
Counter Enable	Click the toggle status to enable the counter.
Rule ID	Select the rule Id from the drop-down list.
	Click this icon to get the information about the rule.

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

   The **Counter** is successfully created and can be viewed using the **View Counter** screen.

4.15.2 View Counter

The **View Counter** screen allows user to view the counter created using the **Create Counter** screen. The status of the created system parameter is displayed as **Unauthorized** and **Open**. Once the checker authorizes the parameter, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under Credit Decision, click **Maintenance**, under **Maintenance**, click **Counter**, under **Counter**, click **View Counter**.

→ The **View System Counter** screen displays.

Figure 219 : View Counter

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

Table 201 : View System Parameter - Field Description

Field	Description
Counter Code	Displays the counter code.
Counter Description	Displays the description of the counter code.
Product Processor	Displays the product processor of the counter.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Counter** screen, click  icon.

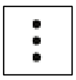
→ The **View Counter – Search** screen displays.

Figure 220 : View Counter - Search

4. On **View Counter – Search** screen, Specify the **Search Filter** to fetch the required counter.

Table 202 : View Counter - Field Description

Field	Description
Counter Code	Specify the counter code.
Counter Description	Specify the counter description.
Authorization Status	Select the authorisation status of the parameters. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the parameters. The options are: • Open • Closed

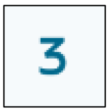
5. Click **Search** to display the required created counter.
6. On **View Counter** screen, click  icon to **Unlock**, **Delete**, **Authorize**, or **View** the created counter.
7. Click **Unlock** to modify the created counter.

→ The **Counter Maintenance – Modify** screen displays.

Figure 221 : Counter Maintenance – Modify

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

Table 203 : Counter Maintenance - Modify - Field Description

Field	Description
Basic Details	
Counter Code	Displays the created counter code.
Counter Description	Displays the Counter Description. User can modify the same.
Product Processor	Displays the product processor of the created Counter code.
Effective Date	Displays the effective date of the created counter. User can modify the same before authorization if it is future dated.
Expiry Date	Displays the expiry date of the created counter. User can modify the same.
Fact Mapping	
Entity ID	Displays the Entity IDs selected for created counter. User can modify the same.
	Displays the number of IDs selected.
	Click to get the information about the rule.
Fact ID	Displays the Fact IDs selected for created counter User can modify the same.

Field	Description
Frequency Description	Displays the frequency description for the created counter. User can modify the same
Operation	Displays the frequency for the created counter. User can modify the same.
Period Basis	Displays the period basis selected.
Frequency	Displays the frequency for the created counter. User can modify the same.
3	Displays the number of frequencies selected.
	Click to get the information about the rule.
Rule ID	Displays the Rule ID for selected for the created Counter.
	Click to get the information about the rule.

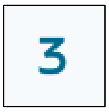
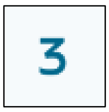
8. Click **Save** to update the modified fields.
9. Click **View** to view the created counter.

   → The **Counter Maintenance – View** screen displays.

Figure 222 : Counter Maintenance – View

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

Table 204 : Counter Maintenance - View - Field Description

Field	Description
Basic Details	
Counter Code	Displays the created counter code.
Counter Description	Displays the created counter description.
Product Processor	Displays the product processor of the created counter.
Event ID	Displays the ID for the created counter.
Effective Date	Displays the effective date for the created counter.
Expiry Date	Displays the expiry date for the created counter.
Fact Mapping	
Entity ID	Displays the entity ids for the created counter.
	Displays the number of the IDs selected.
	Click to get the information about the rule.
Fact ID	Displays the fact IDs for the created counter.
Frequency Description	Displays the frequency description of the created counter.
Operation	Displays the operation for the created counter.
Period Basis	Displays the period basis.
Frequency	Displays the frequencies selected for the created counter.
	Displays the number for frequencies selected.
	Click to get the information about the rule.
Rule ID	Displays the rule ID for the created counter.
	Click to get the information about the rule.

4.16 Charge Code

Fee definition can be simple like fixed amount or fixed percentage but can be complex which is based on various attributes like customer segment, count of transaction, amount of transaction etc.

This section contains the following subsections:

- 4.16.1 Create Charge Code
- 4.16.2 View Charge Code

4.16.1 Create Charge Code

The **Create Charge Code** screen allows the user to create definitions by updating various details.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click Maintenance, under Maintenance, click **Charge Code**, under **Charge Code**, click **Create Charge Code**.

   → The **Create Charge Code** screen displays.

   Figure 223 : Create Charge Code

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

   The fields, which are mentioned as required, are mandatory. For more information on fields, refer to the field description table below.

   Table 205 : Create Charge Code - Field Description

Field	Description
Basic Details	
Advance Charging	Click the toggle status to enable the parameter. Indicates the definition is for advance or simple. By default, the status will be off.

Field	Description
Charge Code	Specify the unique code for the charge.
Charge Description	Specify a short description for the charge code.
Product processor Code	Select the product processor from the drop-down list for which the charge is being created.
Product Processor Description	Displays the description of the product processor code defined.
Effective Date	Specify the effective date.
Expiry Date	Specify the expiry date.
Charging Currency	Select the currency from the drop-down list.
Rate Code	Click on search and select from the list.
Per Annum Basis (Days)	Select the days from the drop-down list. The options are: • 360 • 365 • 366
Charge In Txn Currency	Click the toggle status to enable this parameter. Indicates the charge is to be charged of fee currency or transaction currency. By default, the status will be off.
Charge Computation Details	
Charge Type	Select the type from the drop-down list. The options are: • Fixed Amount • Fixed Percentage • Tiered
Charge Amount	Specify the amount for the charge type. This field is visible if the **Charge Type** is selected as **Fixed Amount**.
Percentage (%)	Specify the percentage for the charge type. This field is visible if the **Charge Type** is selected as **Fixed Percentage**.

Field	Description
Minimum Amount	Specify the minimum amount to be charged. This field will not be visible if the **Charge Type** is selected as **Fixed Amount**.
Maximum Amount	Specify the maximum amount to be charged. This field will not be visible if the **Charge Type** is selected as **Fixed Amount.**
Tiered Charge Type	Select the tiered charge type from the drop-down list. The Options are: • Amount • Percentage • Amount or Percentage This field is visible if the **Charge Type** is selected as **Tiered**. The below option appears if the **Advance Charging** is enabled. • Rule • Amount or Rule • Percentage or Rule
Tier Type	Select from tier type the drop-down list. The options are: • Cumulative • Slab This field is visible if the **Charge Type** is selected as **Tiered.**
Tier Criteria	Select the tier criteria from the drop-down list. The options are: • Amount • Period • Amount or Period The system will not allow use to select the above options if the **Tier Type** is selected as **Slab**
+ button	Click to add a new row.
- button	Click to delete the row.

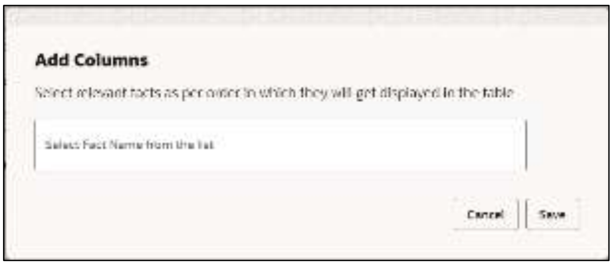
Field	Description
Amount / Period / Amount or Period - From	Specify the start value of the count range. This field is visible only if the **Charge Type** is selected as **Tiered**.
Amount / Period / Amount or Period - To	Specify the final value of the count range This field is visible only if the **Charge Type** is selected as **Tiered.**
Amount	Specify the amount. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount.**
Percentage	Specify the charge percentage. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Percentage.**
Output Option	Select the option from which the output must be displayed. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount or Percentage.**
Output	Specify the output. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount or Percentage.**
Basis of	Select from the drop-down list. This field is visible only if **Charge Type** is selected as **Tiered** and **Advance Charging** is enabled.
Rule	Toggle to enable if the rule is applicable. This field is visible only if the **Advance charging** and **Rule** is enabled and **Charge Type** is selected as **Fixed Amount** or **Fixed Percentage**.
Rule ID	Select the rule from the drop-down list. This filed is visible if the **Advance Charging** and **Rule** is enabled.
	Click this icon to get the information about the rule.

Toggle the **Advance Charging** to link the list of features. This Feature is visible if the **Charge Type** is selected as **Tiered**.

4. Click **+ Add/Edit column** to select and link the facts.

→ The **Add columns** popup screen displays.

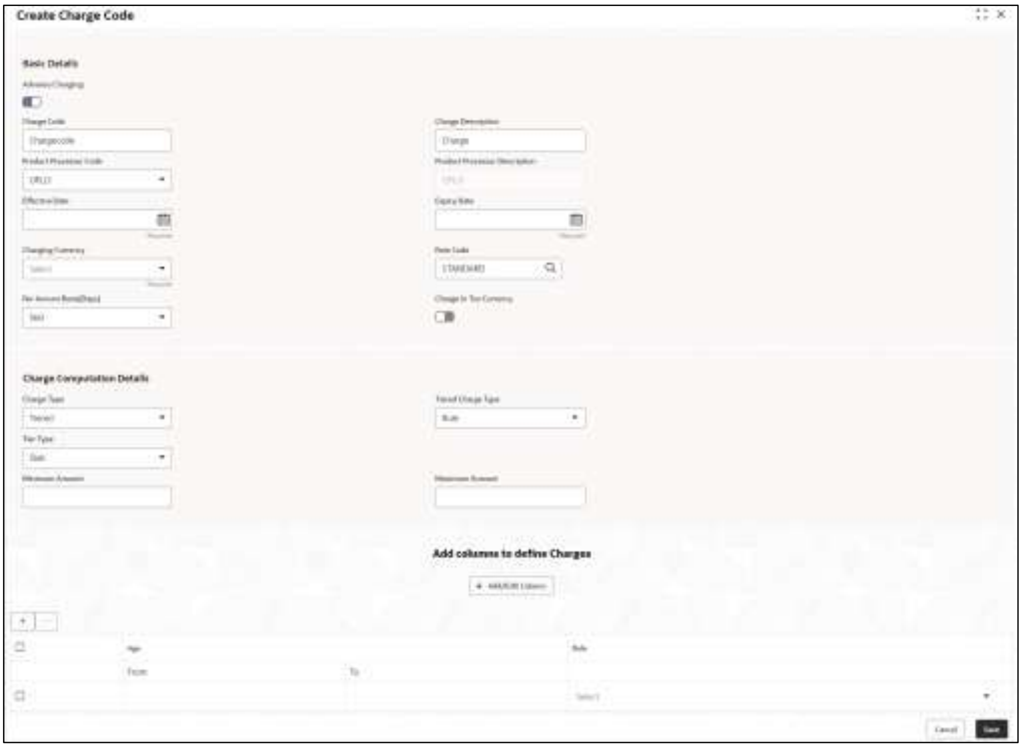
Figure 206: Add Columns



5. Select the facts names from the list. (‘n’ number of facts can be selected)
6. Click **Save** to link the features for defining the tiered charge type.

→ The **Create Charge Code Definition – Tiered** screen displays.

Figure 207: Create Charge Code Definition – Tiered



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

Field	Description
<Numeric Feature>From	Specify the minimum numeric value of the facts selected.
<Numeric Feature>To	Specify the maximum numeric value of the facts selected.
<Numeric Feature>Value	Specify the value of the facts selected.

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

The **Charge Code** is successfully created and can be viewed using the **View Charge Code** screen.

4.16.2 View Charge Code

The **View Charge Code** screen allows user to view the code definition created using the **Create Charge Code** screen. The status of the created system parameter is displayed as **Unauthorized** and **Open**. Once the checker authorizes the parameter, the status is updated to **Authorized** and **Open**.

1. On **Homescreen**, click **Core Maintenance**, under **Core Maintenance**, click **Credit Decision**.
2. Under **Credit Decision**, click **Maintenance**. Under **Maintenance**, click **Charge Code**, under **Charge Code**, click **View Charge Code**.

→ The **View Charge Code** screen displays.

Figure 224 : View Charge Code

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

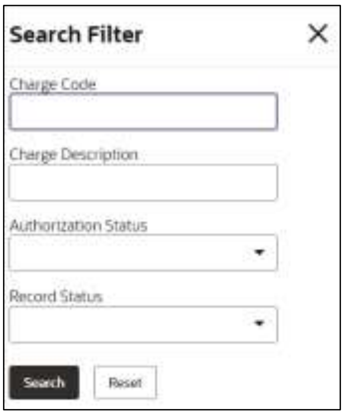
Table 206 : View Charge Code - Field Description

Field	Description
Charge Code	Displays the charge code.
Charge Code Description	Displays the description of the charge code.
Product Processor Code	Displays the product processor of the charge code.
Charging Currency	Displays the currency of the charge code.
Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the record.

3. On **View Charge Code** screen**,** click  icon.

→ The **View Charge Code – Search** screen displays.

Figure 225 : View Charge Code - Search



4. On **View Charge Code – Search** screen, Specify the **Search Filter** to fetch the required charge code.

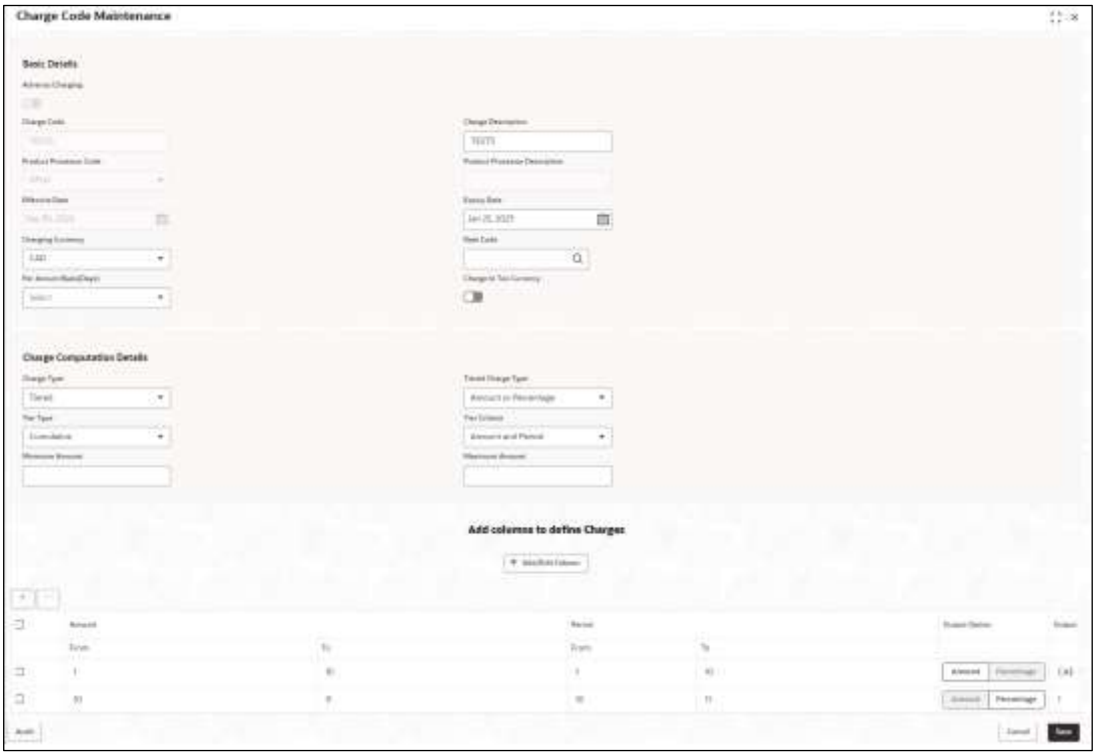
Table 207 : View Charge Code – Search Filter - Field Description

Field	Description
Charge Code	Specify the charge code.
Charge Code Description	Specify the short description for the charge code.
Authorization Status	Select the authorisation status of the parameters. The options are: • Authorized • Rejected • Unauthorized
Record Status	Select the record status of the parameters. The options are: • Open • Closed

5. Click **Search** to display the required charge code definition.
6. On **View Charge Code** screen**,** click ⋮ icon to **Unlock**, **Delete**, **Authorize**, or **View** the created charge code.
7. Click **Unlock** to modify the created charge code.

→ The **Charge Code Maintenance – Modify** screen displays.

Figure 226 : Charge Code Maintenance – Modify



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

Table 208 : Charge Code Maintenance - Modify - Field Description

Field	Description
Basic Details	
Charge Code	Displays the created charge code.
Charge Description	Displays the description for the created charge code. User can modify the same.
Product Processor Code	Displays the product processor of the created charge code.
Product Processor Description	Displays the product processor of the created charge code.
Effective Date	Displays the effective date for the created charge code. User can modify the same if the date is future dated.
Expiry Date	Displays the expiry date for the created charge code. User can modify the same.
Charging Currency	Displays the type of the currency. User can modify the same.

Field	Description
Rate Code	Displays the rate code for the created charge code. User can modify the same.
Per Annum Basis (Days)	Displays the numbers of the days for the created code. User can modify the same.
Charge in Txn Currency	Displays the toggle status for the created charge code. User can modify the same.
Charge Computation Details	
Charge Type	Displays the type for the created charge code. User can modify the same.
Charge Amount	Displays the amount for the created charge code. User can modify the same. This field is displayed if the **Charge Type** is selected as **Fixed Amount.**
Percentage (%)	Displays the percentage for the created charge code. User can modify the same. This field is displayed if the **Charge Type** is selected as **Fixed Percentage.**
Minimum Amount	Displays the minimum amount. User can modify the same. This field will be displayed if the **Charge Type** is selected as **Fixed Percentage** or **Tiered** and **Tier Charge Type** as **Percentage** or **Amount or Percentage.**
Maximum Amount	Displays the maximum amount. User can modify the same. This field will be displayed if the **Charge Type** is selected as **Fixed Percentage** or **Tiered** and **Tier Charge Type** as **Percentage** or **Amount or Percentage.**
Tiered Charge Type	Displays the charge type for the created charge code. User can modify the same. This field is displayed if the **Charge Type** is selected as **Tiered.**

Field	Description
Tier Type	Displays the tier type for the created charge code. User can modify the same. This field is displayed if the **Charge Type** is selected as **Tiered.**
Tier Criteria	Displays the tier criteria for the created charge code. User can modify the same. This field is displayed if the **Charge Type** is selected as **Tiered.**
+ button	Click to add a new row.
- button	Click to delete the row.
Amount / Period / Amount or Period - From	Displays the start value of the count range. User can modify the same. This field is visible only if the **Charge Type** is selected as **Tiered**.
Amount / Period / Amount or Period -To	Displays the final value of the count range. User can modify the same. This field is visible only if the **Charge Type** is selected as **Tiered**.
Amount	Displays the charge amount. User can modify the same. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount.**
Percentage	Displays the charge percentage. User can modify the same. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Percentage.**
Output Option	Displays the output option selected. User can modify the same. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount or Percentage.**
Output	Displays the output. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount or Percentage.**

Field	Description
Basis of	Displays the basis of selected from the drop-down list. User can modify the same. This field is visible only if **Charge Type** is selected as **Tiered** and **Advance Charging** is enabled.
Rule ID	Displays the rule selected.
	Click this icon to get the information about the rule.

8. Click **Save** to update the modified fields.
9. Click **View** to view the created charge code definition.

→ The **Charge Code Maintenance – View** screen displays.

Figure 227 : Charge Code Maintenance – View

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

Table 209 : Charge Code Maintenance – View – Field Description

Field	Description
Basic Details	
Charge Code	Displays the created charge code.
Charge Description	Displays the description for the created charge code.

Field	Description
Product Processor Code	Displays the product processor of the created charge code.
Product Processor Description	Displays the product processor of the created charge code.
Effective Date	Displays the effective date for the created charge code.
Expiry Date	Displays the expiry date for the created charge code.
Charging Currency	Displays the type of the currency.
Rate Code	Displays the rate code for the created charge code.
Per Annum Basis (Days)	Displays the numbers of the days for the created code.
Charge in Txn Currency	Displays the toggle status for the created charge code.
Charge Computation Details	
Charge Type	Displays the type for the created charge code.
Charge Amount	Displays the amount for the created charge code. This field is displayed if the **Charge Type** is selected as **Fixed Amount.**
Percentage (%)	Displays the percentage for the created charge code. This field is displayed if the **Charge Type** is selected as **Fixed Percentage.**
Minimum Amount	Displays the minimum amount. This field will be displayed if the **Charge Type** is selected as **Fixed Percentage** or **Tiered** and **Tier Charge Type** as **Percentage** or **Amount or Percentage.**
Maximum Amount	Displays the maximum amount. This field will be displayed if the **Charge Type** is selected as **Fixed Percentage** or **Tiered** and **Tier Charge Type** as **Percentage** or **Amount or Percentage.**
Tiered Charge Type	Displays the charge type for the created charge code. This field is displayed if the **Charge Type** is selected as **Tiered.**
Tier Type	Displays the tier type for the created charge code. This field is displayed if the **Charge Type** is selected as **Tiered.**
Tier Criteria	Displays the tier criteria for the created charge code. This field is displayed if the **Charge Type** is selected as **Tiered.**

Field	Description
Amount / Period / Amount or Period – From	Displays the start value of the count range. This field is visible only if the **Charge Type** is selected as **Tiered**.
Amount / Period / Amount or Period - To	Displays the final value of the count range This field is visible only if the **Charge Type** is selected as **Tiered**.
Amount	Displays the charge amount. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount.**
Percentage	Displays the charge percentage. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Percentage.**
Output Option	Displays the output option selected. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount or Percentage.**
Output	Displays the output. This field is visible only if the **Charge Type** is selected as **Tiered** and **Tiered Charge Type** as **Amount or Percentage.**
Basis of	Displays the basis of selected from the drop-down list. This field is visible only if **Charge Type** is selected as **Tiered** and **Advance Charging** is enabled.
Rule ID	Displays the rule selected.
	Click this icon to get the information about the rule.

4.17 Execution Summary

Execution Summary screen enables the user to view the details of the processed application. Based on the request mode it displays details related to validation model, borrowing capacity, quantitative score, qualitative score, decision and grade details and pricing details. It also provides different type of filters to perform search for a specific record.

This section contains following subsection:

- 4.17.1 View Execution Summary

4.17.1 View Execution Summary

The **View Execution Summary** screen allows user to view the execution summary based on the various filter options provided

1. On **Homescreen**, click **Core Maintenance,** under **Core Maintenance**, click **Credit Decision.**
2. Under **Credit Decision,** click **Operations**, under **Operations**, click **Execution Summary**.

→ The **Execution Summary** screen displays.

Figure 228 : View Execution Summary

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

Table 210 : Execution Summary - Field Description

Field	Description
Search Criteria	
+ button	Click to add a new row.
- button	Click to delete an existing row.

Field	Description
Filter	Select the required option based on which you can search for the execution summary. The options are: • Request Reference Number • Internal Reference Number • Decision • Batch/Online • Product Processor • Status • Request Type • Execution Date • Contract ID
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 appear showing a list of records based on the specified search criteria.

4. Click **Reset** to reset the search criteria.

Figure 229 : Execution Summary - Search

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

Table 211 : Execution Summary - Search - Field Description

Field	Description
Scoring Decision Summary	
Product Processor	Displays the name of the product processor that sent the request.
Request Type	Displays the request type sent by product processor.
Contract ID	Displays the contract ID sent by the product processor.
Request Reference Number	Displays the request reference number sent by product processor.
Internal Reference Number	Displays the internal reference number of the application.
Execution Date	Displays the execution date of the processing application.
Mode	Displays the mode of execution of the application.
Status	Displays the status of the processed application.

5. Click the icon corresponding to the required record to view the decision related details on each widget. Only one record is viewed at a time. If you need to view another record, user have to click on to close the already open record and then the next record can be viewed. The widgets are arranged in the flow in which the execution is done and is indicated by showing the sequence 1, 2, 3 numbers in the top right corner. The widgets are clickable on hover the color of the widget changes to indicate the widget is clickable.

6. When the status of processed application is **Failure,** on click of the failure message is displayed in the step that is failed. For example, in case of **Qualitative Score Model** is not resolved, then the error message is displayed in the **Qualitative Score Model** widget and the

previous widget will show the data which was processed. Where in if the validation processing fails, then the status **Fail** is shown in the **Validation Model** widget and reason for failure is displayed on click of the widget.

Figure 230 View Execution Summary

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

Table 212 : 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. The following fields appear in **Validation Model** widget.	
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. The following fields appear in **Borrowing Capacity** widget.	
Eligibility Code	Displays the eligibility model code, resolved for calculating the borrowing capacity.

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>Description</td><td>Displays the eligibility model description, resolved for calculating the borrowing capacity.</td></tr>
<tr><td>Requested Amount</td><td>Displays the requested amount for the lending application.</td></tr>
<tr><td>Borrowing Capacity</td><td>Displays the maximum lendable amount that can be given for the application.</td></tr>
<tr><td colspan="2">Qualitative Score Widget
Displays the qualitative credit score, post credit decision of the application. The following fields appear in Qualitative Score widget.</td></tr>
<tr><td>Scoring Model Code</td><td>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.</td></tr>
<tr><td>Description</td><td>Displays the scoring model description, resolved for credit decision.</td></tr>
<tr><td>Score</td><td>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.</td></tr>
<tr><td colspan="2">Quantitative Score Widget
Displays the quantitative credit score post credit decision of the application. The following fields appear in Quantitative Score widget.</td></tr>
</table>

Field	Description
Scoring Model Code	Displays 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 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,** 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. The following fields appear in **Quantitative Score** widget.	
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. The following fields appear in **Quantitative Score** widget.	
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.

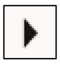
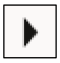
The following fields are displayed once user click the **Validation Model** widget. The details for the request which was clicked on the landing page is displayed.

Figure 231 : Validation Model Widget

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

Table 213 : Validation Model Widget - Field Description

Field	Description
Internal Reference Number	Specify the internal reference number.
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.
Status	Displays the status of the application. This field is shown on click of each widget.

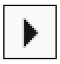
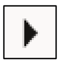
Field	Description
The following fields appear once you click the **Validation Model** widget.	
<Validation Model Code>	Displays the validation model code that is resolved for credit decision. Click the hyper link to view the rule executed to resolve the model.
Show Rule Log	Click to see the rule log.
	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.
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 the sequence has failed.

The following fields are displayed once user click the **Borrowing Capacity** widget.

Figure 232 : Borrowing Capacity Widget

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

Table 214 : Borrowing Capacity Widget - Field Description

Field	Description
The following fields appears in **Borrowing Capacity** widget.	
<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.
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. Click the hyper link 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.

Field	Description
Value	Displays the value of the rule.

The following fields are displayed once user click the **Qualitative Score** widget.

Figure 233 : Qualitative Score Widget – Bar Graph View

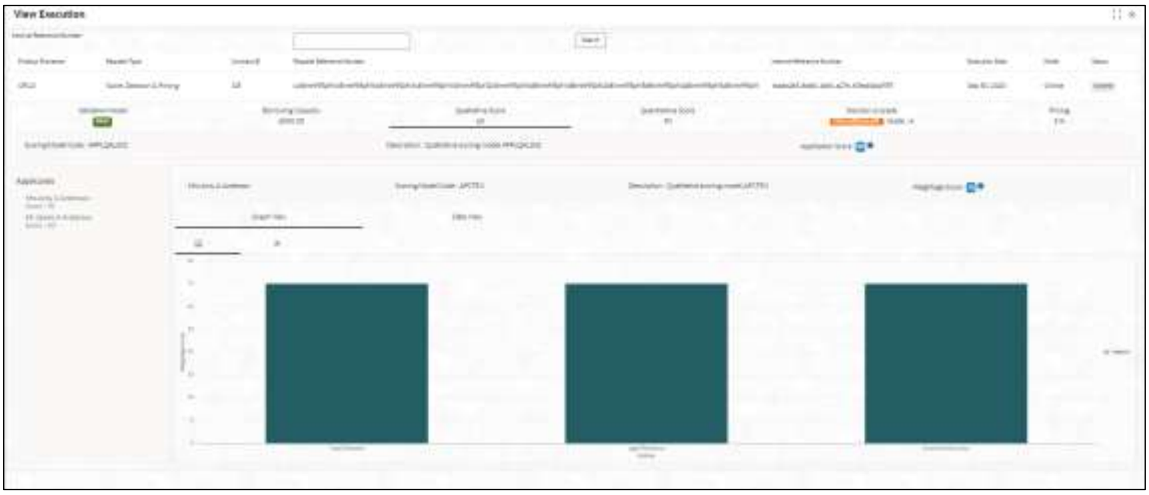


Figure 234 : Qualitative Score Widget – Pie Graph View

Figure 235 : Qualitative Score Widget – Data View

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

Table 215 : Qualitative Score Widget - Field Description

Field	Description
The following fields appears in **Qualitative Score** widget.	

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.
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
	Click to get the information about the formula for calculation of score.
Applicant details are shown at the left panel.	
<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.
Below details are shown at the right panel.	
<Applicant Name>	Displays the applicant names present in the application.

Field	Description
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.
	Click 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.
Scoring Details	
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 user click the **Quantitative Score** widget.

Figure 236 : Quantitative Score Widget – Bar Graph View

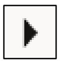
Figure 237 : Quantitative Score Widget – Pie Graph View

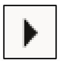
Figure 238 : Quantitative Score Widget – Data View

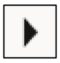
For more information on fields, refer to the field description table below.

Table 216 : Quantitative Score Widget - Field Description

Field	Description
The following fields appears in **Quantitative Score** widget.	

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 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.
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**, system displays the hyperlink on the weightage score value. It shows the aggregate rule details.
Applicant details are shown at the left panel.	
<Applicant Name>	Displays the applicant names present in the application.

Field	Description
<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.
Below details are shown at the right panel.	
<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 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.
	Click to get the information about the formula for calculation of score.

Field	Description
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.
Scoring Details	
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.
Weightage Score	Displays the weighed credit score post credit decision of the application.

The following fields are displayed once user click the **Decision and Grade** widget.

Figure 239 : Decision and Grade Widget

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

Table 217 : Decision and Grade Widget - Field Description

Field	**Description**
The following fields appears in **Decision and Grade** widget.	
<Model Code>	Displays the model code resolved for credit decision and grade. Click the hyper link to view the rule executed to resolve the 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.
Decision	
<Feature Name> Score	Displays the score calculated for the application based on the feature selected. If the feature is rule based, system displays the hyper link.
Show Rule Log	Click to see the rule log.
	Click to expand the rule.
Expression	Displays the expression of the rule.

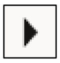
Field	Description
Input	Displays the input of the rule.
Value	Displays the value of the rule.
<Feature Name> Range	Displays the score resolved for the application based on the feature selected.
Color Feature	Displays the color feature.
Color Feature Range	Displays the color feature range.
Decision	Displays the decision taken for the application.
Rule ID	Displays the rule ID of the feature. 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.
Grade	
<Feature Name> Score	Displays the score calculated for the application based on the feature selected. 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.
<Feature Name> Range	Displays the score resolved for the application based on the feature selected.
Grade	Displays the scoring grade taken for the application.

The following fields are displayed once you click the **Pricing** widget.

Figure 240 : Pricing Widget

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

Table 218 : Pricing Widget - Field Description

Field	Description
The following fields appears in **Pricing** widget.	
<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	Displays the pricing model description resolved for credit decision.
Rate Type	Displays the rate type applicable post credit decision.
Rate Percentage	Displays the rate applicable post credit decision.
Loan Amount	Displays the eligible loan amount for the application.
Loan Tenure	Displays the loan tenure for the application.
Loan Amount Range	Displays the range resolved for the loan amount value.
Loan Tenure Range	Displays the range resolved for the loan tenure value.
Rate %	Displays the rate applicable post credit decision.

4.18 Integrating Decision Service with Oracle Banking Routing Hub

4.18.1 Oracle Banking Routing Hub Configuration

Need to import existing service consumer and providers in the system. Service Consumer is oracle product, which invokes oracle banking routing hub API, oracle banking routing hub analyses evaluates destination product processor and transform data into format of the same. Service Consumer comprises of the source and destination integration details.

1. On **Homescreen**, click **Core Maintenance,** under **Core Maintenance**, click **Routing Hub**.
2. Under **Routing Hub**, click **Service Consumers**.

→ The **Service Consumers** screen displays.

Figure 241: Service Consumers

Figure 242: Oracle Banking Routing Hub Configuration

Table 219: Oracle Banking Routing Hub Configuration

Component Name	Component Type	Condition	Comments
Add	Button		Pops up add dialog
Import	Button		Pops up import dialog
Search	Combo Box One		Provides search functionality with case insensitive (Service Consumer Name)
View	menu option	Non-editable	Pops up view dialog
Edit	menu option		Pops up edit dialog
Delete	menu option		

Export	Sub menu item		
JSON	menu option		Exports in JSON
SQL	menu option		Exports in SQL
Configuration	menu option		Pops up configuration dialog
Request Audit	menu option		Pops up request audit log

4.18.1.1 Add

User can create Service Consumer manually.

On **Service Providers** screen, click **Add** to create service providers.

Figure 243: Add

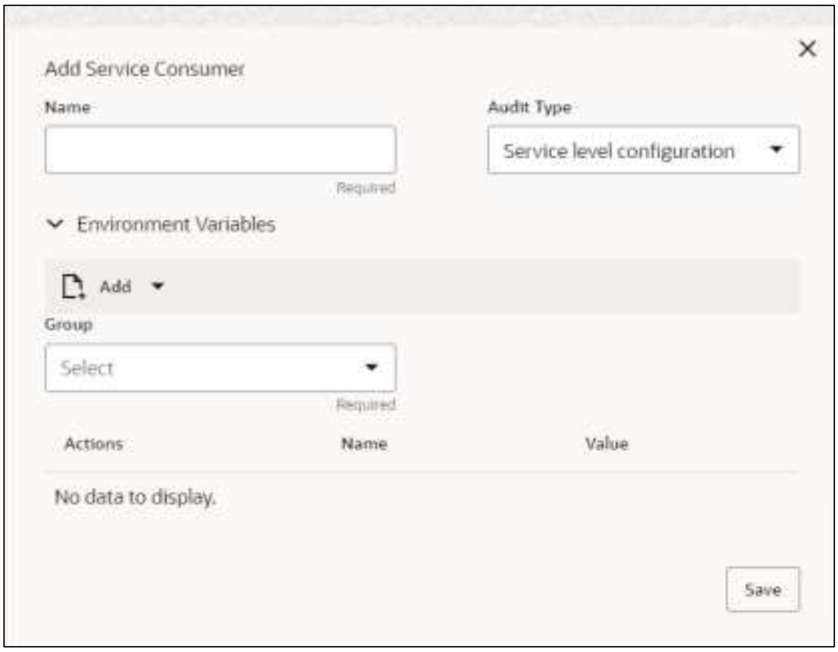


Table 220: Add

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255 • No numeric value at beginning and no space allowed	Unique Service Consumer name
Environment Variables	Table Content				
Save	Button				Saves the Service Consumer

4.18.1.1 Environment Variables

User can define the group of variables that can be accessed throughout the specific consumer's configuration.

Below is the syntax for accessing environment variables:

$env.Environment_Group_Name.Environment_Variable_Name

such as : $env.COMMON.BRANCH_CODE

Figure 244: Environment Variables

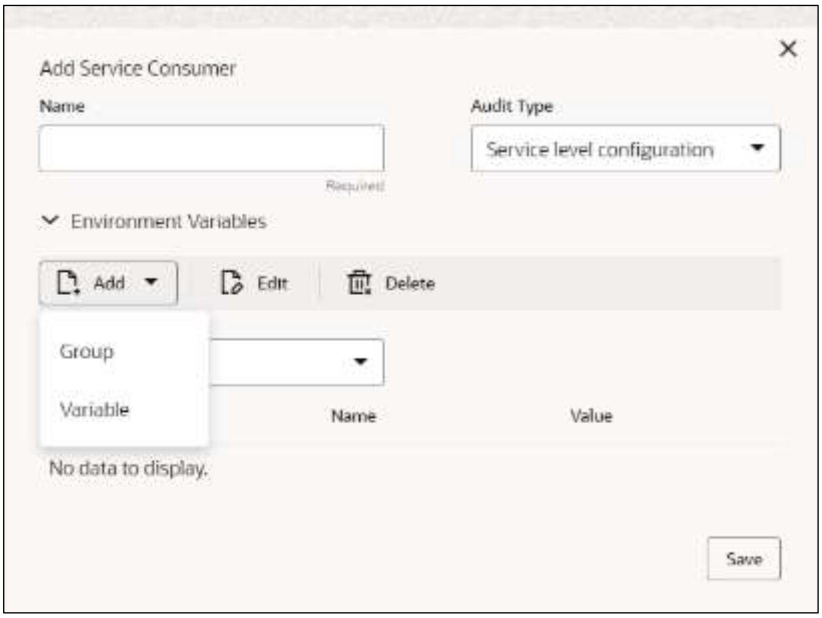


Figure 245: Environment Variables

Figure 246: Environment Variables

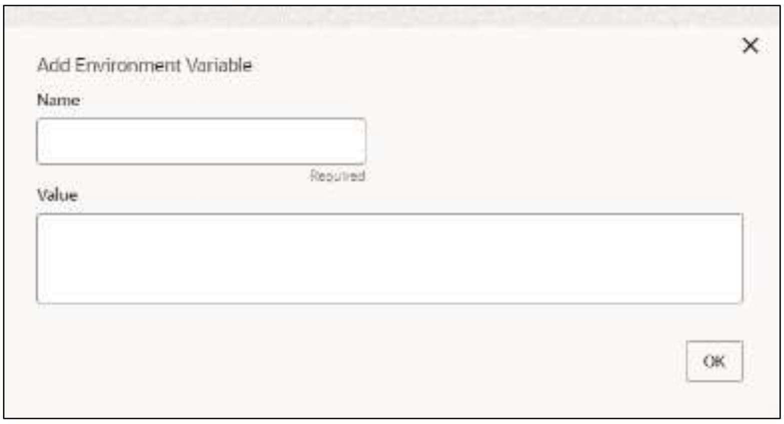


Table 221: Environment Variables

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Add	Menu Item				
Group	Menu option				Pops up add group dialog
Variable	Menu option				Pops up add variable dialog
Navigation: Service Consumer -> Environment Variables -> 3 dot icon (operation menu)					
Edit	menu option / icon				Pops up edit dialog
Delete	menu option / icon				Deletes group / variable
Environment Group / Variable					

Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255 • No numeric value at beginning and no space allowed	
Value	Text Area				Value can either be hardcoded or Velocity mapping.
OK	Button				Saves the group / variable and displays it in the list

4.18.1.2 Import

User can create a service consumer by importing the JSON file and manually selecting the service Providers or select all providers that needs to be imported.

On **Service Providers** screen, click **Import.**

Figure 247: Import

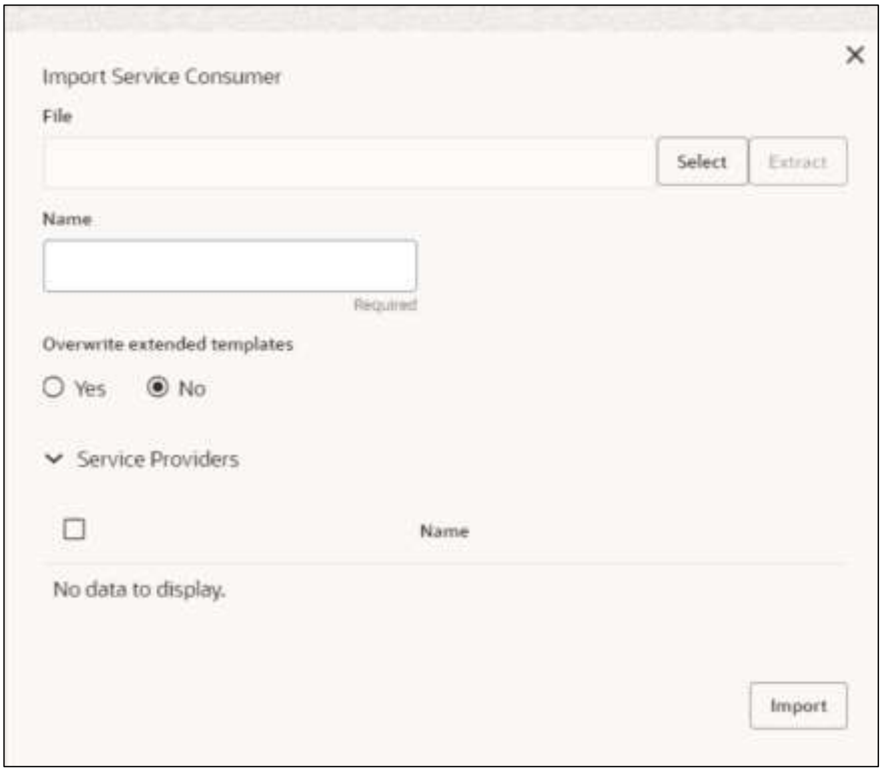


Table 222: Import

Component Name	Component Type	Is Mandatory	Data type	Validation	Condition	Comments
File	File picker	Yes		Allows only to select one file	Accepts only JSON file	Pops up file selection dialog box
Extract	Button	Yes				Extracts Consumer Name and Service Provider list from JSON file and displays it in the respective elements.

Component Name	Component Type	Is Mandatory	Data type	Validation	Condition	Comments
Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255 • No numeric value at beginning and no space allowed	Editable	Unique
Service Provider	Collapsible Header & Content					Displays the list of service providers that are present in JSON file
Import	Button					Imports Service Consumer

Note: Below data needs to be changed after importing consumer configuration file:

• Implementation Host and Port

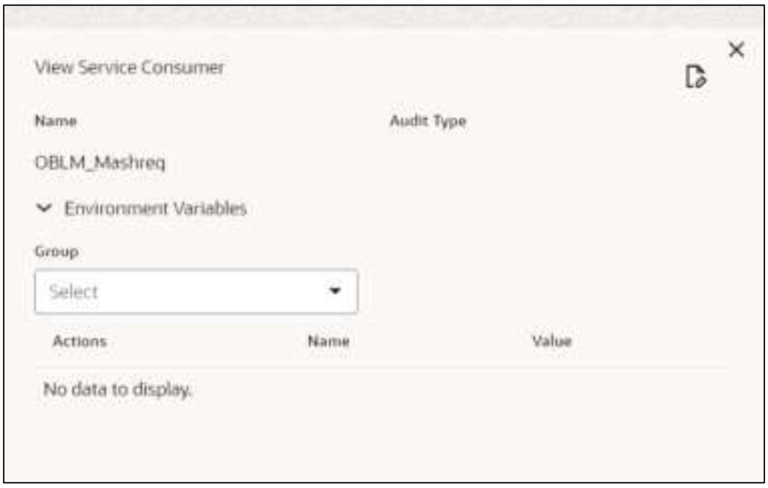
• Implementation Authentication Password

4.18.1.3 View

User can view consumer details and can switch to edit form by clicking on edit icon.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **View.**

Figure 248: View

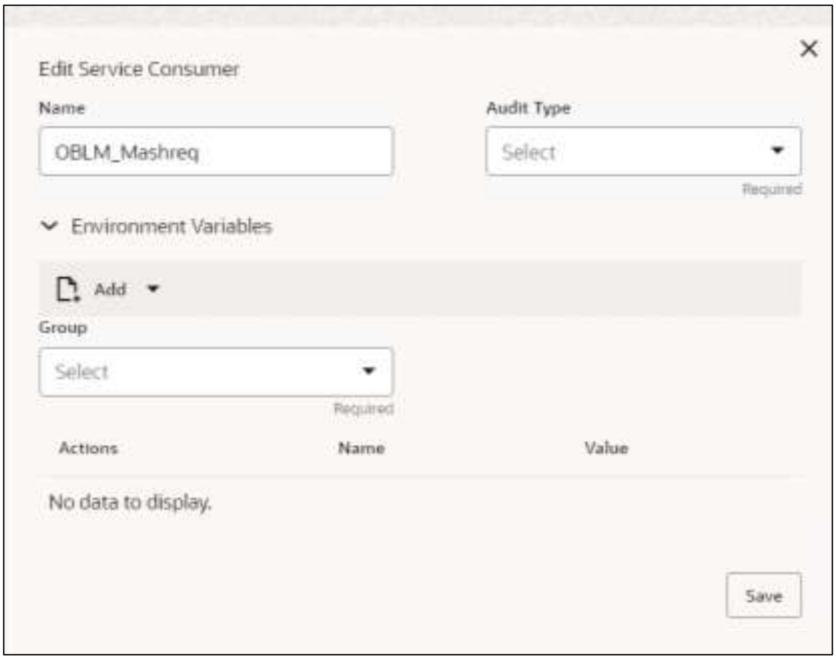


4.18.1.4 Edit

User can modify the consumer details.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **Edit**.

Figure 249: Edit



4.18.1.5 Delete

User can delete the consumer.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **Delete**.

Figure 250: Delete

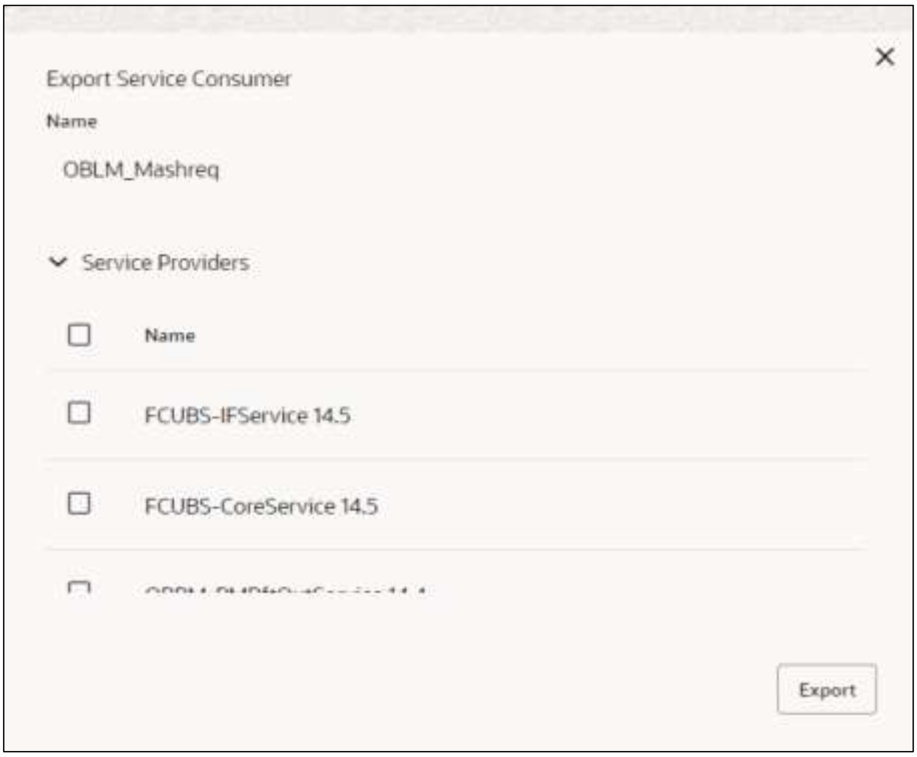
4.18.1.6 JSON Export

User can export the consumer configuration as JSON file.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **Export**.

and then, Click **JSON**.

Figure 251: JSON Export



NOTE: You have an option to select service providers from the list that needs to be exported or can click on Select All option for all service providers.

JSON Export feature will export 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

4.18.1.7 SQL Export

User can export the consumer configuration as SQL file.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **Export**.

and then, click **SQL**.

Figure 252: SQL Export

NOTE: SQL Export feature will export entire configuration without Host, Port and Authentication Password details.

4.18.2 Service Providers

Service Providers are the product processors configure to process request send by oracle banking routing hub on behalf of service consumers. Service Provider comprises of destination integration details.

1. On **Homescreen**, click **Core Maintenance,** under **Core Maintenance**, click **Routing Hub**.
2. Under **Routing Hub**, click **Service Consumers**, under **Service Consumers**, click **Service Providers**.

→ The **Service Providers** screen displays.

Figure 253: Service Providers

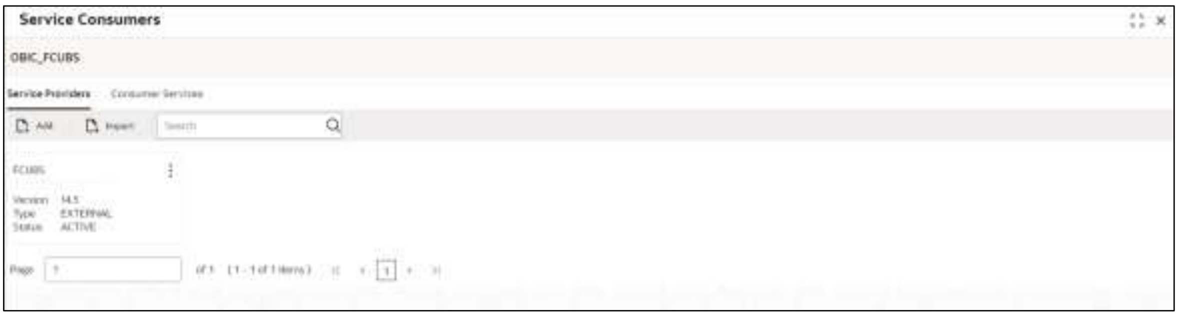


Figure 254: Service Providers

Table 223: Service Providers

Component Name	Component Type	Condition	Comments
<Service Consumer>	Button		Navigates back to Service Consumers
Add	Button		Pops up add dialog
Import	Button		Pops up import dialog
Search	Combo Box One		Provides search functionality with case insensitive (Service Provider Name)
Navigation: **Service Providers -> 3 dot icon (operation menu)**			
View	menu option	Non-editable	Pops up view dialog
Edit	menu option		Pops up edit dialog
Delete	menu option		
Export	menu option		Exports in JSON
Request Audit	menu option		Pops up request audit log

4.18.2.1 Add

User can create service provider manually.

On **Service Providers** screen, click **Add** to create service providers.

Figure 255: Add

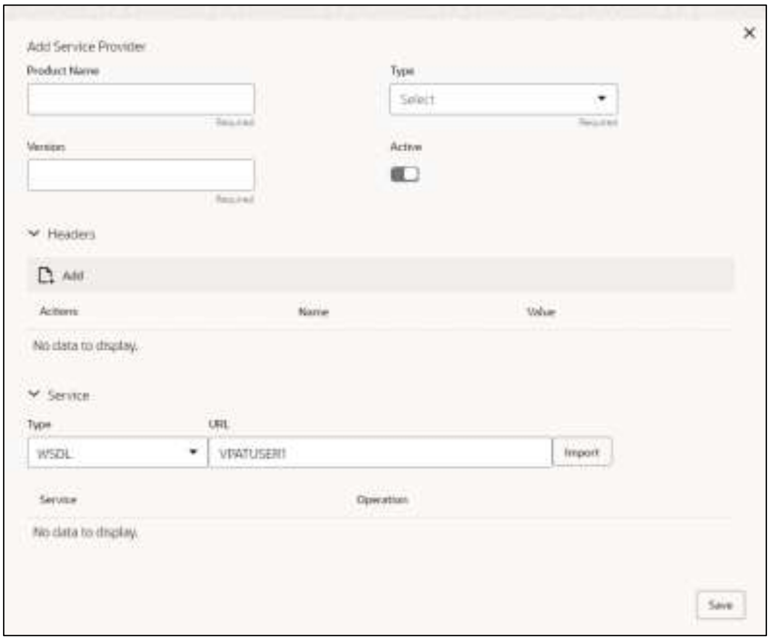


Table 224: Add

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Product Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255. • No numeric value at beginning and no space allowed.	Unique provider name
Type	**Combo Box One**	**Yes**			**Predefined Values: INTERNAL / EXTERNAL**

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Version	Text Box	Yes	Number	• Version cannot be blank • Specify 0 or more characters, up to a maximum of 255. • Specify only numeric or decimal values.	Unique provider version
Active	Switch				Predefined Values: ACTIVE / INACTIVE If provider is marked as inactive, then all related routes will be stopped.
Headers	Collapsible Header & Content				Provider specific headers
Service	Collapsible Header & Content				Provider specific service details
Save	Button				Saves the Service Provider

4.18.2.2 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.

These headers can be configured in oracle banking routing hub using the steps given below.

Figure 256: Headers

Figure 257: Headers

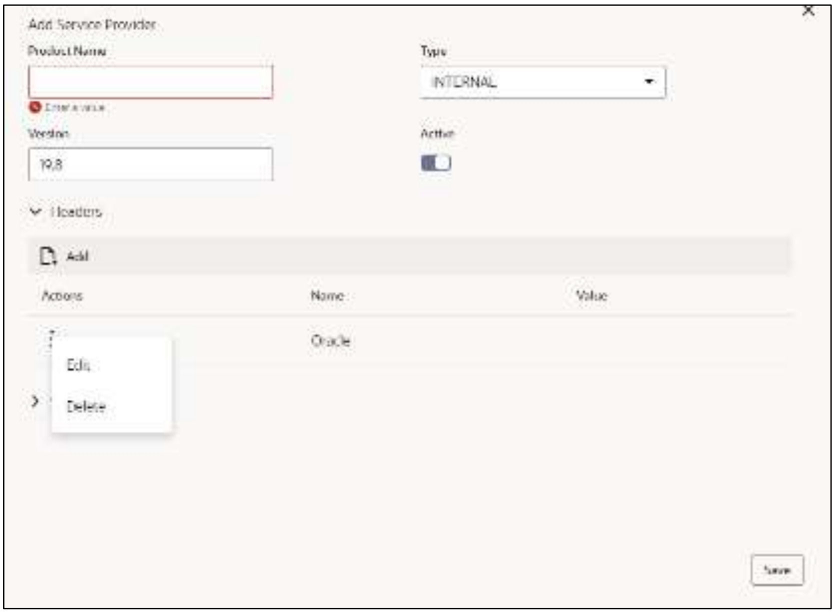


Table 225: Headers

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Add	Button				Pops up add dialog
Edit	menu option				Pops up edit dialog

Component Name	Component Type	Is Mandatory	Data type	Validation	Comments
Delete	menu option				Deletes header
Navigation: **Service Providers -> Headers -> Add**					
Name	Text Box	Yes	Alphanumeric with special characters	• Name cannot be blank • Specify 0 or more characters, up to a maximum of 255. • No numeric value at beginning and no space allowed.	
Value	Text Area	Yes	Alphanumeric with special characters	• Value cannot be blank • Specify 0 or more characters, up to a maximum of 255. • No space allowed.	Value either can be hardcoded or can be Velocity mapping.
OK	Button				Saves the header details and displays it in the list

4.18.2.3 Service

Figure 258: Service

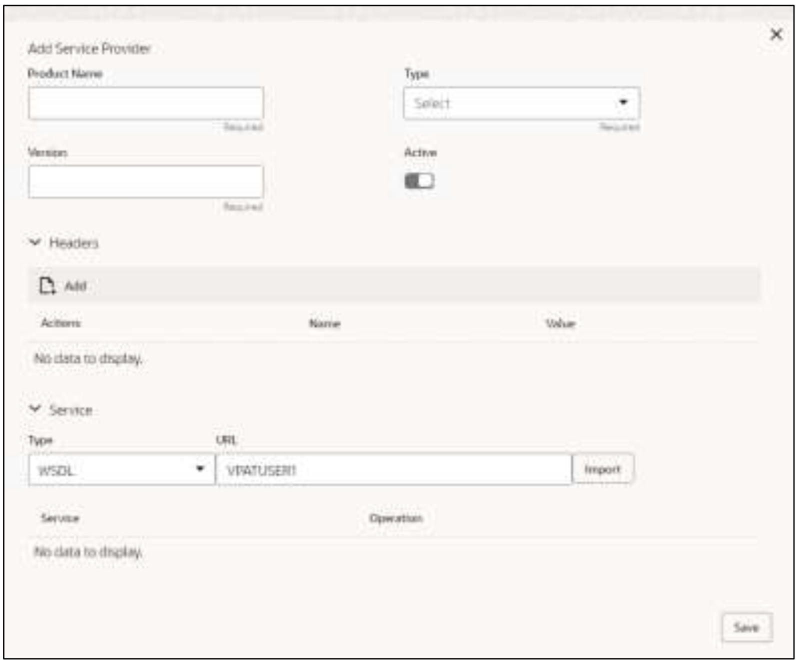


Table 226: Service

Component Name	Component Type	Is Mandatory	Comments
Type	Combo Box One	Yes	Predefined Values: WSDL / SWAGGER
URL	Text Box	Yes	Service URL of the file location
Gateway Prefix	Text Box		Gateway Prefix is context path of below formatted URL http://host:port/gateway-prefix/endpoint
Import	Button		Extracts the service information from URL and displays it in the Service list

4.18.2.4 WSDL

The Web Services Description Language (WSDL) is an XML-based interface description language that is used for describing the functionality offered by a web service.
Currently, non-SSL WSDL URL is only supported.

NOTE: In case there is a change in wsdl file, then same wsdl file need to be imported again in order to update the provided service information in routing hub.

4.18.2.5 SWAGGER

Swagger is an Interface Description Language for describing RESTful APIs expressed using JSON. Currently, Swagger 2.0 & Open API 3.0 both are supported.

NOTE: In case there is a change in swagger file, then same swagger file need to be imported again in order to update the provided service information in routing hub.

4.18.2.6 Import

User can create a service provider by importing the JSON file.

On **Service Providers** screen, click **Import.**

Figure 259: Import

Table 227: Import

Component Name	Component Type	Is Mandatory	Validation	Condition	Comments
File	File picker	Yes	Allows only to select one file	Accepts only JSON file	Pops up file selection dialog box
Import	Button				Imports Service Provider

NOTE: Below data needs to be changed after importing provider configuration file:

- Implementation Host and Port
- Implementation Authentication Password

4.18.2.7 View

User can view provider details and can switch to edit form by clicking on edit icon.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **View.**

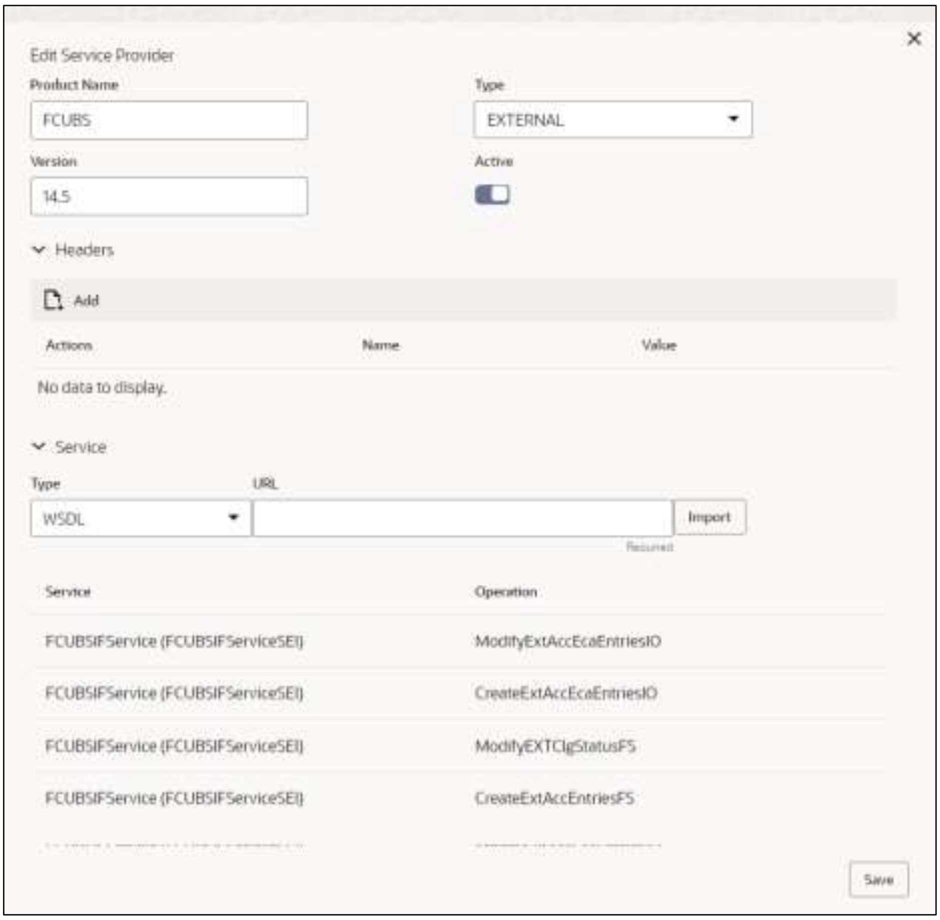
Figure 260: Oracle Banking Routing Hub Configuration

4.18.2.8 Edit

User can modify the provider details.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **Edit.**

Figure 261: Edit



4.18.2.9 Delete

User can delete the provider.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **Delete.**

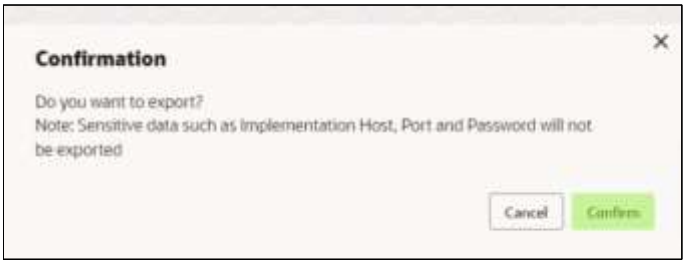
Figure 262: Delete

4.18.2.10 Export

User can export the provider configuration as JSON file.

On **Service Providers** screen, click **Operation Menu (3-dot icon),** and click **Export.**

Figure 263: Export



NOTE: Below data is not 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

4.18.3 Oracle FLEXCUBE Onboarding to Decision Service Configuration

4.18.3.1 Fetch Credit Decision

Figure 264: Fetch credit decision – Header

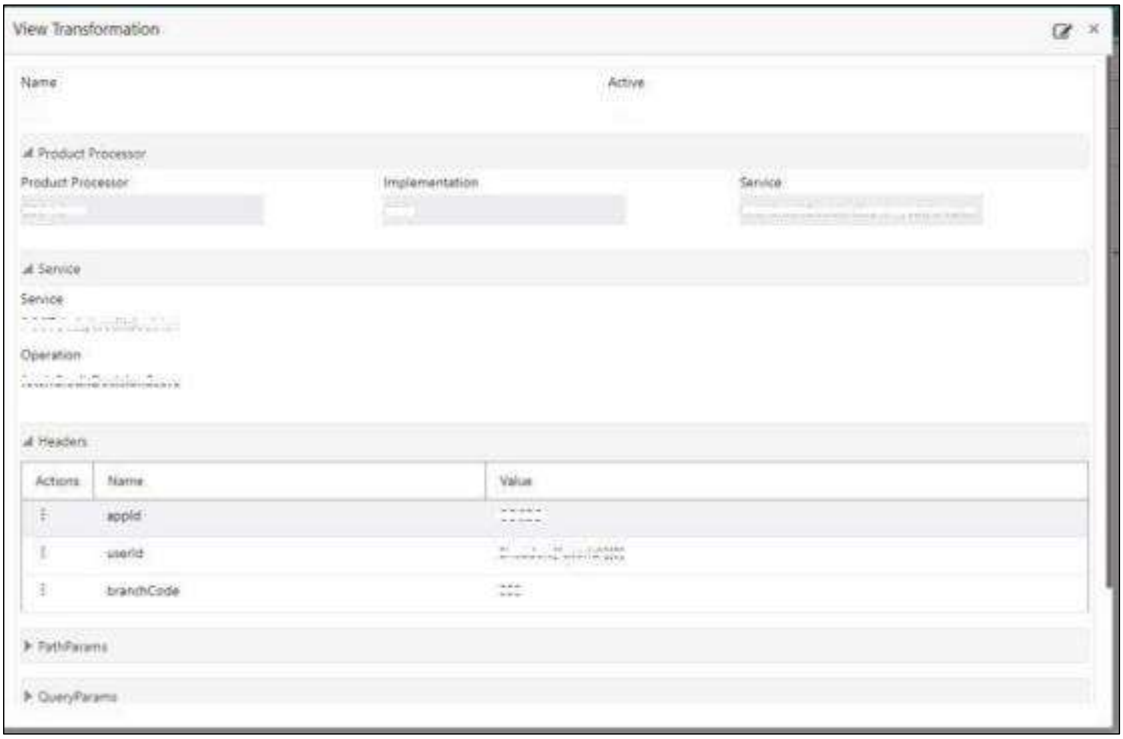


Figure 265: Fetch credit decision - Transformation:

Figure 266: Consumer Services

5 NLP Framework

This section of the user guide is designed to help you quickly get acquainted with the Machine Learning, Natural Language Processing (NLP) framework.

Pre-requisites

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

This section contains the following topics:

- 5.1 Toolkit
- 5.1.5 Operation
- 5.3 3P Service Integration

5.1 Toolkit

The Toolkit is used to design and train NLP/Named Entity Recognition (NER) Model(s).

This section contains following subsections:

- 5.1.1 Use Case Definition
  - 5.1.1.1 Use Case Definition Summary
  - 5.1.1.2 Use Case Definition Maintenance
- 5.1.2 Annotator
- 5.1.2.1 Model Training
- 5.1.4 Model Management
  - 5.1.4.1 Model Management Summary
  - 5.1.4.2 Model Management Maintenance
- 5.1.5 Model Import and Export Maintenance
  - 5.1.5.1 Export Model
  - 5.1.5.2 Import Model

5.1.1 Use Case Definition

Use cases are defined by the business domain. The information that is required to be extracted from documents are driven by business consideration against the context of the use case being defined.

Tags/entities are required for annotating or tagging of information in the source document in order to create training files for a use case model training. These tags or entities will always be driven by business considerations for a particular use 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.

5.1.1.1 Use Case Definition Summary

The summary screen displays the list of defined use cases. To process this screen, perform the following steps:

1. From **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **NLP Toolkit**.
2. Under **NLP Toolkit**, click **Use Case Definition**.

→ The **Use Case Definition** screen is displayed.

Figure 267: Use Case Definition

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

Table 228: Use Case Definition – Field Description

Field	Description
Usecase Name	Displays the name of the use case
Mod No	Displays the modification number
Authorized Status	Displays the Authorized or Unauthorized or Rejected status
Record Status	Displays the status of the record.
Modification Number	Displays the number of modification performed on the record.

5.1.1.2 Use Case Definition Maintenance

The maintenance screen allows you to define use cases and maintain entities/tags for the use case.

Figure 268: Use Case Definition Maintenance

On **Tag Maintenance** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

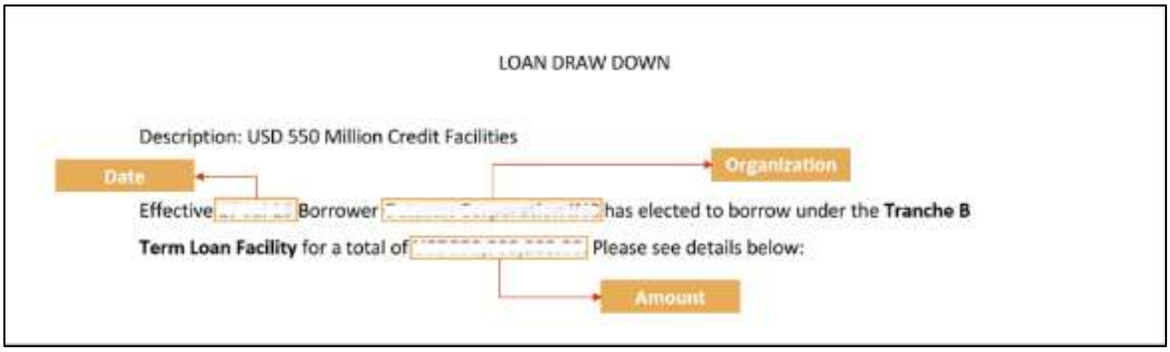
Table 229: Tag Maintenance – Field Description

Field	Description
Use Case Name	Unique use case name. It gets populated on Save, from the last folder name from the "Training Corpus Path (DOC)"
Description	Use Case Description
Mod No	Automatic Modification Number
Straight Through Processing	yes = Unattended / No = Attended
Use Case Tags/Entities	Specifies the use case tags entities.
Tag Display Sequence	The sequence in which the tags get displayed.
Tag Screen Display	Business Name of the Tag
Tag Name	Technical Name of the Tag
Annotation Tag	To identify tags to be used in Training
Default Value	Default value for tags not used for training

5.1.2 Annotator

Annotation is the process of identifying information within a document content and tagging them as a specific type of information. Of course, each use case defined, will have their own relevant maintained list of tags/entities, which will be used to annotate source documents for a use case.

Figure 269: Annotator

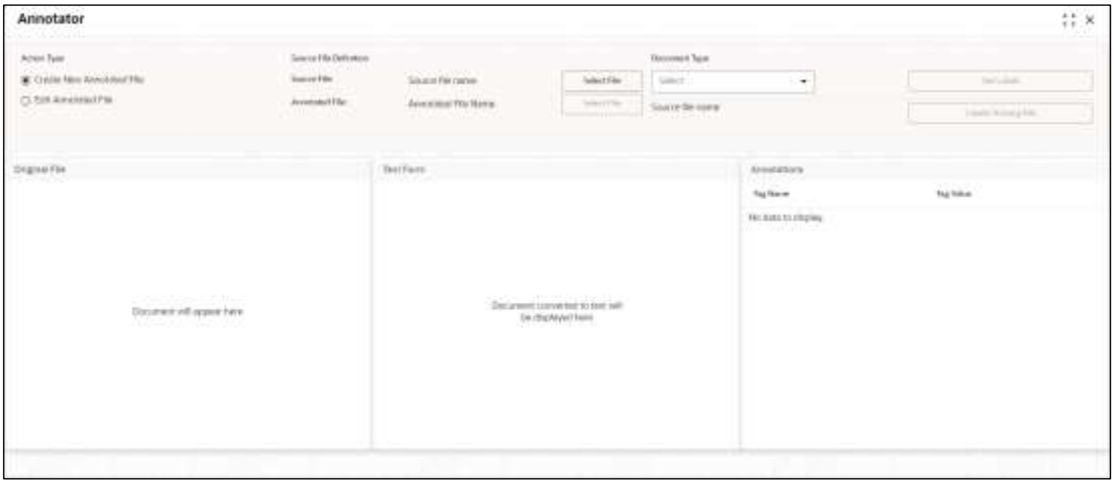


Annotator helps you to perform the annotations on a source document for a use case. To process this screen, perform the following steps:

1. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **NLP Toolkit**.
2. Under **NLP Toolkit**, click **Annotator**.

→ The **Annotator** screen is displayed.

Figure 270: Annotator



3. On **Annotator** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

Table 230: Annotator – Field Description

Field	Description
Action Type	Select the action type. 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**.
Document Type	Displays the list of all the use cases defined under the use case definition.
Get Labels	For the selected Document Type, the maintained Tags/entities are displayed in the Annotations section.
Create Annotated File	Once annotations of all the Tags are completed, this will perform two outcomes, • 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

Follow the below mentioned steps to annotate the source files:

4. Select the Action Type as **Create New Annotated File**.
5. Select the **Document Type** from the dropdown 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.

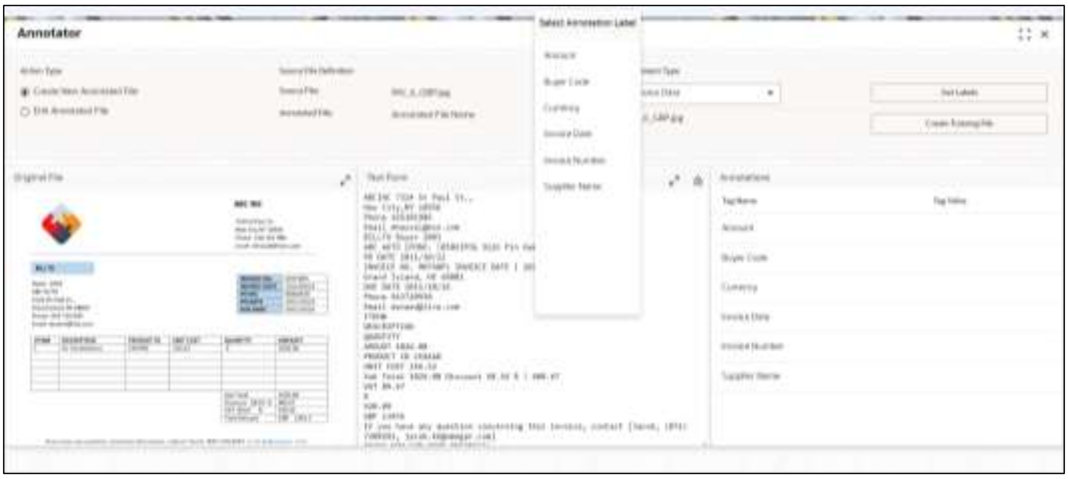
   The **Original File** section displays the source document and the **Text Form** section displays the text version of the document.
8. Click **Get Labels**.

   The **Annotations** section displays all the maintained tags for the selected Document Type.

Figure 271: List of Tags

9. Identify and select the information within the **Text Form** section.
10. Right-click to display the list of tags.

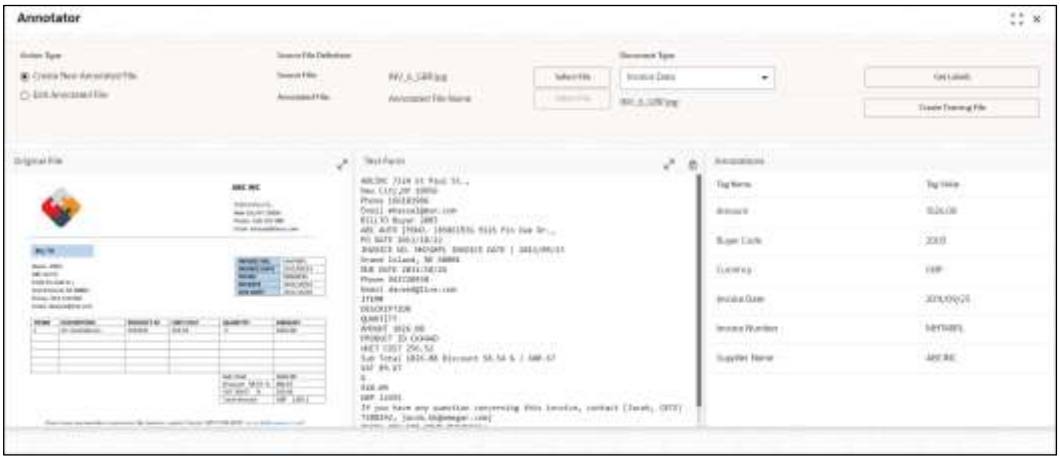
Figure 272: Select Annotation Label



11. Select the relevant tag.

    The **Annotations** section displays the information under Tag Name and Tag Value.

Figure 273: Annotations



12. Repeat steps (9) to (11) 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 with the relevant information, click **Create Training File** to create the annotated file and end the process.

5.1.2.1 Edit Annotated File

The edit annotated file is a feature added Annotator screen to edit the annotations for the already created training files.

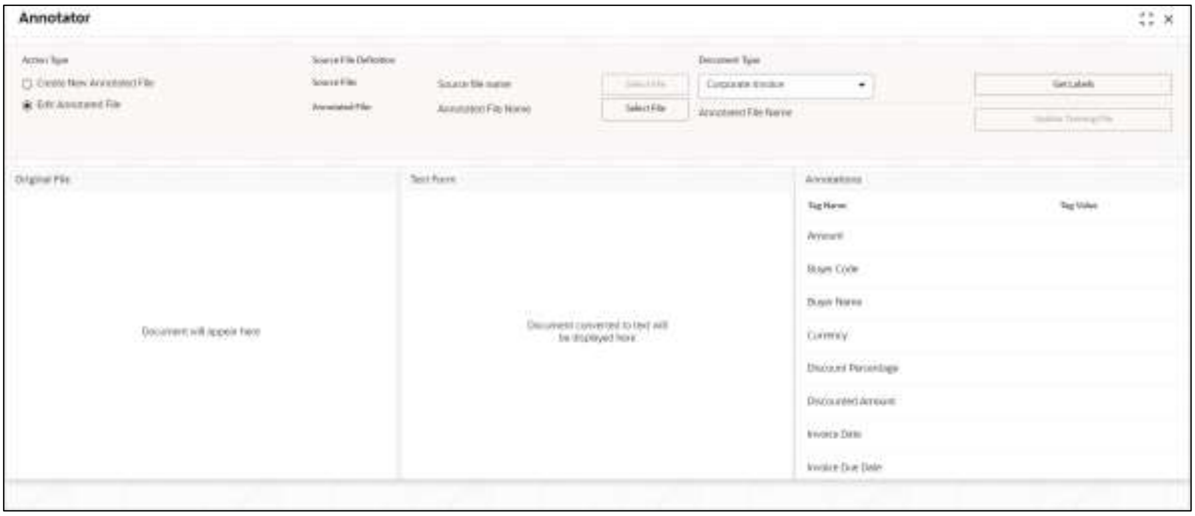
1. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **NLP Toolkit**.
2. Under **NLP Toolkit**, click **Annotator**.
3. Select the Action Type as **Edit Annotated File**.

   → The **Annotator** screen is displayed.

   Figure 274: Annotator

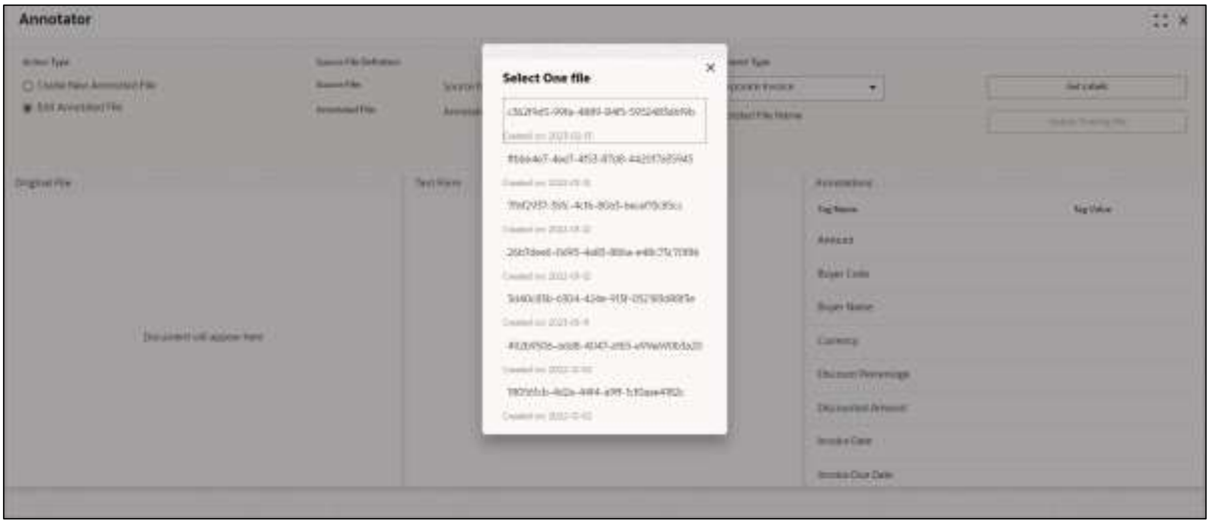
4. Select the **Document type** from the drop down and click **Get labels.**
   The **Annotations** section displays all the maintained tags for the selected Document Type.

   Figure 275: Get Labels



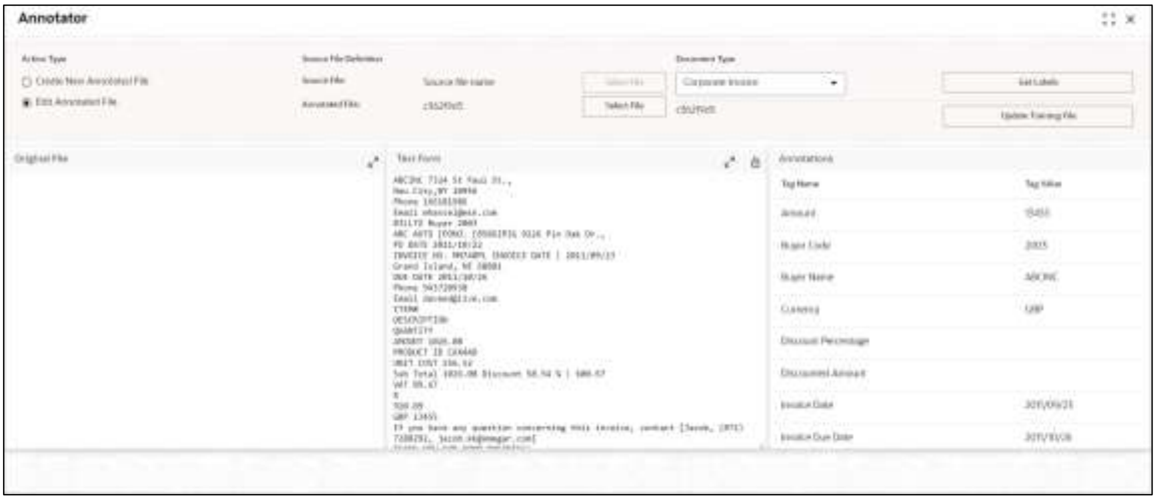
5. Click on **Select file** at **Annotated File Name**. Popup window will open with list of files.

   Figure 276: List of Files



6. Select any file, and it will be displayed on the screen.

Figure 277: Text Form Preview



7. Identify and edit the information within the Text Form section.

Figure 278: Modified Text Form

8. Once all modifications have been completed, click Update Training File to save the existing annotated file and finish the process.

5.1.3 Model Training

Model training is done on the annotated 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 will have its own training corpus available in the path set up in the use case definition. To process this screen, perform the following steps:

1. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **NLP Toolkit**.
2. Under **NLP Toolkit**, click **Model Training**.

   → The **Model Training** screen is displayed.

   Figure 279: Model Training

Training NER Models:

3. Select the Model Type as NLP(NER).
4. Choose the use case name.
5. Click **Train Model**.

Each model for a use case is identified by a unique run reference.

Training Document Classifier Model:

6. Select the Model Type as Document Classification.
7. Click **Train Model**.

If you find the model parameters acceptable, you may want to save the model by clicking **Model Save**.

The alternative is to add more annotated training files for the use case and repeat model training, till satisfactory parameters are achieved.

5.1.4 Model Management

All the run reference of models saved from model training for a use case can be seen here. For each model run reference, you can view the parameters for the model as well as individual tag/entities

You may choose the active model run reference to be used as part of business processing.

This section contains following subsections:

- 5.1.4.1 Model Management Summary
- 5.1.4.2 Model Management Maintenance

5.1.4.1 Model Management Summary

The summary screen displays the list of use case models. To process this screen, perform the following steps:

1. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **NLP Toolkit**.
2. Under **NLP Toolkit**, click **Model Management**.

→ The **Model Management** screen is displayed.

Figure 280: Model Management Summary

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

Table 231: Model Management Summary – Field Description

Field	Description
Use Case Name	Displays the name of the Use Case.
Mod No	Displays the number of modifications.
Authorized Status	Displays the status as Authorized or Unauthorized or Rejected.
Record Status	Displays the record status as Open or Closed.
Modification Number	Displays the number of modification performed on the record.

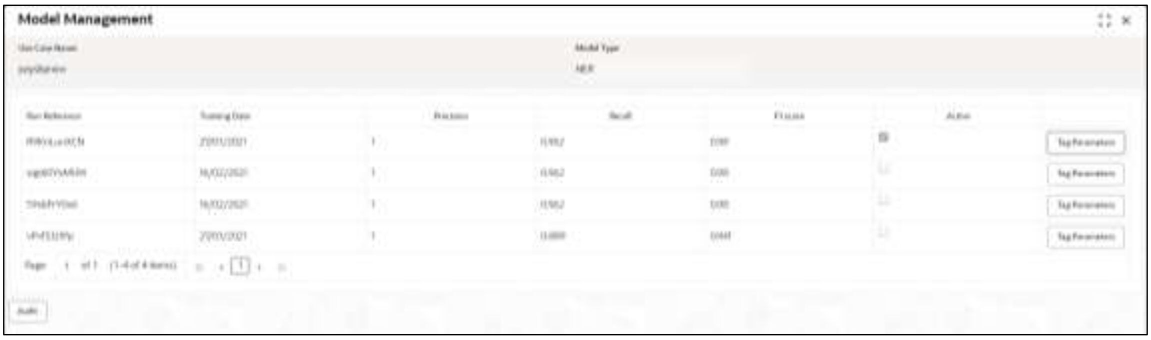
5.1.4.2 Model Management Maintenance

This is where you may unlock and choose the active model run reference to be used as part of business processing. To process this screen, perform the following steps:

1. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **NLP Toolkit**.
2. Under **NLP Toolkit**, click **Model Management**.

   → The **Model Management** screen is displayed.

   Figure 281: Model Management Maintenance



3. On **Model Management** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 232: Model Management Maintenance – 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	Unique Model Version Identifier.
Precision	Value between 0 to 1. Closer to 1 is better.
Recall	Value between 0 to 1. Closer to 1 is better.
F1 Score	Value between 0 to 1. Closer to 1 is better.
Active	The model run reference that is currently active.

For each model run reference you could view the individual tag parameters.

Figure 282: Tag Parameters

At this stage you 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.

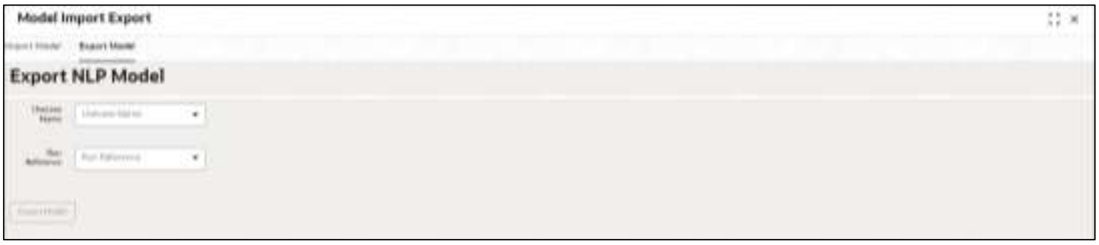
5.1.5 Model Import and Export Maintenance

Models can be moved from one environment to another environment using Model import and export. Using this functionality models can be trained in one environment and be used in another**.** To process this screen, perform the following steps:

1. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **NLP Toolkit**.
2. Under **NLP Toolkit**, click **Model Import Export**

→ The **Model Import Export** screen is displayed.

Figure 283: Model Import Export

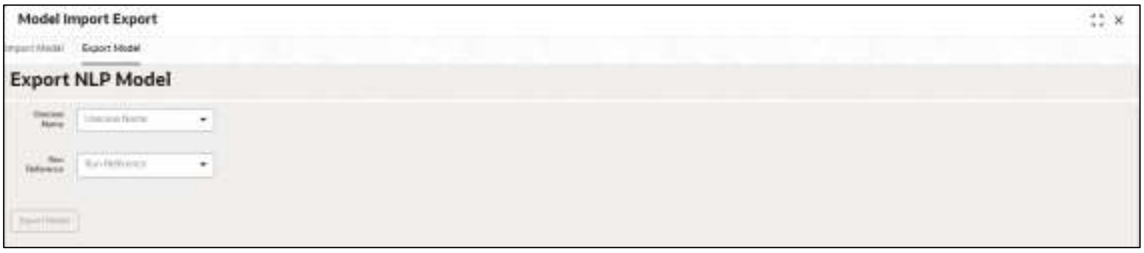


5.1.5.1 Export Model

Use Export Model option on the screen for exporting a model. Model will be exported to a file. Use following steps for process:

1. Select the **Export Model** section and the required **Usecase** and **Run Reference** on the **Model Import Export** screen.

   Figure 284: Export Model



2. Click on the **Export Model** button and Model file will be downloaded.
   Please note down the Model Import Code as it is required while importing model.

Figure 285: Export Model with Model Import Code

5.1.5.2 Import Model

Use Import Model option on the screen for importing a model. Model will be imported using model file created while exporting model. Use following steps for process.

1. On the **Model Import Export** screen select the **Import Model** section.

Figure 286: Import Model

2. Click on **Drag and Drop** option and select the export model to be uploaded.
3. Specify the **Model Import code**.
4. Click **Import Model** button to successfully upload the model.

Figure 287: Import Model Successful

5.2 Operation

This is where the trained models are consumed for business processing.

This section contains following subsections:

- 5.2.1 Document Upload
- 5.2.2 Transaction Log

5.2.1 Document Upload

This is the screen where you upload the source document which is consumed by the NLP model and defined tags/entities are recognized.

The information that is extracted by the model is seamlessly used in further business processing. To process this screen, perform the following steps:

5. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **Operation**.
6. Under **Operation**, click **Document Upload**.

→ The **Document Upload** screen is displayed.

Figure 288: Document Upload

7. Click **Select File** to select the source document.
8. Chose the Document Type from the pick list.
9. Click **Upload** to initiate business process.

5.2.2 Transaction Log

This is the screen where you can see all the uploaded transactions that has been interpreted by the NLP models.

You can filter the displayed transactions based on the following:

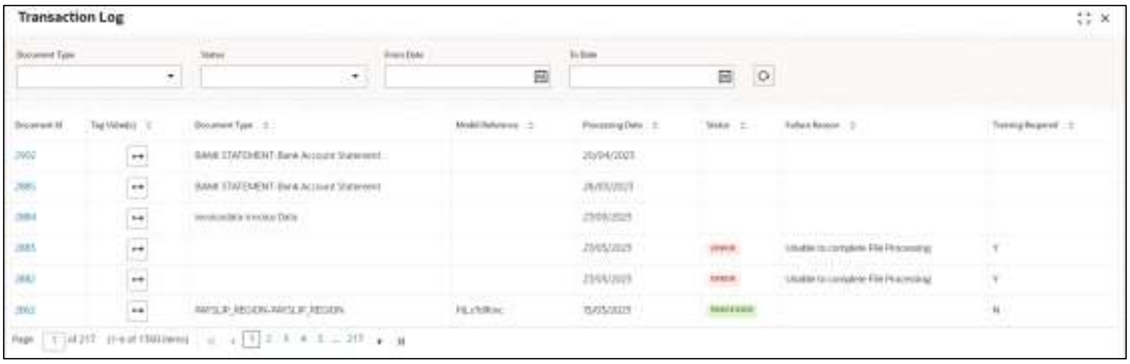
- Document Type
- Status

To process this screen, perform the following steps:

1. From **Home** screen, click **Machine Learning.** Under **Machine Learning**, click **Operation**.
2. Under **Operation**, click **Transaction Log**.

→ The **Transaction Log** screen is displayed.

Figure 289: Transaction Log



3. On **Transaction Log** screen, specify the fields. For more information on fields, refer to the field description table below.

Table 233: Transaction Log – Field Description

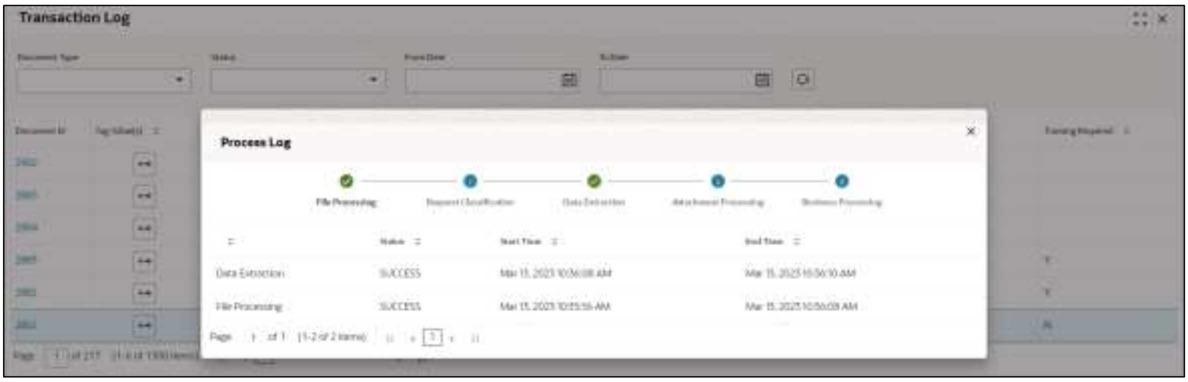
Field	Description
Document Type	Select the document type.
Status	Select the status.
Document Id	Displays the Document Management System Unique Identifier.
Document Type	Displays the document type - Use Case Definition.
Model Ref	Displays the Unique Model Version Identifier.
Processing Date	Displays the document processed date.
Status	Displays the status of the transaction.

Field	Description
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.

Execution Flow

Click on document reference ID to view details and execution flow.

Figure 290: Execution Flow



Processed Status

For any Document Type, you can filter on the 'Processed' status and view the model tag values used to process the transactions. The displayed information reflects both the original retrieved values by the model from the document and also the values which have been corrected by human intervention.

Figure 291: Processed Status

Error Status

For any Document Type, you can filter on the 'Error' status and view all the failed transactions.

Figure 292: Error Status

For the failed transactions, you can 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.

Figure 293: Annotator

5.3 3P Service Integration

Any model execution or training service(s) built using any 3P NLP library can be integrated in the NLP framework.

The only requirement being the REST services must confirm to the payload definition detailed in the following section.

Building model training and execution services using other 3P NLP libraries would involve consulting effort.

This section contains the following topics:

5.3.1 Classification Training Service

This section elaborates the payload details for document classification model training service.

Input Payload

Table 234: 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"
```

5.3.2 NER Training Service

This section elaborates the payload details for NER model training service.

Input Payload

Table 235: 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 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"

ModelFoldPerfromancesDTO:
 type: object
 properties:
  fold_no:
   type: number
  eval_metric:
   type: string
  value:
   type: number

MltbTagPerfomancesDTO:
 type: object
 properties:
  name:
   type: string
  precision:
   type: number
  recall:
   type: number
  f1score:
   type: number
```

5.3.3 Classification Processing Service

This section elaborates the payload details for document classification model processing service.

Input Payload:

Table 236: 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
```

5.3.4 NER Processing Service

This section elaborates the payload details for NER model processing service

Input Payload:

Table 237: 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:


```
MltbNerKeyValsDTO:
 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

5.3.5 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 table CMC_TM_ML_SERVICE_DEFN with the new service API.

Table 238: 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
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 239: 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>	

5.3.6 Business Service Mapping

If straight through processing is enabled in use case definition, then 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 240: For 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 will be called for Business service execution	
HEADERS	Comma separated headers key value separated by colon (:)	Eg : docId:123 , branchCode : 000	
METHOD_TYPE	Method Type	POST	
APP_ID	Sub Domain ID	NULL	
RECORD_STAT	Record Status	O	

Column name	Description	Remarks for Data
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 you are Integrating Business Service via Oracle Banking Routing Hub then in service definition column, you 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, uderId) and to avoid the conflict for these headers, the ML_ prefix is appended in header keys by Oracle Banking Routing Hub adaptor. You need to configure transformation logic of these headers in Oracle Banking Routing Hub.

6 Machine Learning Framework

This section is designed to help you quickly get acquainted with how to on-board business cases on the Machine Learning framework in Oracle Banking.

The assets used to build the Machine Learning framework is available by default with Oracle database.

Oracle Database 19c and above.

Prerequisites

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

Make sure that Machine Learning framework is already deployed and available as part of the application menu. Refer to **Common Core Services Installation Guide** for more details.

6.1 Use Case On-Boarding

On-boarding a new business case onto the Machine Learning framework involves two broad stages as highlighted below.

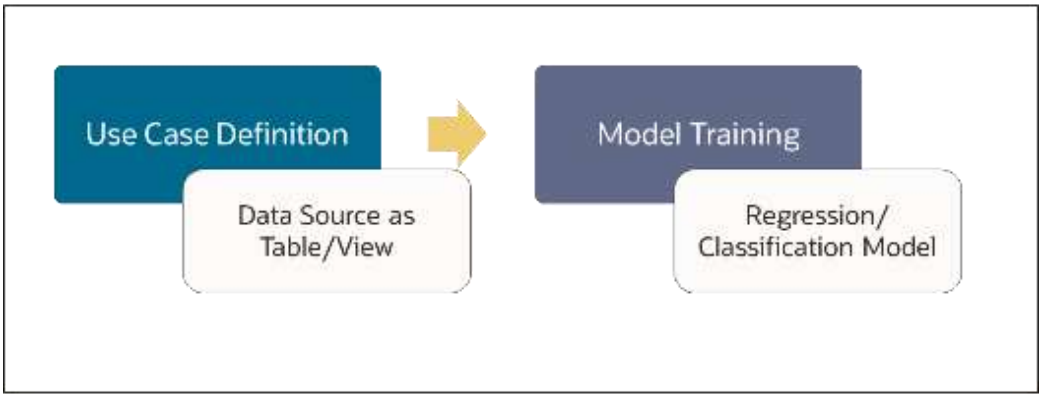
Model Definition

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.



6.2 Frameworks Supported

6.2.1 Timeseries

Timeseries are the use cases involving the date sequence data to forecast for future dates.

Example:

CASE ID	CCY	BALANCE
17-Aug	USD	6723.00
18-Aug	USD	250.00
19-Aug	USD	2654.00
20-Aug	USD	20.00
21-Aug	USD	?

NOTE: CASE ID can either be a DATE or a Sequence

6.2.2 Timeseries Algorithms Supported

By default, the framework uses Exponential Smoothing to forecast from timeseries data. It evaluates 14 different algorithmic combinations to best fit the patterns of

- Error type (additive or multiplicative),
- Trend (additive, multiplicative, or none), including damped trends
- and Seasonality (additive, multiplicative, or none)

NOTE: User is not required to select any algorithmic combinations. The framework evaluates and selects the best fit combination for you.

6.2.3 Regression

Regression is a statistical technique to discover relationships using independent variables to estimate/predict a target variable of NUMBER or INTEGER type.

Example: User needs to predict the value of LUXURY SPEND for a new CASE ID, given the data of branch, marital status, income and savings

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: CASE ID MUST uniquely identify a row

6.2.4 Regression Algorithms Supported

The following algorithm are available as part of the framework.

S No	ALGORITHM	REMARKS
1	GENRALIZED LINEAR REGRESSION	Also handles RIDGE regression depending on the underlying pattern of data
2	SUPPORT VECTOR MACHINES	Supports both linear and gaussian kernels
3	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.

6.2.5 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.

Example: 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

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 uniquely identify a row

6.2.6 Classification Algorithms Supported

The following algorithms are available as part of the framework.

S No	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.

6.3 Partitioned Model

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 you to easily build and manage models tailored to independent slices of data.

Example:

CUSTOMER 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	GRF	N	16567	20	2500

In this above example of data, 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.

6.4 On-Boarding Use Case

6.4.1 Model Definition

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.

The model definition screen allows you to define the use case and configure the data source to be used for model training.

6.4.1.1 Model Definition Summary

The summary screen displays the list of defined use cases. To access the screen, perform the following steps:

1. From **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **Model Definition**.

   → The **Model Definition Summary** screen is displayed.

Figure 294: Model Definition Summary

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

Table 241: Model Definition Summary – Field Description

Field	Description
Usecase Name	Displays the name of the use case
Mod No	Displays the modification number
Correlation	Displays the default 'N' for new records. On correlation validation in Model definition screen, it will change to 'Y'.
Authorized Status	Displays the Authorized or Unauthorized or Rejected status.
Record Status	Displays the status of the record.
Modification Number	Displays the number of modifications performed on the

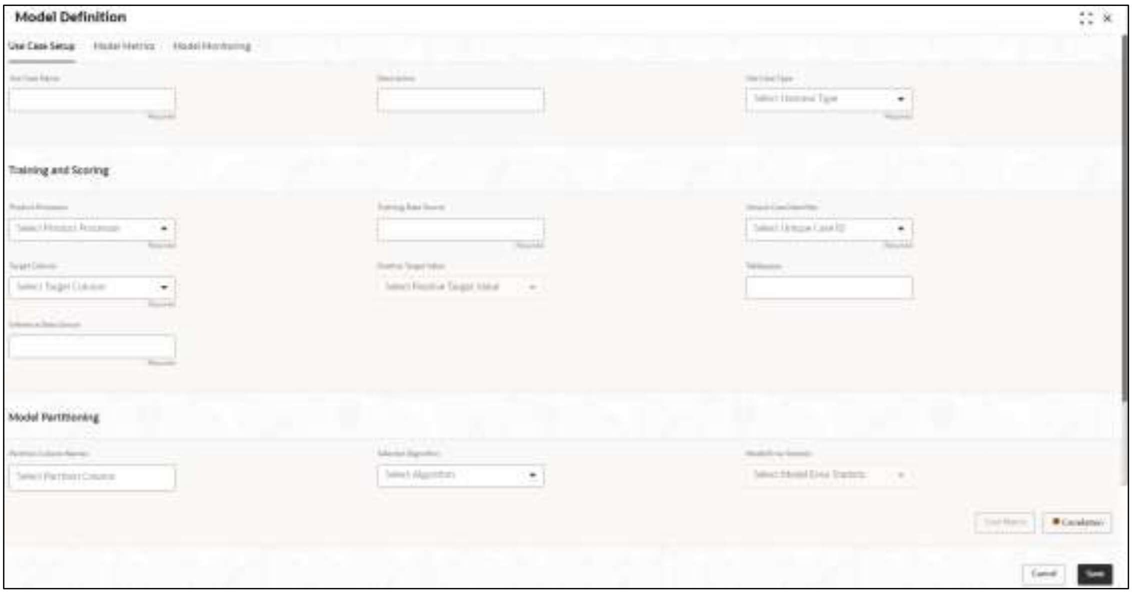
6.4.1.2 Model Definition Maintenance

Model Definition Maintenance screen enables the user to maintain the use case details and define the use case type and data source details.

1. From **Model Definition Summary** screen, click button on the Use case tile to **Unlock** or click to create the new model definition.

   → The **Model Definition Maintenance** screen is displayed.

   Figure 295: Model Definition Maintenance

2. On **Model Definition Maintenance** screen, specify the fields. The fields marked as Required are mandatory. For more information on fields, refer to the field description table below.

   Table 242: Model Definition Maintenance – 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 – Regression or classification from the drop down.
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.

Field	Description
Unique Case Identifier	Select the column name to uniquely identify a record. **NOTE:** Column name is a function of table/view design and has to have unique constraint defined
Target Column	Select the value of the column which is to be predicted by training the model. It has to have unique constraint defined **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
Inference Data Source	Specify the Table or View that capture the data to be used for making predictions. Inference data source will be the current data where we are trying to predict the target using the built model, unlike the training data where target is already provided.
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. This field should be null to 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’. It will be disabled for CLASSIFICATION

Cost Matrix:

This button is enabled ONLY for CLASSIFICATION type of use cases.

Any classification model can make two kinds of 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.

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.

3. Click **Cost Matrix** button to launch the screen.

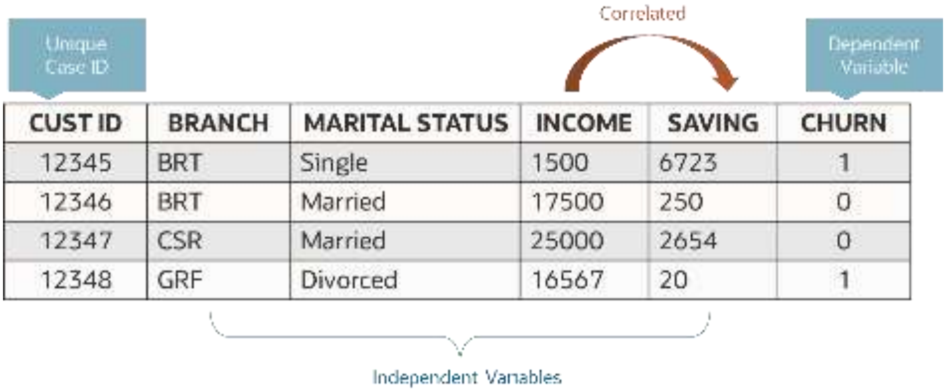
→ The **Cost Matrix** screen is displayed.

Figure 296: Cost Matrix

4. On **Cost Value** screen, specify the relevant penalty cost.
5. Click **Save** to save and close the **Cost Matrix** screen and back to the **Model Definition Maintenance** screen.

Correlation:

Multicollinearity occurs when two or more independent variables are highly correlated with one another in a model.



CUST ID	BRANCH	MARITAL STATUS	INCOME	SAVING	CHURN
12345	BRT	Single	1500	6723	1
12346	BRT	Married	17500	250	0
12347	CSR	Married	25000	2654	0
12348	GRF	Divorced	16567	20	1

Multicollinearity may not affect the accuracy of the model as much, but we might lose reliability in model interpretation

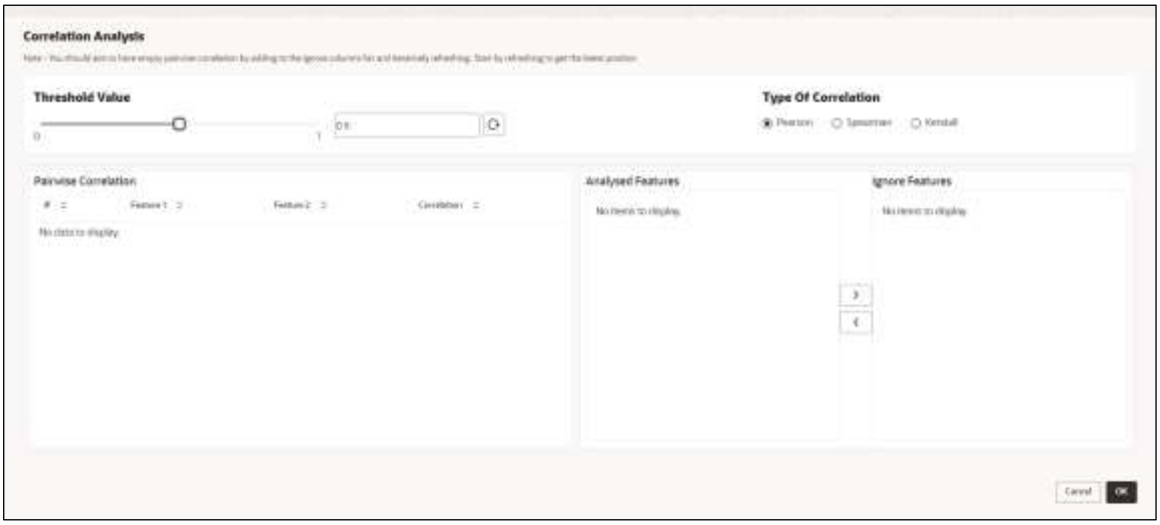
Irrespective of CLASSIFICATION or REGRESSION, all use cases must be evaluated for Correlation.

This button will display Orange mark if evaluation is pending.

6. Click **Correlation** button to launch the screen.

   → The **Correlation Analysis** screen is displayed.

   Figure 297: Correlation Analysis

7. On **Correlation Analysis** screen, select the required fields. For more information on fields, refer to the field description table below.

   Table 243: Correlation Analysis – Field Description

Field	Description
Threshold Value	Select the threshold value. By default, the value is set as 0.5. The Value can be set between 0.1 to 0.9.

Field	Description
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.

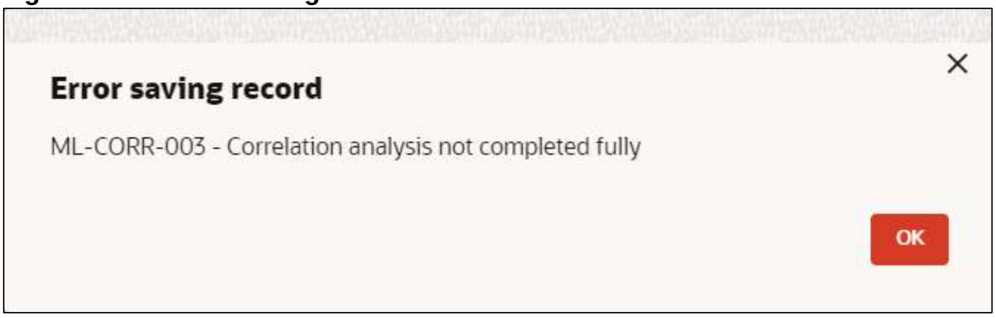
8. Click to initiate the evaluation process.

→ The **Correlation Analysis - Pairwise Correlation** screen is populated.

Figure 298: Correlation Analysis - Pairwise Correlation

9. Move ONE of the Analyzed Features to Ignore Features List
10. Click and re-evaluate Correlation as mentioned in Step 8.
11. Rinse & repeat Step 9 & 10 for each feature addition to the **Ignore feature** list, until **Pairwise Correlation** displays zero correlated pair.
12. Attempting to exit the screen midway without achieving zero Pairwise Correlation, will display the following error message.

Figure 299: Error Message



13. After successful **Correlation Evaluation**, the orange highlight on the **Correlation** button is removed.

14. After **Correlation Evaluation** and **Cost Matrix** definition (for CLASSIFICATION), click **Save** to create the new Model Definition. The user can view the configured details in the **Model Definition Summary**.

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** tab only after training the model successfully. Refer to **Model Training and Scoring** section for training the model.

15. Click **Model Metrices** tab to view the Model Metrices details.

→ The **Model Metrices** screen is displayed.

Figure 300: Model Metrices

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

Table 244: Model Metrices – Field Description

Field	Description
Model Partitions	Select the model partitions from the dropdown. 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.

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, Model Name Algorithm INF_TIME (Inference Time) <Model metric>(Train) <Model metric>(Test)
Value	Displays the value of the attribute.

6.4.2 Model Training and Scoring

Model Training and Scoring screen enables the user 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.

1. From **Home** screen, click **Machine Learning**. Under **Machine Learning**, click **Model Training and Scoring**.

   → The **Model Training and Scoring** screen is displayed.

   Figure 301: Model Training and Scoring

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

Table 245: Model Training and Scoring – Field Description

Field	Description
Use Case Name	Select the Use Case name from the dropdown.
Description	Displays the description of the use case.
Use Case Type	Displays the type of use case.
Model Training	
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 Batch Scoring	
Model Name	Displays the name of the model.
Inference Data Source	Displays the Inference data source.

2. Select the use case name from the dropdown.
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.

6.5 Online Single Record Prediction

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 explain ability of the model outcome is also made available.

6.6 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 246: Use Case Modifications

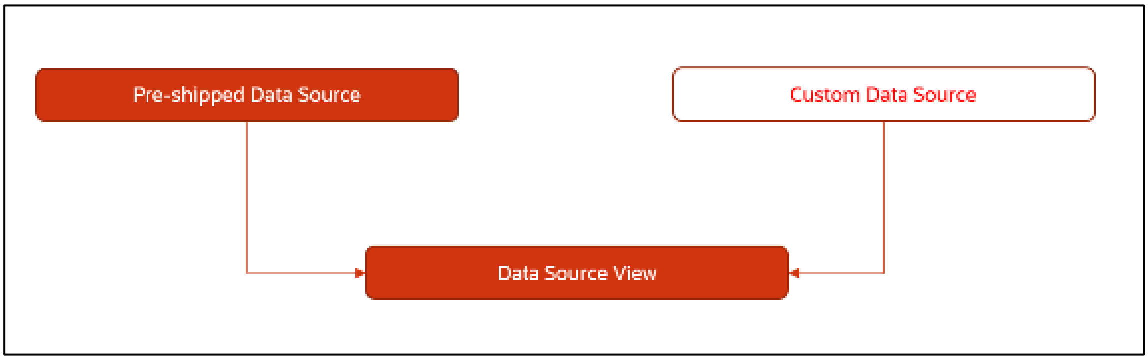
Use Case Modification	Model Re-training Required	Correlation Analysis Required
Data Source replaced by another data source	Yes	Yes

Use Case Modification	Model Re-training Required	Correlation Analysis Required
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

6.7 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 302: 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.

6.8 Model Explainability

The details of the Regression models built using the framework is made available under the ‘Model Metrices’ tab in Use Case Definition for better understanding and transparency.

The available details are

- 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

6.9 Time Series Forecast

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.

6.9.1 Forecast REST Service

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 247: 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. 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 tablespace and all model related data will be persisted in this table space

6.10 Model Monitoring and Auto Training

The underlying data on which a machine learning model is initially trained will eventually undergo changes in distribution over time. This shift in the data distribution away from the original distribution is referred to as data drift.

Not if, but when the underlying data drift is significant enough, the current model may lose its efficacy in predicting outcomes, onsetting model decay.

Monitoring of deployed models is required to detect data drift and trigger model re-build or re-training.

Regression and Classification use case types are eligible for setting up model monitoring.

Note: Model monitoring expects the presence of an existing trained model as a pre-requisite.

---

1. From **Home** screen, click **Machine Learning**. Under **Machine Learning**, Click **Model Definition,** Under **Model Definition**, click **Model Definition Summary.**
2. Click button on the Use case tile to **Unlock.**
3. Select **Model Monitoring** tab to view the **Model Definition** screen.

   → The **Model Monitoring** screen is displayed.

   Figure 303: Model Monitoring

4. This screen allows you to setup Model monitoring for the use case. For more information on fields, refer to the field description table below.

Table 248: Model Monitoring – Field Description

Field	Description
Run Date	Run date is the calendar date used with 'Run Frequency (Month)' to set up a recurring monitoring schedule. On the schedule date, model monitoring routine will analyze the underlying data to detect presence/absence of data drift and trigger model re-build. Permissible values: 1 – 31 and default is 15 **Note**: This field is mandatory
Run Frequency (Month)	Specify the run frequency in months. Example: if we want to schedule a run on 17th of every 6 months, then we set up Run Date: 17 Run Frequency (Month): 6 6 is the set default, the value. Minimum value is 1 **Note**: This field is mandatory
Historic Window (Days)	Historic window in days determine how far back should we consider, to define the window of data evaluation. Example: A value of 90 would mean a historic window from T-90 days to T Day, T being the system date. Default is set at 180. **Note**: This field is mandatory
Date Column	This field captures the date column in the data source which should be considered for determining the historic window. Keep it empty If the data source does not have a date column. In the absence of a date column in the data source, system will consider the entire available data available in the data source.

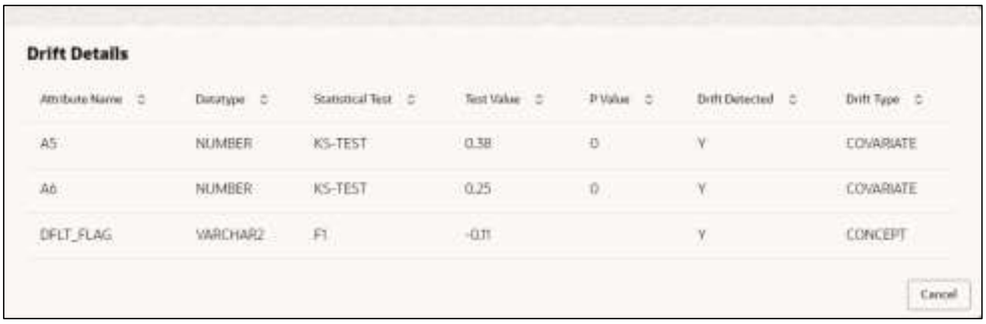
5. The following fields are populated for reference once the model monitoring routine is executed on the scheduled date.

Table 249: Model Evaluation – Field Description

Field	Description
Drift Reference	Displays the Unique Drift Reference ID, populated by the model monitoring routine initial run
Scheduled Date	Displays the scheduled date after the initial run of the model monitoring routine.
Drift	Initially it will be empty and will get populated once the model monitoring routine runs and determines the presence or absence of drift. Display value is Y or N.
Re-Training Required	Model monitoring routine determines the re-training requirement and populates Y or N values.
Re-Trained	Model monitoring routine populates the status of re-training with Y or N values.
Running Model	The model monitoring routine evaluates both the existing and the new model, it re-trained, to determine which model best fits the contemporary changed data. Final values are OLD, if existing model is retained or NEW, for revised re-trained model

6. Click on the  icon to view the **Drift Details**.
   The Drift Details button will be enabled only if drift is detected; otherwise, it will continue to be disabled.
   The model monitoring routine identifies the drift in the data distribution using statistical hypothesis tests. Drift is of two types - Concept drift for target and data drift for the data attributes. Concept drift decides if the current model is to be re-trained or not. If concept drift is detected, this screen displays the analysis and statistical test values for both the concept drift and data drift of the attributes that contribute to the model.

Figure 304: Drift Details



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

Table 250: Drift Details – Field Description

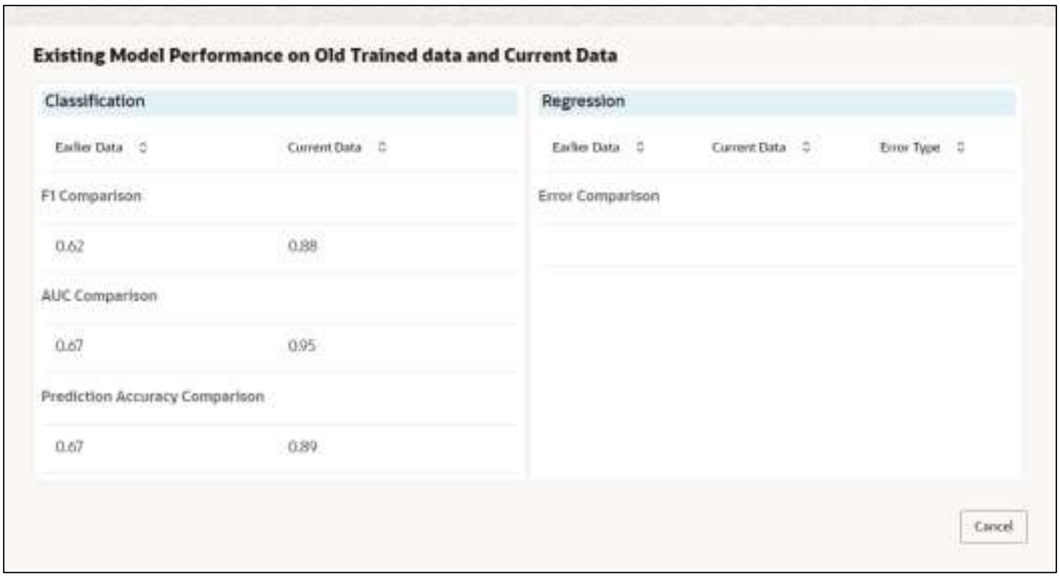
Field	Description
Attribute Name	Displays the attributes used in the model
Datatype	Displays the data type of the attribute.
Statistical Test	Displays the statistical tests results. The available options are: **F1** - concept drift **KS-TEST** - Numerical feature attributes **CHI-SQR** - categorical feature attributes
Test Value	Displays the numerical statistical test result
P Value	The P Value determines the statistical significance. Will be null for F1 statistical test.
Drift Detected	Indicates whether drift has been detected with a Y or N.
Drift Type	Displays either concept or covariate (data) drift type.

7. Select the relevant **drift reference** record.

   Click ⓘ from **Drift** header to view the comparative Model Performance Screen to understand how the decision of drift is arrived at.
   Existing model is used to predict on an earlier data sample and the current data sample. The results of both the prediction are captured and displayed.

   Classification models are compared on F1, AUC and Prediction accuracy while Regression, models are evaluated on prediction error.

Figure 305: Existing Model Performance on Old Trained data and Current Data



8. Select relevant **Drift reference** record.

   Click from **Running Model** header to view the comparative performance of the re-trained model vs current model, in order to understand how the system decided on which model best fit the current data distribution.

   Classification models are evaluated on F1, AUC and Prediction accuracy while Regression models, are evaluated on prediction error

Figure 306: Existing and New Model Metrics Comparison

7 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 section contains the following topics:

- 7.1 Facts
- 7.2 Rule

7.1 Facts

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 section contains the following topics:

- 7.1.1 Create Fact
- 7.1.3 View Fact

7.1.1 Create Fact

The **Create Fact** screen allows the user to create fact through single creation.

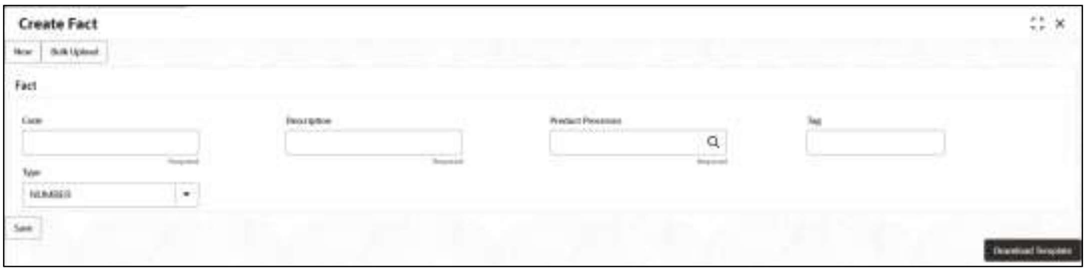
Prerequisite

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

1. From **Home** screen, Under **Fact**, click **Create Fact**.
2. Click **New** to create a single fact.

   → The Create Fact screen is displayed.

Figure 307: Create Fact



3. Specify the details in the relevant data fields.

The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below

Table 251: 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.
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.
5. Click **Bulk Upload** to create a multiple fact.

→ The **Create Fact- Bulk Upload** screen is displayed.

Figure 308: Create Fact – Bulk Upload

6. Click on **Download Template** to get the sample file.

FactsTemplate.csv

7. Fill all the Facts details to be created in the template file and save the file.
8. Click **Drag and Drop** and select the file from the browser.
9. Click **Upload.**

7.1.2 Create ENUM type Fact

The **Create Fact** screen allows the user to create ENUM type of fact.

Prerequisite

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

1. From **Home** screen, Under **Fact**, click **Create Fact.**
2. Click **New** to create a ENUM type fact.

   → The **Create Fact – ENUM Type Fact** screen is displayed.

Figure 309: Create Fact – ENUM Type Fact

3. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

Table 252: Create Fact - ENUM Type 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.
Type	Select the type of the fact as ENUM from the dropdown list.

4. Click on the icon to add the list of ENUM fact values.
5. Click on the icon to delete any of the list of ENUM fact values.
6. Click **Save** to save the details.

7.1.3 View Fact

The **View Fact** screen allows the user to view and edit the facts.

Prerequisite

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 is displayed.

Figure 310: View Fact

3. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

Table 253: 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.
Product Processor	Displays the product processor.

4. Specify the Fact details in **Filter** textbox to filter the data.
5. Click **Refresh** to refresh the screen.

6. Right-click on the fact from the list and Click **View Details**.

   → The **Fact Creation** screen is displayed.

   Figure 311: Fact Creation

7. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

   Table 254: 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.
Type	Select the type of the fact from the dropdown list. The available options are: • **Number** • **Text** • **Boolen** • **Date** • **Array** • **ENUM**

7.2 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.

Step 1: Create a Rule1 - LOAN_TO_COLLATERAL

Expression - LOANAMOUNT/COLLATERAL_VALUE

Step 2: Create a rule2 - Loan to Value (LTV)

Expression - LOAN_TO_COLLATERAL *100

This section contains the following topics:

7.2.1 Create Rule

The **Create Rule** screen allows the user to create the rule.

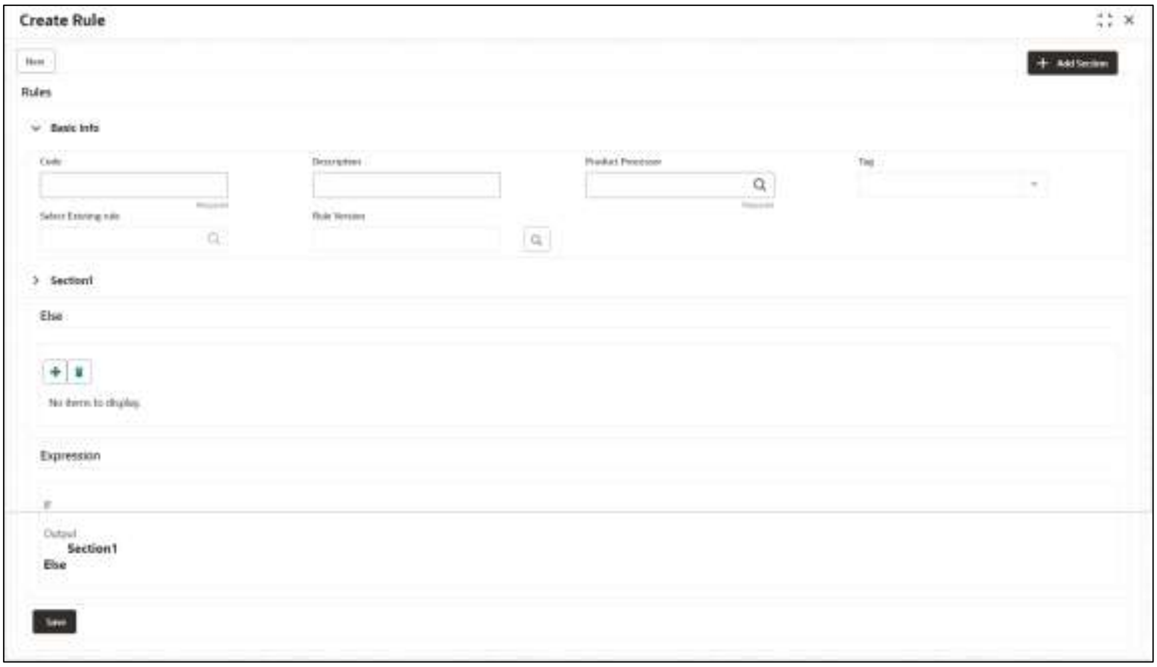
Prerequisite

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

1. From **Home** screen, Under **Rule**, click **Create Rule**.

   → The **Create Rule** screen is displayed.

   Figure 312: Create Rule



2. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

   Table 255: 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	Displays 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

Field	Description
Expression Builder	Select the expressions to build the rule.
Add Expression	Click Add Expression to create the expression for the rule.
+ icon	Click this 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 you select the data type, the new field appears adjacent to the data type. Update the same based on the selected data type. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact**
Output	Select the output from the drop-down list. Once you select the output, the new field appears 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.

7.2.1.1 Create Rule with multiple Output

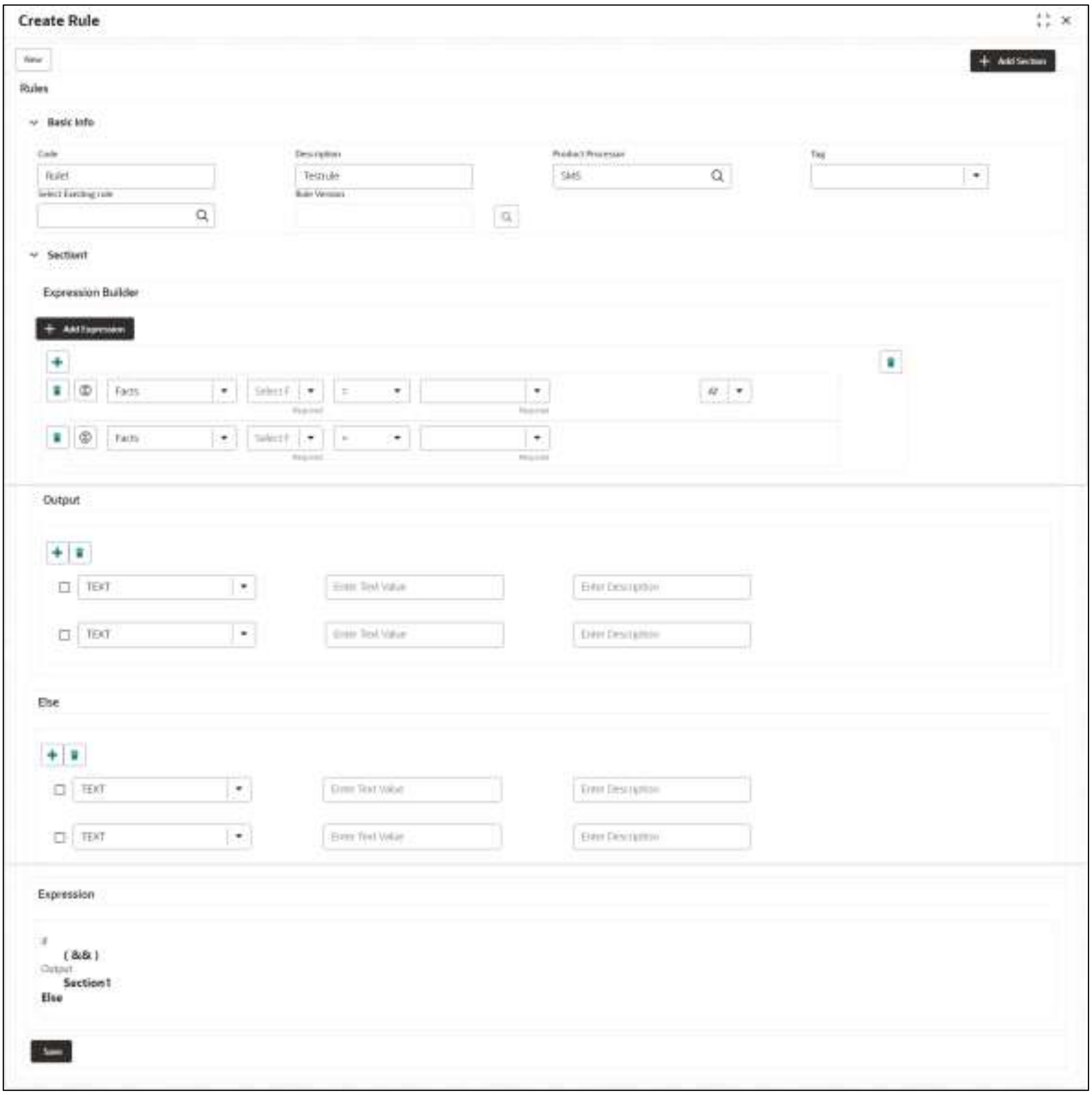
Steps to build a Rule with multiple output is explained with the below example.

The Rule Expression for Multiple output rule is:

IF (TotalIncome > 20000) && (TotalExpense < 8000)

then Eligible for loan, 10000, 2022-07-06

Figure 313: Create Rule with Multiple Output



7.2.2 View Rule

The View Rule screen allows the user to view and modify the existing rules.

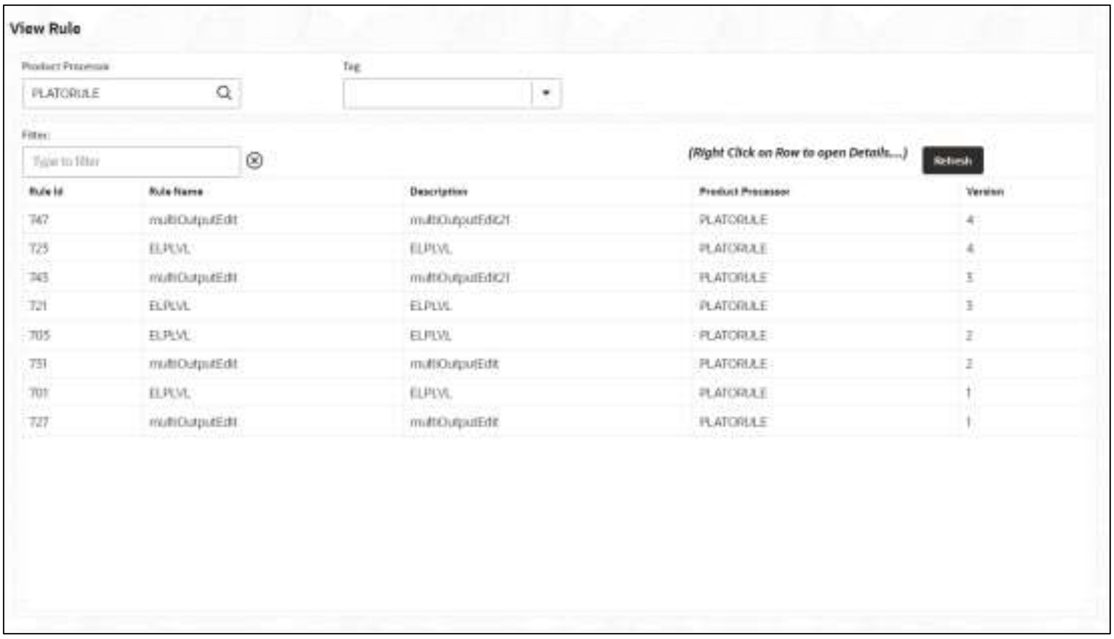
Prerequisite

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

1. From **Home screen**, Under **Rule**, click **Rule**.
2. Under **Rule**, click **View Rule**.

   → The **View Rule** screen is displayed.

Figure 314: View Rule



3. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

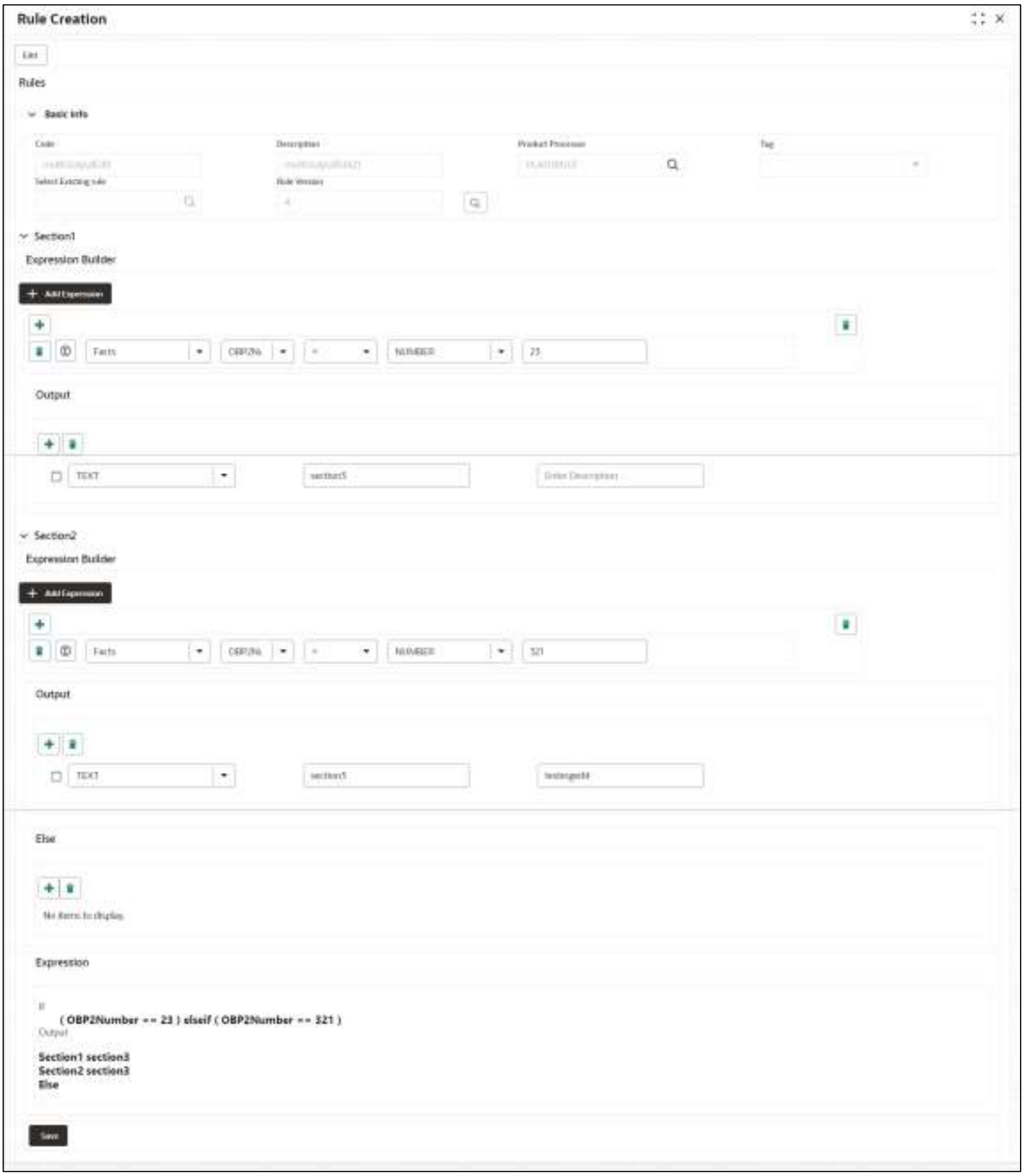
Table 256: View Rule – Field Description

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.
Product Processor	Displays the product processor.

4. Specify the Rule details in **Filter** textbox to filter the data.
5. Click **Refresh** to refresh the screen.
6. Right-click on rules from the list and Click **View Details**.
7. Click **Edit** to edit the rule.

   → The **Rule Creation** screen is displayed.

Figure 315: Rule Creation



8. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

Table 257: Rule Creation – Field Description

Field	Description
Code	Specify the alphanumeric code without space for the rule.
Description	Specify the description of the rule.
Product Processor	Displays the product processor.

Field	Description
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 this 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 you select the data type, the new field appears adjacent to the data type. Update the same based on the selected data type. The available options are: • **Text** • **Number** • **Boolean** • **Date** • **Fact**

Field	Description
Output	Select the output from the drop-down list. Once you select the output, the new field appears 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.

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

7.2.3 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"

}

7.2.4 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

7.2.4.1 Create Rule Group

The **Create Rule Group** screen allows the user to combine the rule.

Prerequisite

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

1. From **Home** screen, Under **Rule**, click **Create Rule Group.**

→ The **Create Rule Group** screen is displayed.

Figure 316: Create Rule Group

2. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

Table 258: 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.

Field	Description
Tag	Specify the tag for rule group.
Evaluate Group	Select the toggle to evaluate the expression in sequence. **NOTE:** If the toggle is disabled, the evaluation of the expression stops when the condition of expression is evaluated to **True**.
✚ **icon**	Click this icon to add expression.

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

7.2.4.2 View Rule Group

The View Rule Group screen allows the user to view and modify the existing rules group.

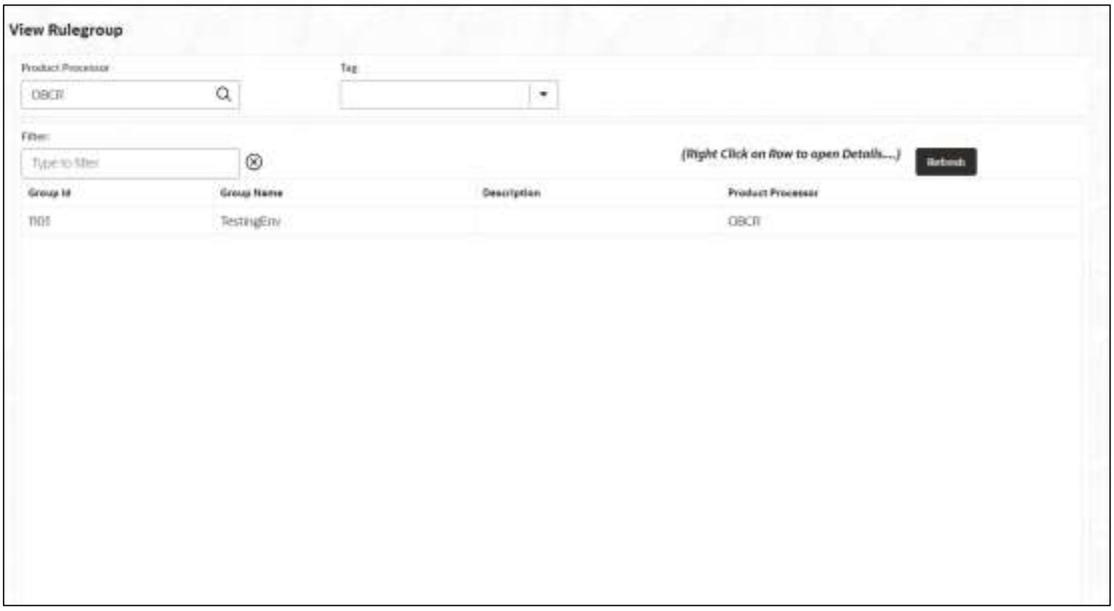
Prerequisite

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

1. From **Home** screen, Under **Rule**, click **View Rule Group.**

   → The **View Rule Group** screen is displayed.

   Figure 317: View Rule Group



2. Specify the details in the relevant data fields. The fields marked with asterisk are mandatory. For more information on fields, refer to the field description table below.

   Table 259: View Rule Group – Field Description

Field	Description
Product Processor	Displays the product processor.
Tag	Displays 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.

7.2.5 Audit Rule

The View Audit Rule screen allows the user to **View Rule log** after the evaluation of the expression through evaluate API.

Prerequisite

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

1. From **Home** screen, Under **Rule**, click **View Audit Rule**.

   → The **View Audit Rule** screen is displayed.

   Figure 318: View Audit Rule

2. Specify the details in the relevant data fields. For more information on fields, refer to the field description table below.

Table 260: 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.

8 Document Verification Framework

This section is designed to help the user quickly get acquainted with the Document verification framework.

Introduction:

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 section contains the following topics:

8.1 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.

8.2 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.

8.3 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 section contains the following topics:

8.3.1 Passport Extraction

This section describes the payload details for Passport Details extraction service.

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 261: Passport Extraction API Format

S 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

8.3.2 Driving License Extraction

This section describes 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

8.3.3 National Identification Extraction

This section 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
- Canada
- 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 Request:

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

8.3.4 Voter Identity Card Extraction

This section elaborates the payload details for Voter ID Card Details extraction service.

Voter ID 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 ID are extracted using "/**extractInformation**" API.

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 Request:

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

8.4 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.

This section contains the following topics:

- 8.4.1 Passport Validation
- 8.4.2 Driving License Validation
- 8.4.3 National Identification Validation
- 8.4.4 Voter Identity Card Validation
- 8.4.5 Pointers about Request and Response
- 8.4.6 Things to be taken care of

Table 262: 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

8.4.1 Passport Validation

This section describes 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"
              }
            ]
          ]
        }
      }
    ]
  }
```

8.4.2 Driving License Validation

This section describes the payload details for Driving License Details 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 for "/**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"
              }
            ]
          ]
        }
      }
    ]
  }
```

8.4.3 National Identification Validation

This section describes the payload details for National ID Card Details 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 ID 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 Request:

The output for "/**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"
              }
            ]
          ]
        }
      }
    ]
  }
```

8.4.4 Voter Identity Card Validation

This section describes the payload details for Voter ID Card Details 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 ID 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 Request:

The output for "/**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"
                }
            ]
        ]
      }
    }
  ]
}
```

8.4.5 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.

8.4.6 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

8.5 Recommendations for better performance

The better the 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.

9 File Upload

The following File Upload features are available in the respective common core maintenances

- Country Code File Upload
- Bank Core Parameters File Upload
- Branch Core Parameters File Upload
- Currency Definition File Upload
- BIC Directory File Upload
- Local Holiday File Upload
- Currency Holiday File Upload
- External Customer File Upload
- External Customer Account File Upload
- Exchange Rate File Upload

9.1 Country Code File Upload

Country Code File Upload is used to perform country code maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcCountryMaint_<UniqueName>.csv

NOTE: Replace the <UniqueName> for each file upload.

Table 263: Country Code File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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

Sequence	Attribute Name	Type	Size	Description
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	Number	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

Mandatory Fields are

- Action
- Country Code
- Description
- Alt Country Code
- Region Code
- Blacklisted
- IBAN Check Reqd
- Intra European
- Clr Code Bic
- ISO Num Country Code
- Gen Mt205
- ISD Code
- EU Country

9.2 Bank Core Parameters File Upload

Bank Core Parameters File Upload is used to perform bank core maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcBankMaint_<UniqueName>.csv

NOTE: Replace the <UniqueName> for each file upload.

Table 264: Bank Core Parameters File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
1	Action	String	10	Denotes file operation type. Allowed values are new/modify
2	Days To Forget Customer	Number	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

Mandatory Fields are

- Action
- Days To Forget Customer
- HO Branch
- Bank Name
- Bank Code

9.3 Branch Core Parameters File Upload

Branch Code Parameters File Upload is used to perform branch code maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcBranchMaint_<UniqueName>.csv

NOTE: Replace the <UniqueName> for each file upload.

Table 265: Branch Core Parameters File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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
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

Sequence	Attribute Name	Type	Size	Description
15	Host Code	String	8	Host Code
16	Branch Code	String	3	Denotes the Code of Branch
Child record 1				
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
Child record 2				
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

Mandatory Fields are

- Discriminator
- Action
- Source Branch Code
- Source System
- Auto Auth
- Branch Lcy
- Branch Addr3
- Branch Addr2
- Branch Addr1
- Branch Name
- Country Code
- Host Code
- Branch Code

- Discriminator (Child record 1)
- Branch Code (Child record 1)
- Discriminator (Child record 2)
- Default BIC (Child record 2)
- Swift Address (Child record 2)
- Branch Code (Child record 2)

9.4 Currency Definition File Upload

Currency Definition Upload is used 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.

Table 266: Currency Definition File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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

Sequence	Attribute Name	Type	Size	Description
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
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

Sequence	Attribute Name	Type	Size	Description
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
Child record				
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

Mandatory Fields are

- Discriminator
- Action
- Currency Code
- Currency Name
- Country
- Currency Decimals
- Currency Round Rule
- Currency Round Unit
- Currency Spot Days

- Currency Int Method
- Currency Eur Type
- Settlement Msg Days
- Index Flag
- Cut Off Hr
- Cut Off Min
- Alt Currency Code
- Eur Conversion Reqd
- Cut Off Days
- Gen 103p
- Cls Currency
- Fx Netting Days
- Gen Cust Cov
- Validate 50f
- Maintenance Country
- Commodity Code
- Discriminator (Child Record)
- Maintenance Country (Child Record)
- Country Code (Child Record)
- Country Desc (Child Record)
- Currency Code (Child Record)

9.5 BIC Directory File Upload

BIC Directory File Upload is used to perform BIC directory maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcBICDirectory_<UniqueName>.csv

NOTE: Replace the <UniqueName> for each file upload.

Table 267: BIC Directory File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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

Sequence	Attribute Name	Type	Size	Description
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

Sequence	Attribute Name	Type	Size	Description
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
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

Mandatory Fields are

- Action
- BIC Code
- Bank Name
- Sk Arrangement
- Bank Address1
- Bank Address2
- Bank Address3
- Relationship
- Swift Key
- Telex Key
- Upload Flag
- Upload Update
- Gen Mt103
- Blacklisted
- CUG Member
- Gen Mt103p
- Multi Cust Transfer
- Max Size
- Remit Member
- Gen Mt102p

- Gen Mt101
- Transaction Per Msg
- ADB Member
- BE Indicator

9.6 Local Holiday File Upload

Local Holiday File Upload is used 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.

Table 268: Local Holiday File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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
Child record				
1	Discriminator	String	1	Denotes child record type. Default value is always “C”
2	Branch Code	String	3	Branch Code
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

Mandatory Fields are

- Discriminator
- Action
- Branch Code
- Year
- Weekly Holidays
- Unexp Hol
- Discriminator (Child record)
- Branch Code (Child record)
- Year (Child record)
- Month (Child record)
- Holiday List (Child record)

9.7 Currency Holiday File Upload

Country Code File Upload is used to perform country code maintenance in common core.

File Type Supported - CSV

File Naming Convention - CmcCurrencyHoliday_<UniqueName>.csv

NOTE: Replace the <UniqueName> for each file upload.

Table 269: Country Code File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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
Child record				
1	Discriminator	String	1	Denotes child record type. Default value is always “C”
2	Currency	String	3	Currency

Sequence	Attribute Name	Type	Size	Description
3	Year	String	4	Indicates the year details
4	Month	Number	2	Indicates the month details
5	Holiday List	String	31	Denotes the Holiday List

Mandatory Fields are

- Discriminator
- Action
- Currency
- Year
- Weekly Holidays
- Discriminator (Child record)
- Currency (Child record)
- Year (Child record)
- Month (Child record)
- Holiday List (Child record)

9.8 External Customer File Upload

External Customer File Upload is used 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.

Table 270: External Customer File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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

Sequence	Attribute Name	Type	Size	Description
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 customer'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
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

Sequence	Attribute Name	Type	Size	Description
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

Mandatory Fields are

- Action
- Country
- Language
- Nationality
- Deceased
- Frozen
- Whereabouts Unknown
- Sanctions Checks Required
- Staff
- Walkin Customer
- Source System
- Source System Cust No
- Customer No
- Customer Type
- Customer Name1
- Short Name
- Address Line1
- Address Line2
- Address Line3
- Address Line4
- Pincode

9.9 External Customer Account File Upload

External Customer Account File Upload is used 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.

Table 271: External Customer Account File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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
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

Sequence	Attribute Name	Type	Size	Description
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

Mandatory Fields are

- Action
- Country Code
- Address4
- Address3
- Address2
- Address1
- Eca Check Req
- Account Class
- Ac Stat Dormant
- Ac Stat Frozen

- Gl Stat Blocked
- Ac Stat No Dr
- Ac Stat No Cr
- Ac Open Date
- Cust Ac Name
- Cust Ac Ccy
- Customer No
- Source System Acc Brn
- Source System Acc No
- Source System
- Host Code
- Cust Account No

9.10 Exchange Rate File Upload

Exchange Rate File Upload is used 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.

Table 272: Exchange Rate File Upload – Records

Sequence	Attribute Name	Type	Size	Description
Master record				
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
Child record				
1	Discriminator	String	1	Denotes child record type. Default value is always “C”

Sequence	Attribute Name	Type	Size	Description
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

Mandatory Fields are

- Discriminator
- Action
- Branch Code
- Currency1
- Currency2
- Discriminator
- Branch Code
- Currency1
- Currency2
- Rate Type
- Mid Rate
- Buy Spread
- Sale Spread
- Buy Rate
- Sale Rate
- Rate Date

10 Error Codes and Messages

This topic contains the error codes and messages:

Table 273: 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

Error Codes	Messages
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 doesnt have access to PII data, 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
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 doesnot exist
CMC-BRN-CD01	Date changed successfully
CMC-BRN-CD02	Failed to change date, holiday list not maintained properly

Error Codes	Messages
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's 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 BOD
CMC-BRN-EOD15	Branch status not in BOD, 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 Eoti retry intiated

Error Codes	Messages
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
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

Error Codes	Messages
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)

Error Codes	Messages
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
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

Error Codes	Messages
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 maintaned 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

Error Codes	Messages
CMC-CUS-FOR01	Record successfully deleted
CMC-CUS-PII01	User doesnt 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
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 BOD 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.

Error Codes	Messages
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, usecase identifier or prediction column.
CMC-INDBML-007	$1 and $2 are not similar
CMC-INDBML-008	Invalid Table Name
CMC-INDBML-009	Unable to save model monitoring details
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

Error Codes	Messages
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
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 don’t 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-NLP-010	Run Reference is already mapped with Usecase
CMC-NLP-011	Usecase is not present. Cannot import model
CMC-NLP-012	Model Import code is not valid. Please check again.
CMC-OBRH-001	Record already exists.
CMC-OBRH-002	Record saved successfully.

Error Codes	Messages
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.

Error Codes	Messages
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.
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

Error Codes	Messages
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

Error Codes	Messages
GCS-AUTH-02	Valid modifications for approval were not sent. Failed to match
GCS-AUTH-03	Maker cannot authorize
GCS-AUTH-04	No Valid unauthroized 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 makerId 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 didnt match valid unauthorized modifications that can be deleted for this record

Error Codes	Messages
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 unauthroized 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.
ML-TS-001	Invalid Data Source

Error Codes	Messages
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

Error Codes	Messages
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
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

Error Codes	Messages
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)

Error Codes	Messages
CDS-DML-006	Invalid range definition. Either range or value is allowed
CDS-DML-007	Duplicate $1 values are not allowed
CDS-DML-010	From value should not be greater than To value
CDS-RUL-001	Error occurred while evaluating the rule
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-023	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-DML-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

Error Codes	Messages
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-010	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

Error Codes	Messages
CDS-DML-019	Unable to resolve the best fit scoring model. Multiple scoring model resolved
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

Error Codes	Messages
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-043	Invalid $1 sent
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	Percenatge 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
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

Error Codes	Messages
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 CDS-QUR-015	Questionnaire Description size must be between 1 and 240 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
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

Error Codes	Messages
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 CDS-STG-024	Question Code cannot be duplicate for a questionnaire. 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
CDS-STG-001	Strategy Code cannot be null or blank
CDS-STG-002	Strategy Code Description cannot be null or blank
CDS-STG-003	Product Processor cannot be null or blank.
CDS-STG-004	Product Processor Description cannot be null or blank.
CDS-STG-005	Account Category cannot be null or blank.
CDS-DML-041	Multiple Range definitions not allowed in case of MultiApplicant Scoring Model
CDS-DML-042	Incorrect Range Definition. $1

11 Functional Activity Codes

This topic contains the functional activity codes:

Table 274: 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

Screen Name	Functional Activity Code
	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
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

Screen Name	Functional Activity Code
	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

Screen Name	Functional Activity Code
	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
	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

Screen Name	Functional Activity Code
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

Screen Name	Functional Activity Code
	CMC_FA_EXT_BRANCH_PARAMETERS_REOPEN
	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

Screen Name	Functional Activity Code
	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
	CMC_FA_AMTXTLANG_DELETE
	CMC_FA_AMTXTLANG_NEW
	CMC_FA_AMTXTLANG_REOPEN

Screen Name	Functional Activity Code
	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

Screen Name	Functional Activity Code
	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
	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

Screen Name	Functional Activity Code
	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

Screen Name	Functional Activity Code
	CMC_FA_RH_SERVICECONSUMER_PROCESSJSON
	CMC_FA_RH_SERVICECONSUMER_SERVICE_MODIFY
	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

Screen Name	Functional Activity Code
	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
	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

Screen Name	Functional Activity Code
	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

Screen Name	Functional Activity Code
	CMC_OBCDS_FA_DGM_VIEW
	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

Screen Name	**Functional Activity Code**
	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
	CMC_OBCDS_FA_LOOKUPS_VALIDATE_LOV
	CMC_OBCDS_FA_LOOKUPS_VIEW

Screen Name	Functional Activity Code
	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

Screen Name	Functional Activity Code
	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
	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

Screen Name	**Functional Activity Code**
	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

Screen Name	Functional Activity Code
	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
	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

Screen Name	Functional Activity Code
	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

Screen Name	Functional Activity Code
	CMC_CBR_FA_CBD_VIEWCHANGES
Criteria	CMC_CBR_FA_CRITERIA_ACTIONS
	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

Screen Name	Functional Activity Code
	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
	CMC_OBCBS_FA_PPR_CLOSE
	CMC_OBCBS_FA_PPR_DELETE

Screen Name	Functional Activity Code
	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
Model Import Export	CMC_NLP_FA_MODEL_IMPORT_EXPORT

12 Glossary

This section provides a glossary of all terms and abbreviations used in the user manual.

Accounts

Continuing financial relationship between a bank and a customer, in which deposits and debts are held and processed within a framework of established rules and procedures.

Reports

A page containing information organized in a narrative, graphic, or tabular format, prepared on ad-hoc, periodic, recurring, regular, or as required basis. Reports may refer to specific periods, events, occurrences, or subjects.

Pareto Chart

It is a type of chart that consists of both bars and a line graph, where individual values are represented in descending order by bars, and the cumulative total is represented by the line.

Sunburst Chart

It is a type of chart that is ideal for displaying hierarchical data. Each level of the hierarchy is represented by one ring or circle with the innermost circle as the top of the hierarchy. A sunburst chart without any hierarchical data (one level of categories), looks similar to a doughnut chart.

Virtual Account

Virtual accounts are provided to a corporate by its banking partner. Each account is a subsidiary or sub-account of the client's own physical account with the bank; they cannot exist outside of the immediate relationship; hence they are virtual.

Virtual Identifier

Virtual identifier serves to segregate any funds from any other funds in the same main account and yet is inextricably linked to the virtual account.

13 List of Menus

14 Feedback and Support

Oracle welcomes customers' comments and suggestions on the quality and usefulness of the document. Your feedback is important to us. If you have a query that is not covered in this user guide or if you still need assistance, please contact documentation team.