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1. Preface

1.1 Introduction

This manual is designed to help acquaint you with the Integrated Liquidity Management module of Oracle FLEXCUBE.

This manual provides answers to specific features and procedures that you need to be aware of for the module to function successfully. Besides this User Manual, while maintaining the interface related details, you can invoke the context sensitive help available for each field. This help encapsulates the purpose of each field within a screen. Placing the cursor on the relevant field and striking the <F1> key on the keyboard can obtain information specific to a particular field.

1.2 Audience

This manual is intended for the following User/User Roles:

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back office data entry Clerks</td>
<td>Input functions for maintenance related to the interface.</td>
</tr>
<tr>
<td>Back office Managers/Officers</td>
<td>Authorization functions</td>
</tr>
</tbody>
</table>

1.3 Documentation Accessibility

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

1.4 Organization

This manual is organized into the following chapters:

<table>
<thead>
<tr>
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<td>6</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
1.5 **Related Documents**

The Procedures User Manual

1.6 **Glossary of Icons**

This User Manual may refer to all or some of the following icons:

<table>
<thead>
<tr>
<th>Icons</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>Exit</td>
</tr>
<tr>
<td>+</td>
<td>Add row</td>
</tr>
<tr>
<td>-</td>
<td>Delete row</td>
</tr>
<tr>
<td>⯥</td>
<td>Option List</td>
</tr>
</tbody>
</table>
2. Integrated Liquidity Management - An Overview

2.1 Introduction

Liquidity Management refers to the services your bank provides to its corporate customers thereby allowing them to optimize interest on their checking/current accounts and pool funds from different accounts. Your corporate customers can, therefore, manage the daily liquidity in their business in a consolidated way.

Customers need to define ‘account structures’ which form the basis of liquidity management. The account structure reflects the hierarchical relationship of the accounts as well as the corporate strategies in organizing accounts relationships.

Liquidity management services are broadly classified as under:
- Sweeping - where physical funds are moved in account structure from child to parent or parent to child.
- Pooling - where funds are not physically moved in and out of accounts. Instead, the account balances are notionally consolidated and ‘interest computations’ carried out on such notional balances.

The Integrated Liquidity Management (ILM) module in Oracle FLEXCUBE supports a multi-branch, multi-currency liquidity management structure using architecture of ‘System Accounts’. This enables the system to keep track of balances in accounts in the structure, calculate interest on the accounts in the structure as well as track the history of the sweep/pool structure.

Note

System accounts are internal accounts created by the system based on the role played by an account in an Account Structure.

This document is broadly classified into two sections as follows:
- Maintenance required for ILM
- EOD Batch operations and sequence
3. Maintaining Parameters for Integrated Liquidity Management

3.1 Introduction

You need to maintain certain parameters before you define account structures for integrated liquidity management process. They are:

- Account class
- Customer Spreads
- IC – SDE Maintenance
- IC Rule Maintenance
- IC Product Maintenance
- Customer Maintenance
- Customer Account Maintenance
- Transaction Code
- Product Event class and Accounting entries for ILM
- ILM Branch parameters Maintenance
- Group Code Maintenance
- Third-Party Account Maintenance (if Multi Bank Cash Concentration is implemented)
- Account Structure Maintenance
- Group Account Linkage
- Other Maintenances

3.2 Maintaining Account Classes

You can use the Account Class feature in Oracle FLEXCUBE to create a set of accounts which have the same characteristics. You can invoke the ‘Account Class Maintenance’ screen by typing ‘STDACCLS’ in the field at the top right corner of the Application tool bar and clicking
on the adjoining arrow button. Click on the ‘Preferences’ button in the ‘Account Class Maintenance’ screen to invoke the ‘Preferences’ screen.

You are required to input the following details in this screen:

**Integrated LM**

Check this option to indicate that accounts created under this Account Class should be part of an ILM Structure. If the option is checked, the system creates system accounts (internal accounts) for each account that is linked in a pool/sweep structure and tracks the balances on both the actual accounts as well as these system accounts. It also calculates interest on these system accounts.

---

**Note**

Interest on accounts that are not part of an account structure are calculated on the actual customer account.

### 3.3 Maintaining Customer Spreads

For a given customer and currency pair, you can define buy and sell spreads in different tenors (in days). The system defaults the spread to zero if you have not maintained any spread for a customer.

You can maintain spreads for a customer in the ‘Customer Currency Spread Maintenance’ screen. You can invoke the ‘Customer Currency Spread Maintenance’ screen by typing
‘CYDCUSPR’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

3.3.1 Maintaining SDEs

In order to calculate interest, Oracle FLEXCUBE uses components called ‘data elements’ that provide the required data.

System Data Elements (SDEs) are values such as the balance in an account or the number of transactions in a day. This information is constantly updated in the system and is readily available for computation of interest. These values can only be picked up by the system while applying interest. User cannot indicate what the value of an SDE should be.

The following SDEs will be used in IC Processing:

<table>
<thead>
<tr>
<th>SDE (System Data Elements)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILBD_ULT_DR_BAL</td>
<td>Captures the book dated Debit balance of the pool header in this Data element during the IC calculation process</td>
</tr>
<tr>
<td>ILBD_ULT_CR_BAL</td>
<td>System populates the book dated Credit balance of the pool header in this data element during the IC calculation process</td>
</tr>
<tr>
<td>ILVD_ULT_DR_BAL</td>
<td>System populates the value dated Debit balance of the pool header in this data element during the IC calculation process</td>
</tr>
<tr>
<td>ILVD_ULT_CR_BAL</td>
<td>System populates the value dated Credit balance of the pool header in this variable during the IC calculation process</td>
</tr>
<tr>
<td>ILBD_CP_DR_CONT</td>
<td>This data element captures the Compensated contribution of the book dated Debit balance</td>
</tr>
<tr>
<td>ILBD_CP_CR_CONT</td>
<td>This data element captures the Compensated contribution of the book dated Credit balance</td>
</tr>
<tr>
<td>ILVD_CP_DR_CONT</td>
<td>This data element captures the Compensated contribution of the value dated Debit balance</td>
</tr>
<tr>
<td>ILVD_CP_CR_CONT</td>
<td>This data element captures the Compensated contribution of the value dated Credit balance</td>
</tr>
</tbody>
</table>
### 3.3.2 Maintaining UDEs

User Data Elements (UDEs) are elements (such as Interest or Tax rate) the values for which are provided by the User. The following User Data Elements (UDE) can be specified in IC Rule Maintenance:

- **Debit Rate for Pool Balance**
- **Credit Rate for Pool Balance**
- **Inter-Bank Rate**
- **Tax Rate**

### 3.4 Creating Interest & Charges Rules

You can use the SDEs and UDEs that you have previously defined to create formula to be used by the system for interest calculations in the ‘Interest & Charges Rule Maintenance’ screen. You can invoke the ‘Interest & Charges Rule Maintenance’ screen by typing...
You are required to input the following detail in this screen:

**Integrated LM**
Choose this option if you want to use the product for Integrated Liquidity Management processing.

**Integrated LM Type**
Specify the type of System Account to which the product ought to be linked. It can be:
- Pool Leader: Indicates that the Rule will apply to Header accounts in a structure.
- Pool Reallocation: Indicates that the rule will apply to Parent and Child Accounts below the Header Account.

Refer the chapter ‘Annexure B – IC Rule Set-up’ in this User Manual for suggested IC rules.

### 3.4.1 Creating Interest & Charges Products

You can invoke the ‘Interest And Charges – Interest Product Preferences’ screen by clicking ‘Preferences’ button on the ‘Interest And Charges Product Maintenance’ screen. You can
invoke the latter by ‘typing ‘ICDPRMNT’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

You can input the following details in this screen:

**Integrated LM**
Choose this option if you want to use the product for Integrated Liquidity Management processing.

**Integrated LM Type**
Specify the type of System Account to which the product ought to be linked. It can be:

- Pool Leader: Indicates that the Rule will apply to Header accounts in a structure.
- Pool Reallocation: Indicates that the rule will apply to Parent and Child Accounts below the Header Account.

Refer the chapter ‘Annexure A - Accounting Entries’ in this User Manual for suggested IC products.
3.5  Maintaining Customers

You can invoke the ‘Customer Maintenance’ screen by typing ‘STDCIF’ in the field at the top right corner of the Application toolbar and clicking on the adjoining arrow button.

Apart from serving as a means to collect basic information about a customer, the ‘Customer Information Maintenance’ screen also reflects the hierarchy existing between a Parent company and its various subsidiaries. The subsidiaries take on the Customer Number of the parent company as their Liability number.

3.5.1  Maintaining IC Special Conditions for Customer Accounts

The ‘Customer Accounts Maintenance’ screen is used to create accounts for a given Customer using the desired account class and currency combination. You can invoke the
‘Customer Accounts Maintenance’ screen by typing ‘STDCUSAC’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
Click ‘Interest’ button in ‘Customer Account Maintenance’ screen to invoke ‘IC Special Conditions Maintenance’ sub-screen, where you can maintain IC special conditions for ILM accounts.

3.5.1.1 IC Special Conditions

The system displays the following fields on the basis of your choice in the IC Rule and IC Product screens.

**Integrated LM**

The system defaults the value specified in the product screen from based on product selected from the option list.

**Integrated LM Type**

The system displays the value on the basis of your choice in the IC Rule and IC Product screens.
3.6 Maintaining Product Event Class & Accounting Entries

When you define an Events Class, you choose, first of all, the set of events that would belong to the class. Events are, usually, unique to a module.

The events that you would like to include in an Events Class can be identified through the ‘Events Accounting Entries and Advices Class Maintenance’ screen. This screen is invoked from the Application Browser.

You can invoke the ‘Events Class Maintenance’ screen by typing ‘CSDACTCL’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

You can maintain the following details in this screen:

**Class Code**
An Events Class is identified with a unique Code and a Description. This indicates the name of the event class to which the events for ILM processing will be linked.

**Description**
You need to enter a brief description for the class code.

**Module**
Events are, usually, unique to a module. Specify the module as IL to define the events for Liquidity Management module.

**Events Description**
Once you specify the class code and module, click on add icon. The system will display the events associated with the Integrated Liquidity Management module.

The following events are available for the integrated liquidity management module:

- SWBK : Sweep Booking
- RVSW: Reverse of Sweep Booking
3.6.1 Defining Accounting Entries for Event

You can indicate the accounting entries that should be passed at an event in the Accounting Entries section of the ‘Events Class’ screen. This section is invoked by clicking the ‘Accounting Entries’ button.

As part of the Accounting Entry details of an event, you should specify the following details:
- The accounting role
- The amount tag
- If a debit or a credit
- The transaction code

Accounting Role
If accounting entries are to be passed for an event, you have to indicate the different Accounting Roles. At an event in the life cycle of a deal, involving a product to which you associate the class, the appropriate entries will be passed under the specified Accounting Roles.

The adjoining option list displays a list of all the available accounting roles.

Amount Tag
The amount (i.e. the available balance, booking dated balance etc.) that is to be posted for an event, is referred to as the Amount Item. The tag associated with an Amount Item is the Amount Tag.

The adjoining option list displays a list of the amount tags that are maintained in the system. You can choose a tag by double clicking on it.

Debit/Credit
You have already specified the type of account to which an entry should be passed, and the tag which identifies the amount (available balance, booking dated balance etc.) that should be passed. In this field, you must indicate if the amount is to be debited from credited to the specified account. Choose the Debit or Credit indicator.

Transaction Codes
Every accounting entry in Oracle FLEXCUBE involves a Transaction Code that describes the nature of the entry. This code and its description will identify the original sweep book, reverse booking and their corresponding reversals. The Transaction Code for both legs of the transaction would be the same.

The table below illustrates the accounting entries for each event that you need to set up for the liquidity management module.

<table>
<thead>
<tr>
<th>Event</th>
<th>Debit/Credit Indicator</th>
<th>Accounting Role</th>
<th>Amount Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWBK</td>
<td>DR</td>
<td>CHILD</td>
<td>CR_CONT</td>
</tr>
<tr>
<td>SWBK</td>
<td>CR</td>
<td>PARENT</td>
<td>CR_CONT</td>
</tr>
<tr>
<td>SWBK</td>
<td>CR</td>
<td>CHILD</td>
<td>DR_CONT</td>
</tr>
<tr>
<td>SWBK</td>
<td>DR</td>
<td>PARENT</td>
<td>DR_CONT</td>
</tr>
<tr>
<td>RVSW</td>
<td>DR</td>
<td>PARENT</td>
<td>CR_CONT</td>
</tr>
</tbody>
</table>
Refer to the Modularity User Manual for further information on setting up accounting details.

### 3.6.2 Associating Branch to Event Class

After you define the accounting entries that need to be passed for a set of events, you need to associate the event accounting entries to the branches of your bank.

You can invoke the ‘ILM Branch Parameter Maintenance’ screen by typing ‘ILDBRPRM’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

You are required to input the following details:

**Event Class**
Choose the event class that you wish to associate to the branch.

**Multi branch ILM structure**
Check this option to indicate that multi-branch ILM structure is applicable for this branch. In case you wish to modify the option by un-checking it, the system allows it only if there are no existing active groups for the multi-branch.

**Job Frequency Min**
Specify the frequency for the processing of MBCC Jobs for a branch. The default value of Jobs Frequency is 30.
3.7 **Group Code Maintenance**

In Oracle FLEXCUBE, you can bring together several accounts to form a ‘Group’ for ILM processing. You can then link this group code to the Header Account maintained as part of Account Structure. In Oracle FLEXCUBE, group codes allow you to uniquely identify a given account structure for ILM processing.

You can invoke the ‘Integrated Liquidity Management Group Code Maintenance’ screen by typing ‘ILDGRPCD’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

You can input the following details in this screen:

**Group Code and Description**
Enter a unique code to identify the group code in the system. Enter a brief description.

**Effective Date**
Specify the date from which the group will become active in the system. You will not be allowed to input Back Valued Dates (BVT) here.

**Sweep Basis**
You need to indicate if the sweep should be performed on Book Dated balance or Value Dated Balance for the entire structure falling under the group. If BVT support is required, it must have ‘Value Dated’ option.

**Pool Benefit**
If you select this option, interest re-allocation is carried out for the child accounts involved in the group.

**Reverse Sweep**
Indicate whether reverse sweeps should be performed during BOD batch.

**BVT Applicable**
Specify if BVT processing is applicable for a group.
BVT Unit
Indicate the unit the system should consider while calculating the BVT date. This can be Days/Months

BVT Duration
This indicates the number of BVT units allowed as back period from today’s date while calculating BVT date.

For instance, to indicate 30 Days input ‘Days’ as BVT Unit and ‘30’ in the BVT Duration fields. Similarly, to indicate 2 months, the BVT Unit should be ‘Months’ and the BVT Duration ‘2’.

Note
– If the Sweep basis is Book Dated, back value dated transaction is not allowed.
– While maintaining a new Group, the system will validate whether the ILM Applicable option is checked in the ‘ILM Branch Parameters’ screen.

3.7.1 A Note on Back Valued Transactions

The system rebooks the sweeps (in case of physical pooling) and adjusts the interest amount that had been accrued and settled in the accounts when you input a transaction with a back value date. In case of a change in the Account Structure in the interim between the Back Value Transaction (BVT) date and current date, the system uses the account structure existing on the execution days.

The following points need to be kept in mind for BVT Processing:
- It is performed only for sweeps and pools which are value based.
- The corresponding System Account active on the Effective Date is considered for a back valued transaction to an account. (If BVT falls on a holiday then BVT is considered only from the next working day, as there will not be any value dated record in system account for holidays)
- The processing involves replaying the sweep from the least date of the BVT which means that the Contributions and Pool Balances of the System Accounts are calculated afresh. The balances in all accounts of the structure are reworked and the sweeps carried out again for each of the previous sweep having the same value date.
- The value dated balances of the Parent Account as well as the Child Accounts in the Account Structure are updated
- In Customer Account Statements, only the back value transaction will be available on the date that it was posted.

The system follows the following process for replaying sweeps:
1. It omits BOD processing for the least back value date only and continues till the current processing date. It then identifies the value dated balance of the current processing date for the corresponding System Account and carries out the EOD processing.
2. For a particular Effective Date, it calculates Sweep Amount for the corresponding System Accounts.
3. It fetches the entry posted for the BVT date from the Sweep Log and compares it with the Sweep Amount that has been calculated currently.
4. If the Sweep Amounts are equal, no entry is posted.
5. If the Sweep Amounts are different, it reverses the entry that was posted for the BVT date (SWBK) and the corresponding entry that was used during BOD to reverse the entry.
6. Reversal of Reverse Sweep (RSWR) entry gets posted during reversal of RVS.
7. It inputs a new entry whose booking date is the processing date of the BVT and whose
   value date is the BVT date. This entry is entered into the Daily Log.
8. It then updates the post sweep balances for a combination of Account + Effective Date +
   System Account.

Note
Every time a physical sweep is executed, the system stores the credit balance and the un-
used OD limit in the Parent Account before and after the sweep.

3.8 Maintaining Third Party Accounts

A Third Party Account is an account which is located in another bank which is not part of your
bank, but is part of the Liquidity Management Account Structure maintained with your bank.
The funds can be moved from or to the Third Party accounts. To establish a relationship
between the accounts in Oracle FLEXCUBE and the third party accounts, you first need to
maintain a mirror account of such accounts as normal CASA accounts in Oracle FLEXCUBE
and then capture the parameters of the Third Party Accounts in the ‘Mirror Accounts
Maintenance’ Screen.

The Mirror accounts can be created at your branch in the country where the Third Party
Account is located/your branch in the country where the Header account of the Group is
located. The funds to be moved to/from the Third Party Account will be routed through this
CASA account.

The Mirror Account will be used to capture parameters for message generation. The balance
information obtained from the Third Party Bank will be stored in the Mirror Account.
The Third Party Account details are maintained in the ‘Mirror Accounts Maintenance’ screen. You can invoke the ‘Mirror Accounts Maintenance’ screen by typing ‘ILDMIRAC’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

You need to maintain the following parameters in this screen:

**Mirror A/c**
This indicates the account number in Oracle FLEXCUBE.

**External A/c**
You need to indicate the account number in the third party bank.

**Currency**
The system defaults the account currency.

**Technical A/c**
This indicates the CASA account linked to the mirror account.

**Location**
This indicates the location of the third party bank.

**BIC**
Indicate the BIC Code of the third party bank.

**Route Code**
Specify the route code based on which the system will pick up the settlement instructions from ARC settlement instructions maintenance for third party accounts, for the generation of payment messages.

**Account Current Balance**
The system will display the balance of the external account sent by the last MT 942 message.
Balance Update On
The system displays the date on which the last MT942 message was received.

Start Time MT920
Here, indicate the time at which the first MT920 message for a day should be generated.

End Time MT920
You need to specify the time at which the last MT920 message for a day should be generated.

MT920 Generation Frequency
Here you need to indicate the interval (in hours) at which MT920 should be generated.

Dr/(Dr and Cr) Floor Limit
Specify the debit floor limit of the account. If the credit floor limit is not separately specified, this will indicate both the debit and the credit floor limits.

This value indicates 34F tag value of MT920.

Cr Floor Limit
Specify the credit floor limit of the account. This value indicates 34F tag value of MT920.

Cutoff Time MT101
You need to indicate the time at which MT101 should be generated for sweeping in funds from the Third Party Account.

Cutoff Time MT103
You need to indicate the time at which MT103 should be generated for sweeping out funds from the Parent Account.

3.9 Maintaining Account Structures

In Oracle FLEXCUBE, you can define a structure for the various accounts participating in the ILM process and set up a hierarchy for the accounts - establish the relationships or links among the accounts that are to be part of the Group.

You need to define the account structure and the hierarchy for ILM processing in the ‘Account Structure Maintenance’ screen. You can invoke the ‘Account Structure Maintenance’ screen
by typing ‘ILDSWEEP’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button._

You can define the following parameters as part of maintaining the account structure for ILM processing:

### 3.9.1 Indicating Account Details

Specify the following details.

**Third Party Account**

If the account that you have specified is a mirror account of an account held with another bank, you need to indicate it by selecting this option. If you select this option, the system will allow you to select the Technical CASA account that is linked as part of Third Party Accounts Maintenance.

**Account**

First, you need to specify the account (main or affiliate account) which has to be part of the account structure.

**Account Type**

You need to indicate whether the account that you have specified is a main account or secondary account. The account type defines the relationship between the accounts.

- Select the option ‘Parent’ to indicate that the account is the main account in the hierarchy.
- Select the option ‘Child’ to indicate that the account is a secondary account in the hierarchy.

You will not be able to link the accounts at the same level in an account structure.

If you de-link a parent account from a structure or link it to another parent in the same structure, the associated child accounts linked to it will also follow the parent account.
Effective Date
You need to indicate the date from which the account structure is available in the system for ILM processing. However, if Intraday Sweep Batch is run for the branch for any group, you cannot change the structure on the same effective date.

Parent Account
This is applicable only if you are maintaining a child account. You need to indicate the parent account for the child here.

Note
You cannot link a child account to more than one parent account.

Booking Account
You need to indicate the account to which the interest amount is to be booked during interest reallocation (after interest is calculated).

Note
The booking account linked to the account should have the same currency as the account.

Scheme
Indicate the type of structure for which the link is being defined. The following types are possible:

- Sweep: Indicates that the level of the structure is Sweep, in which movement of funds is physical.
- Pool: Indicates that the level of the structure is Pool, in which movement of funds is notional.

Note
- You can maintain Pool Structure only for a single level
- You cannot have maintain a Sweep structure on top of a pool structure

Interest Reallocation
Check this option to allow interest to be re-allocated to this account.

3.9.2 Maintaining Sweeping Parameters

Specify the following details.

Sweep Type
This indicates the sweep type of the parent and child account. The sweep type can be either of the following:

- Debit (Sweep Out)
- Credit (Sweep In)
- Target Balance Agreement

Base Amount
The amount depends on the sweep type that you have selected.
If the sweep type is Debit, the Amount indicates the balance in the account that should trigger a sweep out of funds. The sweep transaction will be executed if the balance in the account becomes greater than this amount.

If the sweep type is Credit, the Amount indicates the balance in the account that should trigger a sweep in of funds. The sweep transaction will be executed if the balance in the account goes below this amount.

If the sweep type is Target Balance, the Amount indicates the minimum balance that is to be left behind in the Child Account after the sweep is performed. A value of zero indicates Zero Balancing sweeps.

**Multiples Amount**

This indicates the multiples amount in which the system performs sweeps.

### 3.9.3 Indicating Pooling Parameters

Specify the following details.

**Rate Type**

This indicates the exchange rate type that would be used by the system to convert child account balances to the currency of the parent account. The system will not allow you to specify the rate type if you have specified the scheme as ‘Sweep’ as the system supports only single currency sweeps.

**Spread Indicator**

Specify which spread will be applicable - Mid or Buy/Sell. The system default value is ‘Mid’.

If you choose the ‘Buy/Sell’ option, the system applies the ‘Buy’ rate when debiting the customer account and the ‘Sell’ rate when crediting the customer account.

After defining the account structure, you can modify it as well as the Header Account linkages. You can also move accounts from one structure to another and if the account being moved is a Parent Account, all the child accounts associated with it are moved to the new structure. However, you cannot make a back-value dated change to an Account Structure.

Every change in an Account Structure or a Group–Account linkage leads to the creation of new System Accounts for the accounts in the Group. This results in the system closing the existing System Account for the accounts. But the closed records are retained to enable the system to track the history of the Account Structure and are stored based on their ‘Effective Dates’.
3.9.4 Closing Accounts in an Account Structure

The following steps explain how to close an account in a given account structure. Let us assume that, in the structure shown below, we need to close account P2 and attach account C2 directly to H1.

The steps to be followed for the closure are:

- Child Account C2 is closed first (You can query to find out the child accounts of a given parent account, say P2)
- Subsequently, account P2 is closed.
- Account C2 is now freshly linked with H1.

After the structure change has been carried out, the new structure appears as shown below:

In the new structure (i.e. after the change), account C2 will have a new ‘System Account’ associated with it.
3.9.5 Creating Group Account Linkages

You can link the account structure to the group codes that you have maintained in the 'Account Group Linkage Maintenance' screen. You can invoke the 'Account Group Linkage Maintenance' screen by typing 'ILDGRPLN' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

In this screen, you need to specify the following:

**Header Account**
The system will display the parent accounts maintained as part of account structure maintenance. Select the account which you want to link to the group.

**Effective Date**
Indicate the date on which the structure under the group should come into effect.

**Group Code**
Indicate the group code to which you want to link the account structure.

For example, the following structure may be defined for a Group Code ‘GRP’

**HACC** (Header Account)
-- **PACC1** (Child to HACC)
-- **CACC1** (Child to PACC1)
-- **PACC2** (Child to HACC)
-- CACC2 (Child to PACC2)

-- CACC3 (Child to PACC2)

In the above structure, PACC2 is the Child Account in the link HACC – PACC2 whereas Parent Account in PACC2 – CACC.

3.9.6 **Maintaining Sweeping Eligible Balance**

Click on ‘Amounts & Dates’ section in ‘Customer Account Maintenance’ screen to view the current days Sweep Eligible Balance which is available for Sweep Out/ Interest Calculation.
4. Other Maintenance

4.1 Introduction

Apart from the maintenances mentioned in previous sections, if Multi Bank Cash Concentration facility is allowed, the following maintenances need to be done during implementation. This is necessary only if they have not been maintained earlier.

4.2 Maintaining BIC Codes (used in Mirror Account maintenance)

You can invoke the 'BIC Code Details' screen by typing ‘ISDBICDE’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
4.3 Maintaining Message Media Formats

You can invoke the ‘Message Media format Maintenance’ screen by typing MSDMDFMT in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
4.4 Maintaining Advise Formats

You can invoke the ‘Advise Format Maintenance’ screen by typing ‘MSDADVFT’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
4.5 **Maintaining Message Types**

You can invoke the ‘Message Type Maintenance’ screen by typing ‘MSDMSTYP’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

![Message Type Maintenance Screen](image)

4.6 **Maintaining STP Rules**

You can invoke the ‘STP Rule Maintenance’ screen by typing ‘MSDMTUDF’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

![STP Rule Maintenance Screen](image)
4.7 **Maintaining STP preferences**

You can invoke the ‘STP Preferences Maintenance’ screen by typing ‘MSDSTPRF’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

4.8 **Maintaining Upload Source Preferences**

You can invoke the ‘Upload Source Preferences Maintenance’ screen by typing ‘CODUPLDM’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
4.9 Maintaining Retail Teller Settlement Instructions

You can invoke the ‘Retail Teller Settlement Details Maintenance’ screen by typing ‘FTDRCST’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
4.10 Maintaining Retail Teller Products

You can invoke the ‘Retail Teller Product Maintenance’ screen by typing ‘DEDRTPRM’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
4.11  Maintaining ARC Details

You can invoke the ‘ARC Maintenance’ screen by typing ‘IFDATMMN’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

4.11.1 Service charges for Inter-branch Transactions

In a transaction, if the account branch of the teller transaction is different from the transaction branch, then charges maintained by inter-branch product will be applied to the transaction.

If the IB checkbox is checked for a product, then the system will pick up and process the charge entries maintained at the IB product level.

During a transaction, if IB product is not maintained and if the transaction branch is different from account branch, then charges maintained in non-ib product will be applied to the transaction.

**IB Transaction**

Check this box if you want the system to pick up the product, for inter-branch transactions.

You will notice the difference in the service charges processed for two transactions with same kind of product.
Refer the chapter ‘Maintaining Account, Rate, and Charge Details’in the FCC_Host_Clearing user manual, for detailed explanation of the fields in this screen.

4.12 Mapping Products

You can invoke the ‘Message Product Mapping Maintenance’ screen by typing MSDPRDMP’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.
4.13 Maintaining Settlement Instructions

You can invoke the ‘Settlement Instruction Maintenance’ screen by typing ‘ISDINSTN’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

4.14 EOD Batch Maintenance Screens

You are required to maintain the following sequence for ILM batches that need to be run, for any branch which is enabled for ILM. You can invoke the ‘Mandatory Batch Program Maintenance’ screen by typing ‘EIDMANPE’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

At EOTI – Stage
- ILRMJOBS
- ILBATCH
- ICEOD

At BOD - Stage
- ILBATCH
- ICEOD
- ILMBCCC1
- ILMBCCC2

The various mandatory programs are show below:
4.15 Maintaining Mandatory Batch Programs

You can maintain the following mandatory batch programs using ‘Mandatory Batch Program Maintenance’ screen.

- ILBATCH during End of Transaction Input
- ICEOD during End of Transaction Input
- ILBATCH during BOD
- ICEOD during BOD:
- Batch processing ILMBCCC1:
- Batch processing ILMBCCC2:
- Batch processing ILMJJOBS:

4.16 IC Processing for Account Structures

Interest resolution for customer accounts with non-integrated LM IC products is carried out by the system at the time of saving the accounts. In the case of customer accounts with integrated LM type of IC product, System Account records for the customer accounts are created after the account structure has been maintained. The system accounts are created on the basis of their account type (Header and Reallocation) and are resolved in a similar manner to customer accounts.

The following points need to be considered for IC processing:
- The Header Account is identified on the basis of system account level
- Details of dates for liquidation/accrual/calculation and previous liquidation for the various ILM type products linked to a customer account are stored when a new system account is created.
- The Account Type of the System Account and the ILM type of formula determine how interest is computed and if the accounting entries for accrual or liquidation should be suppressed or not.
- The re-allocation interest is computed on the basis of the respective IC condition that is associated with each System Account Type. This is based on Child Account’s contribution to the Parent Account.
- Value dated contribution of the Child Account to/from the Parent Account is kept track of
- The interest amount for the System Accounts can be calculated by checking the ‘Pool Benefit’ box at the Group level.

A change in UDE values does not impact the resolution of System Accounts since both the UDEs and the UDE values are taken from the corresponding Customer Account of each System Account.

The UDE values are maintained in the Node and the same is picked up for interest calculation. If the UDE values are changed for an effective date, the IC calculations will be based on the new UDE value as on that effective date.

A back valued change in a UDE value leads to a back valuation for the following:
- The relevant System Account and the corresponding subsequent System Accounts
- The Pool System Accounts to which the UDE belonged to as of the UDE effective date till date.

For ILM type of products, the Balance SDEs used for the calculation of the Pool System Accounts are the consolidated pool balance and for the System Accounts it is the System Accounts independent balances. For non ILM type of products the balances are taken from the customer accounts.

The System Account interests which are affected by BVT are recalculated and will be compared with the interest posted during that period. The adjustment entry to the System Account will be the difference of interest computed and interest posted.

The adjustment entry due to BVT is maintained in the corresponding Booking Account of the System Account maintained in the Account Structure Maintenance.

If the interest calculated cannot be posted due to the closure of the booking account maintained for the System Account in the Account Structure, then the system will post the interest entry to the suspense account maintained.

The System Accounts considered for calculation are those which:
- belong to the current period,
- belong to the last period, and
- are enabled for BVT (back value transaction) processing

The reallocation of interest depends on the interest conditions (based on the Value Dated Sweep Amounts) set up on the Child Accounts. The system obtains the interest rates for calculating re-allocation interest from the UDEs specified in IC Maintenances.

The interest so derived on the contribution of the child accounts is re-allocated to the respective child accounts.
4.17 Integrated Liquidity Management Processing

The subsequent sections of this chapter explains the various processes (real time, intra day and end of day) performed by the system as part of ILM processing.

4.18 Validation of Account Structure

The system automatically validates the account structure that you have maintained. You can run this batch process anytime during the day to check the validity of account structures. If you have modified the account structure details, you need to manually run the validation.

The system will execute the validation batch as part of ILM Processing (Intra-day or End of Day) for all account structures which have not been validated.

4.19 End of Day Processing

4.19.1 Generating System Accounts

An account can play the role of child or parent in an account structure. For this purpose (and to help in the processing of corrections such as back value dated transactions), Oracle FLEXCUBE creates system accounts. This helps the system to identify the role of the account in a structure at any point of time.

The resolution for generation of system accounts is as follows:

- The system identifies all the active groups in the branch to which the accounts are linked in Account Structure Maintenance. The system also identifies all the accounts in the Account Structure.
- The system identifies the ultimate parent account or Header Account linked to the group in a structure creates System Accounts for the given structure. The system accounts are created for every account.
- The system assigns level called System Account level apart from the level of the account in the structure that you have maintained.

For instance, in the illustration explained under the section 'Linking Account Structure to Group Code', the Account Structure for the Group GRP is maintained as:

<table>
<thead>
<tr>
<th>Child Account</th>
<th>Parent Account</th>
<th>IL Relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HACC</td>
<td>GRP</td>
<td>C</td>
</tr>
<tr>
<td>HACC</td>
<td>HACC</td>
<td>P</td>
</tr>
<tr>
<td>PACC1</td>
<td>HACC</td>
<td>C</td>
</tr>
<tr>
<td>PACC2</td>
<td>HACC</td>
<td>C</td>
</tr>
<tr>
<td>PACC1</td>
<td>PACC1</td>
<td>P</td>
</tr>
<tr>
<td>PACC2</td>
<td>PACC2</td>
<td>P</td>
</tr>
<tr>
<td>CACC1</td>
<td>PACC1</td>
<td>C</td>
</tr>
<tr>
<td>CACC2</td>
<td>PACC2</td>
<td>C</td>
</tr>
<tr>
<td>CACC3</td>
<td>PACC2</td>
<td>C</td>
</tr>
</tbody>
</table>
The System Account is created for the above mentioned Account Structure as follows:

<table>
<thead>
<tr>
<th>Account</th>
<th>IL Relation As</th>
<th>System Account</th>
<th>Account Level</th>
<th>System Account Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HACC</td>
<td>Parent</td>
<td>T3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>HACC</td>
<td>Header</td>
<td>T4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>PACC1</td>
<td>Child</td>
<td>T1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PACC2</td>
<td>Child</td>
<td>T2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PACC1</td>
<td>Parent</td>
<td>S3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>PACC1</td>
<td>Header</td>
<td>S4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>PACC2</td>
<td>Parent</td>
<td>S6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>PACC2</td>
<td>Header</td>
<td>S7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>CACC1</td>
<td>Child</td>
<td>S1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>CACC2</td>
<td>Child</td>
<td>S2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>CACC3</td>
<td>Child</td>
<td>S5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

- The System Account will have the same account Class, currency and customer ID as that of the customer account.
- The attributes defined in the Account Structure Maintenance are carried forward for the corresponding System Accounts.

### 4.19.2 Sweeping and Pooling

During End of Day (EOD) process, you can execute the sweep process for integrated liquidity management.

When you execute this process, based on your specifications, funds are swept between accounts in a structure. That is:

- In a multi-tiered sweep structure, sweeps of a lower level will be done before the sweeps of a higher level.
- System identifies the level of the System Accounts and the contribution of each account to its respective Pool is calculated. This information is stored at the Account + System Account + Effective Date level.
- For Notional Pooling structures, the system consolidates balances of all accounts that are part of the Notional Pooling structure and calculates the pool balance.
- For sweeping structures, system will also post accounting entries as follows:

<table>
<thead>
<tr>
<th>Dr</th>
<th>Contributing Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cr</td>
<td>Receiving Account</td>
<td>Amount</td>
</tr>
</tbody>
</table>

- The value date and posting date for the entries will be the date on which the sweep is actually executed.
- If a sweep cannot be executed because of any reason, the system stores the information for reporting.
4.19.3 EOD Processing for Sweeps

All sweeps will be single currency sweeps. During EOD:

- Based on the choice of ‘Sweep Type’, the system will process as follows:
  
  - **Sweep In**: The minimum balance to be maintained in the Child Account is considered as ‘Amount’. This sweep will be affected only if the account balance at EOD falls below this number. The funds will be swept into the child account from the parent.
  
  - **Sweep Out**: The maximum balance to be maintained in the child account is considered as the ‘Amount’. This sweep will be affected only if the account balance at EOD is above this number. The funds will be swept out the child account to the parent.
  
  - **Target Balance**: The Target Balance for the Child Account is considered as the ‘Amount’. The funds will be moved in or out of the child account in order to maintain the Target balance at EOD.

- System will perform the sweep only if there are sufficient funds in the parent account to perform the sweep.

- Credit balance in the account as well as unused OD limit in the parent account would be treated as balance available for sweeping (if you have chosen the option ‘OD Limit Available’ for the Parent Account).

- The system will reverse the sweeps for which the ‘Reversal’ option has been selected.

4.19.4 Processing for Notional Pooling Structures

The processing for Notional Pooling structures is as follows:

- In case of Notional Pooling (NP) funds are actually not moved across accounts. However, the value dated balances of the Child accounts are kept track of.

- Notional Pooling is performed only for a single level. A single level NP structure can be defined above a multi level sweeping structure.

- Notional Pooling is an EOD process where system consolidates balances of all accounts that are part of the NP structure and calculates the Pool Balance.

The system converts the Child Account balances to Parent Account currency. This is done in order to arrive at the ultimate Pool Balance in terms of the Parent Account currency.

4.19.5 Batch process for Sweep Eligible Balance

To determine the Contribution Amount, the ILM batch considers the Sweep Eligible Balance instead of the Available Balance.

---

**Note**

The Sweep Ineligible Balance is populated from E-Gifts DEUPLOAD interface based on the ‘AIP Eligible’ value as Y or N. Any record with ‘AIP Eligibility’ set to N increases the Sweep InEligible balance by that amount.
5. Reports

5.1 Introduction

Reports provide details of various events in the life of a specific contract, or across contracts at a specific point of time. For every module in Oracle FLEXCUBE, you can generate reports. This chapter details out the reports that you can generate from Integrated Liquidity Management module of Oracle FLEXCUBE.

You can generate the following report for the Integrated Liquidity Management module:

- Account Structure Report

5.2 Account Structure Report

Account structure report provides information on the type of account, whether the account is a parent type account or child type account and effective date of each account. You can set preferences as to generation of the report using ‘Account Structure Report’ screen. To invoke the screen, type ‘ILRTQURY’ in the field at the top right corner of the Application tool bar and click the adjoining arrow button.

5.2.1 Report Options

You can set your preferences for report generation on this screen.

Group Code

Specify the group code for which you are generating the report. The option list displays all valid group codes maintained in the system. Choose the appropriate one.

Once you have specified the group code, click OK button. The system displays the print option screen. Here, you can set your preferences as to printing the report. Click OK button to print the report.

5.2.2 Contents of the Report

The contents of Account Structure report have been discussed under the following heads:
Header
The ‘Header’ carries the title of the report, branch code, branch date, user ID, module from which the report has been generated, date and time at which the report has been generated and the page number of the report.

Body of the Report
You can find the following details in the body of the report:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Field Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Code</td>
<td>The code that identifies the branch.</td>
</tr>
<tr>
<td>Account</td>
<td>The account number for which the corresponding details are provided.</td>
</tr>
<tr>
<td>Account Type</td>
<td>The account type displays whether the Account is a Parent type account or child type account.</td>
</tr>
<tr>
<td>Effective Date</td>
<td>The effective date of the corresponding account.</td>
</tr>
</tbody>
</table>
6. Annexure A - Accounting Entries

6.1 Accounting Entries for ILM

This Annexure lists the suggested event-wise accounting entries that can be set up, for the Interest and Charge product applicable for the Integrated Liquidity Management module of Oracle FLEXCUBE.

6.2 Events

You need to set up the following events for an Interest product:

<table>
<thead>
<tr>
<th>Event Code</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILIQ</td>
<td>Interest Liquidation</td>
</tr>
<tr>
<td>IACR</td>
<td>Interest Accruals</td>
</tr>
</tbody>
</table>

6.3 Amount Tags

The following amount tags are available:

- IACR
- IACR_ADJ
- ILIQ
- IACQUIRED
- TAX
- TAX_ADJ

6.4 Accounting Roles

The following accounting roles are available:

- PHR1-ACCR-1
- PHR1-ACCR-2
- PHR1-ACQUIRED-1
- PHR1-ACQUIRED-2
- PHR1-ACR_ADJ-1
- PHR1-ACR_ADJ-2
- PHR1-PNL-1
- PHR1-PNL-2
- PHR1-PNL_ADJ-1
- PHR1-PNL_ADJ-2
- PHR1-TPBL-3
- PHR1-BOOK-1
- PHR1-BOOK-2
- PHR1-BOOK-3
- PHR1-TPBL_ADJ-3
6.5 Event-wise Accounting Entries for Products

You can set up various IC products for liquidity management. Some representative products are listed below:

- Pool Header
- Pool Reallocation
- Normal Debit and Credit Interest

6.5.1 Pool Header

You can set up event-wise accounting entries and advices for the product as suggested below:
6.5.1.1 IACR: Interest Accrual

Accounting Entries

<table>
<thead>
<tr>
<th>Accounting Role</th>
<th>Amount Tag</th>
<th>Dr/Cr Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHR1-PNL-1</td>
<td>IACR</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-ACCR-1</td>
<td>IACR</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-PNL_ADJ-1</td>
<td>IACR_ADJ</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-ACR_ADJ-1</td>
<td>IACR_ADJ</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-PNL-2</td>
<td>IACR</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-ACCR-2</td>
<td>IACR</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-PNL_ADJ-2</td>
<td>IACR_ADJ</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-ACR_ADJ-2</td>
<td>IACR_ADJ</td>
<td>Credit</td>
</tr>
</tbody>
</table>

6.5.1.2 ILIQ: Interest Liquidation

Accounting Entries

<table>
<thead>
<tr>
<th>Accounting Role</th>
<th>Amount Tag</th>
<th>Dr/Cr Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHR1-ACCR-1</td>
<td>ILIQ</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-BOOK-1</td>
<td>ILIQ</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-ACQUIRED-1</td>
<td>IACQUIRED</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-BOOK-1</td>
<td>IACQUIRED</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-ACQUIRED-2</td>
<td>IACQUIRED</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-BOOK-2</td>
<td>IACQUIRED</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-ACCR-2</td>
<td>ILIQ</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-BOOK-2</td>
<td>ILIQ</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-TPBL-3</td>
<td>TAX</td>
<td>Credit</td>
</tr>
<tr>
<td>PHR1-BOOK-3</td>
<td>TAX</td>
<td>Debit</td>
</tr>
<tr>
<td>PHR1-TPBL_ADJ-3</td>
<td>TAX_ADJ</td>
<td>Credit</td>
</tr>
</tbody>
</table>

6.5.2 Pool Reallocation

6.5.2.1 IACR: Interest Accrual

Accounting Entries
6.5.2.2 **ILIQ: Interest Liquidation**

**Accounting Entries**

<table>
<thead>
<tr>
<th>Accounting Role</th>
<th>Amount Tag</th>
<th>Dr/Cr Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLC1-ACCR-1</td>
<td>ILIQ</td>
<td>Credit</td>
</tr>
<tr>
<td>PLC1-BOOK-1</td>
<td>ILIQ</td>
<td>Debit</td>
</tr>
<tr>
<td>PLC1-ACQUIRED-1</td>
<td>IACQUIRED</td>
<td>Credit</td>
</tr>
<tr>
<td>PLC1-BOOK-1</td>
<td>IACQUIRED</td>
<td>Debit</td>
</tr>
<tr>
<td>PLC1-ACQUIRED-2</td>
<td>IACQUIRED</td>
<td>Debit</td>
</tr>
<tr>
<td>PLC1-BOOK-2</td>
<td>IACQUIRED</td>
<td>Credit</td>
</tr>
<tr>
<td>PLC1-ACCR-2</td>
<td>ILIQ</td>
<td>Debit</td>
</tr>
<tr>
<td>PLC1-BOOK-2</td>
<td>ILIQ</td>
<td>Credit</td>
</tr>
<tr>
<td>PLC1-TPBL-3</td>
<td>TAX</td>
<td>Credit</td>
</tr>
<tr>
<td>PLC1-BOOK-3</td>
<td>TAX</td>
<td>Debit</td>
</tr>
<tr>
<td>PLC1-TPBL_ADJ-3</td>
<td>TAX_ADJ</td>
<td>Credit</td>
</tr>
<tr>
<td>PLC1-BOOK-3</td>
<td>TAX_ADJ</td>
<td>Debit</td>
</tr>
</tbody>
</table>

6.5.3 **Normal Debit and Credit Interest**

You can set up event-wise accounting entries and advices for the product as suggested below:
### 6.5.3.1 IACR: Interest Accrual

**Accounting Entries**

<table>
<thead>
<tr>
<th>Accounting Role</th>
<th>Amount Tag</th>
<th>Dr/Cr Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>NINT-PNL-1</td>
<td>IACR</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-ACCR-1</td>
<td>IACR</td>
<td>Credit</td>
</tr>
<tr>
<td>NINT-PNL_ADJ-1</td>
<td>IACR_ADJ</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-ACR_ADJ-1</td>
<td>IACR_ADJ</td>
<td>Credit</td>
</tr>
<tr>
<td>NINT-PNL-2</td>
<td>IACR</td>
<td>Credit</td>
</tr>
<tr>
<td>NINT-ACCR-2</td>
<td>IACR</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-PNL_ADJ-2</td>
<td>IACR_ADJ</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-ACR_ADJ-2</td>
<td>IACR_ADJ</td>
<td>Credit</td>
</tr>
</tbody>
</table>

### 6.5.3.2 ILIQ: Interest Liquidation

**Accounting Entries**

<table>
<thead>
<tr>
<th>Accounting Role</th>
<th>Amount Tag</th>
<th>Dr/Cr Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>NINT-ACCR-1</td>
<td>ILIQ</td>
<td>Credit</td>
</tr>
<tr>
<td>NINT-BOOK-1</td>
<td>ILIQ</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-ACQUIRED-1</td>
<td>IACQUIRED</td>
<td>Credit</td>
</tr>
<tr>
<td>NINT-BOOK-1</td>
<td>IACQUIRED</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-ACQUIRED-2</td>
<td>IACQUIRED</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-BOOK-2</td>
<td>IACQUIRED</td>
<td>Credit</td>
</tr>
<tr>
<td>NINT-ACCR-2</td>
<td>ILIQ</td>
<td>Debit</td>
</tr>
<tr>
<td>NINT-BOOK-2</td>
<td>ILIQ</td>
<td>Credit</td>
</tr>
</tbody>
</table>
7. Annexure B – IC Rule Set-up

7.1 Introduction

This Annexure lists the Interest and Charge (IC) rules that need to be maintained for the Integrated Liquidity Management module of Oracle FLEXCUBE. It also gives the UDEs and rates for which values need to be maintained.

7.2 IC Rule Maintenance

The components required to calculate interest (the principal, period, and rate) are broadly referred to as ‘Data Elements’. Data elements are of two types:

- System Data Elements (SDEs)
- User Data Elements (UDEs)

In addition to specifying how the SDEs and UDEs are connected through the formulae, you also define certain other attributes for a rule using the ‘Interest and Charges Rule Maintenance’ screen. You can invoke this screen by typing ‘ICDRLMNT’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

For details about the screen, refer the chapter ‘Maintaining Interest Rules’ in the Interest and Charges User Manual.

You can maintain rules for the following:

- Pool Header
- Pool Reallocation
- Normal Debit and Credit Interest
7.2.1 **Pool Header**

Specify the following details:

**On Account Opening Month**
Check this box.

**On Account Closure Month**
Check this box.

**SDE**
Maintain the following SDEs:
- DAYS
- ILVD_ULT_CR_BAL
- ILVD_ULT_DR_BAL

**UDE**
Maintain the following UDEs:
- HDR_RATE
- HCR_RATE
- HTAX_RATE

**Type**
For each of the UDEs, select the option ‘Rate’ from the adjoining drop-down list.

**Get Latest**
For each of the UDEs, select the option ‘Use Effective’ from the adjoining drop-down list.

Click ‘Formulas’ button and invoke the ‘Formulas’ screen.

![Formulas Screen]

You need to maintain two booked and two tax formulae.

**Formula 1**
Specify the following details:
**Book Flag**
Select ‘Booked’ from the adjoining drop-down list.

**Periodicity**
Choose ‘Daily’ from the adjoining drop-down list.

**Debit/Credit**
Select ‘Debit’ from the adjoining drop-down list.

**Days in a Month**
Select ‘Actuals’ from the adjoining drop-down list.

**Days in a Year**
Select ‘365’ from the adjoining drop-down list.

**Accrual Required**
Check this box.

**Rounding Required**
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen.

Specify the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILVD_UTL_DR_BAL&gt;0</td>
<td>( ILVD_UTL_DR_BAL * DR_RATE * DAYS )/36500</td>
</tr>
</tbody>
</table>

**Formula 2**

Specify the following details:

**Book Flag**
Select ‘Booked’ from the adjoining drop-down list.

**Periodicity**
Choose ‘Daily’ from the adjoining drop-down list.
Debit/Credit
Select ‘Credit’ from the adjoining drop-down list.

Days in a Month
Select ‘Actuals’ from the adjoining drop-down list.

Days in a Year
Select ‘365’ from the adjoining drop-down list.

Accrual Required
Check this box.

Rounding Required
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen. In this screen, you need to maintain the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILVD_UTL_CR_BAL&gt;0</td>
<td>( ILVD_UTL_CR_BAL * CR_RATE * DAYS )/36500</td>
</tr>
</tbody>
</table>

Formula 3

Specify the following details:

Book Flag
Select ‘Tax’ from the adjoining drop-down list.

Periodicity
Choose ‘Periodic’ from the adjoining drop-down list.

Debit/Credit
Select ‘Debit’ from the adjoining drop-down list.

Days in a Month
Select ‘Actuals’ from the adjoining drop-down list.

Days in a Year
Select ‘Actuals’ from the adjoining drop-down list.

Rounding Required
Check this box.

Tax Category
Select ‘TAXAPPLIC’ from the adjoining drop-down list.

Basis Percent
Specify ‘100’ as the basis percent.

Local Currency Basis
Check this box.

Tax Payable Currency Flag
Specify ‘Local Currency’ here.
Basis Amount Option
Select 'Currency Default' from the adjoining drop-down list.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen. In this screen, you need to maintain the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMULA1&gt;0</td>
<td>ROUND(FORMULA1*HTAX_RATE/100,2)</td>
</tr>
</tbody>
</table>

**Formula 4**

Specify the following details:

**Book Flag**
Select 'Tax' from the adjoining drop-down list.

**Periodicity**
Choose ‘Periodic’ from the adjoining drop-down list.

**Debit/Credit**
Select 'Debit' from the adjoining drop-down list.

**Days in a Month**
Select ‘Actuals’ from the adjoining drop-down list.

**Days in a Year**
Select ‘365’ from the adjoining drop-down list.

**Rounding Required**
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen. In this screen, you need to maintain the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMULA2&gt;0</td>
<td>ROUND(FORMULA2* HTAX_RATE / 100,2)</td>
</tr>
</tbody>
</table>

### 7.2.2 Pool Reallocation

Specify the following details:

**On Account Opening Month**
Check this box.

**On Account Closure Month**
Check this box.

**SDE**
Maintain the following SDEs:

- DAYS
- ILVD_CP_CR_CONT
- ILVD_CP_DR_CONT
- ILVD_NCP_CR_CONT
- ILVD_NCP_DR_CONT

**UDE**
Maintain the following UDEs:
- CDR_RATE
- CCR_RATE
- CTAX_RATE

**Type**
For each of the UDEs, select the option ‘Rate’ from the adjoining drop-down list.

**Get Latest**
For each of the UDEs, select the option ‘Use Effective’ from the adjoining drop-down list.

Click ‘Formulas’ button and invoke the ‘Formulas’ screen. You need to maintain two booked and one tax formulae.

**Formula 1**
Specify the following details:

**Book Flag**
Select ‘Booked’ from the adjoining drop-down list.

**Periodicity**
Choose ‘Daily’ from the adjoining drop-down list.

**Debit/Credit**
Select ‘Debit’ from the adjoining drop-down list.

**Days in a Month**
Select ‘Actuals’ from the adjoining drop-down list.

**Days in a Year**
Select ‘365’ from the adjoining drop-down list.

**Rounding Required**
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen. You need to maintain three booked and three non-booked formulae.

**Formula 1**
Specify the following expression:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ILVD_CP_DR_CONT + ILVD_NCP_DR_CONT ) &gt; 0</td>
<td>(( ILVD_CP_DR_CONT + ILVD_NCP_DR_CONT ) * CDR_RATE * DAYS ) / 36500</td>
</tr>
</tbody>
</table>

**Formula 2**
Specify the following details:
Book Flag
Select ‘Booked’ from the adjoining drop-down list.

Periodicity
Choose ‘Daily’ from the adjoining drop-down list.

Debit/Credit
Select ‘Credit’ from the adjoining drop-down list.

Days in a Month
Select ‘Actuals’ from the adjoining drop-down list.

Days in a Year
Select ‘365’ from the adjoining drop-down list.

Rounding Required
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen. In this screen, you need to maintain the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ILVD_CP_CR_CONT + ILVD_NCP_CR_CONT ) &gt; 0</td>
<td>(( ILVD_CP_CR_CONT + ILVD_NCP_CR_CONT ) * CCR_RATE * DAYS ) / 36500</td>
</tr>
</tbody>
</table>

Formula 3

Specify the following details:

Book Flag
Select ‘Tax’ from the adjoining drop-down list.

Periodicity
Choose ‘Periodic’ from the adjoining drop-down list.

Debit/Credit
Select ‘Debit’ from the adjoining drop-down list.

Days in a Month
Select ‘Actuals’ from the adjoining drop-down list.

Days in a Year
Select ‘365’ from the adjoining drop-down list.

Rounding Required
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen. In this screen, you need to maintain the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMULA2&gt;0</td>
<td>ROUND(FORMULA2* CTAX_RATE / 100,2)</td>
</tr>
</tbody>
</table>
7.2.3 Normal Debit and Credit Interest

Specify the following details:

On Account Opening Month
Check this box.

On Account Closure Month
Check this box.

SDE
Maintain the following SDEs:
- DAYS
- VD_DLY_CR_BAL_M
- YEAR

UDE
Maintain the following UDEs:
- NORMAL_RATE1
- NORMAL_RATE2
- AMOUNT1
- TAX1

Type
For each of the UDEs, select the option ‘Rate’ from the adjoining drop-down list.

Get Latest
For each of the UDEs, select the option ‘Use Effective’ from the adjoining drop-down list.

Click ‘Formulas’ button and invoke the ‘Formulas’ screen. You need to maintain two booked formulae.

Formula 1
Specify the following details:

Book Flag
Select ‘Booked’ from the adjoining drop-down list.

Periodicity
Choose ‘Daily’ from the adjoining drop-down list.

Debit/Credit
Select ‘Debit’ from the adjoining drop-down list.

Days in a Month
Select ‘Actuals’ from the adjoining drop-down list.

Days in a Year
Select ‘Actuals’ from the adjoining drop-down list.

Accrual Required
Check this box.
Interest Method Default from Currency Definition
Check this box.

Rounding Required
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen.

Specify the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLY_NET_BAL_M &lt; 0</td>
<td>(DLY_NET_BAL_M<em>DR_RATE</em>DAYS)/(365*100)</td>
</tr>
</tbody>
</table>

**Formula 2**

Specify the following details:

**Book Flag**
Select ‘Booked’ from the adjoining drop-down list.

**Periodicity**
Choose ‘Daily’ from the adjoining drop-down list.

**Debit/Credit**
Select ‘Credit’ from the adjoining drop-down list.

**Days in a Month**
Select ‘Actuals’ from the adjoining drop-down list.

**Days in a Year**
Select ‘Actuals’ from the adjoining drop-down list.

**Accrual Required**
Check this box.

**Interest Method Default from Currency Definition**
Check this box.

**Rounding Required**
Check this box.

Click ‘Formula Wizard’ button and invoke the ‘Formula Wizard’ screen. In this screen, you need to maintain the following expressions:

<table>
<thead>
<tr>
<th>Case</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLY_NET_BAL_M &gt; 0</td>
<td>(DLY_NET_BAL_M<em>CR_RATE</em>DAYS)/(365*100)</td>
</tr>
</tbody>
</table>

**7.3 UDE Value Maintenance**

You can maintain UDE values for the rules using the ‘Interest & Charges User Data Element Maintenance’ screen. You can invoke the ‘Interest & Charges User Data Element
Maintenance’ screen by typing ‘ICDUDVAL’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

For details about the screen, refer the chapter ‘Giving UDE Values for Condition’ in the Interest and Charges User Manual.

In this screen, you need to maintain the following UDEs for the different IC products. Assume that you have maintained the following IC products:

- Interest on term deposit payable quarterly
- Interest on term deposit payable monthly
- Interest on deposits for NRI customers
- Recurring deposit interest product

7.3.1 **Interest on Term Deposit Payable Quarterly**

You need to maintain values for the following UDEs under this product:

- TD_RATE1
- TD_RATE2
- TD_RATE3
- TD_RATE4
- CA_IN1
- CA_IN2
- CA_IN3
- CA_IN4
7.3.2 **Interest on term deposit payable monthly**

You need to maintain values for the following UDEs under this product:

- TD_RATE
- PENALTY_RATE
- TAX_RATE

7.3.3 **Interest on deposits for NRI customers**

You need to maintain values for the following UDEs under this product:

- TD_RATE1
- TD_RATE2
- TD_RATE3
- TD_RATE4
- CA_IN1
- CA_IN2
- CA_IN3
- CA_IN4
- TAX_RATE

7.3.4 **Recurring deposit interest product**

You need to maintain values for the following UDEs under this product:

- TD_RATE1
- TD_RATE2
- TD_RATE3
- TD_RATE4
- PREPAYMENT_RATE
- OVERDUE_AMOUNT
- TAX_RATE
7.4 IC Rates Maintenance

You can maintain rate codes for branches using the “Interest & Charges Branch Availability Maintenance” screen. You can invoke this screen by typing ‘ICDRESTR’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

You need to maintain the following rate codes for all branches of your bank:

- PERIODIC_1
- PERIODIC_2
- PERIODIC_3
- PERIODIC_4
- PENALTY_1
- PENALTY_2
- PENALTY_3
- PENALTY_4
- TAX_RATE
- PREPAY_RATE
- PERIODIC_1
- PERIODIC_2
- PERIODIC_3
- PERIODIC_4
- PENALTY_1
- PENALTY_2
- PENALTY_3
- PENALTY_4
- TAX_RATE
- PREPAY_RATE
For the aforesaid rate codes, you need to maintain rates and effective dates in the ‘Interest and Charges Rate Input’ screen. You can invoke the ‘Interest and Charges Rate Input’ screen by typing ‘ICDRATES’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

These rates are picked up by the TD module while processing interest applicable on a TD account.

Refer the chapter ‘Floating Rate Codes for IC Module’ for details about rate maintenance.
## 8. Function ID Glossary

| C         | ILDGRPCD ......................... | 3-13 |
| CODUPLDM | ILDGRPLN .......................... | 3-22 |
| CSDACTCL | ILMIRAC ......................... | 3-16 |
| CYDCUSPR | ILDSWEEP ........................... | 3-18 |
| D         | ILRTQURY ........................... | 5-1  |
| DEDRTPRM | ISDBICDE .......................... | 4-1  |
| E         | MSDADVFT .......................... | 4-3  |
| EIDMANPE | MSDMDFMT .......................... | 4-2  |
| F         | MSDMSTYP .......................... | 4-4  |
| FTDRCST  | MSDMTUDF .......................... | 4-4  |
| I         | MSDPRDMP .......................... | 4-9  |
| ICDPRMNT | MSDSTPRF .......................... | 4-5  |
| ICDRLMNT | S                           |     |
| IFDATMMN | STDACCLS .......................... | 3-1  |
| ILDBRPRM | STDCIF ............................ | 3-7  |
| ILDGRPCD | STDCUSAC .......................... | 3-8  |
| ILDGRPLN | ILDGRPLN .......................... | 3-22 |
| ILMIRAC  | ILMIRAC .......................... | 3-16 |
| ILDSWEEP | ILMIRAC .......................... | 3-16 |
| ILRTQURY | ILMIRAC .......................... | 3-16 |
| ISDBICDE | ILMIRAC .......................... | 3-16 |
| MSDADVFT | ILMIRAC .......................... | 3-16 |
| MSDMDFMT | ILMIRAC .......................... | 3-16 |
| MSDMSTYP | ILMIRAC .......................... | 3-16 |
| MSDMTUDF | ILMIRAC .......................... | 3-16 |
| MSDPRDMP | ILMIRAC .......................... | 3-16 |
| MSDSTPRF | ILMIRAC .......................... | 3-16 |
| STDACCLS | ILMIRAC .......................... | 3-16 |
| STDCIF   | ILMIRAC .......................... | 3-16 |
| STDCUSAC | ILMIRAC .......................... | 3-16 |