Central Liability
Oracle FLEXCUBE Corporate Lending 12.1.0.0.0
[April] [2016]

Part No. E74823-01

ORACLE
FINANCIAL SERVICES

ORACLE

ORACLE®

Central Liability
[April] [2016]
Version 12.1.0.0.0

Oracle Financial Services Software Limited
Oracle Park
Off Western Express Highway
Goregaon (East)
Mumbai, Maharashtra 400 063
India
Worldwide Inquiries:
Phone: +91 22 6718 3000
Fax:+91 22 6718 3001
www.oracle.com/financialservices/
Copyright ©[2005], [2016] , Oracle and/or its affiliates. All rights reserved.

Table of Contents

ORACLE

ORACLE®

1. About this Manual

1.1 <u>Introduction</u>

This manual is designed to help you quickly get acquainted with the Central Liability module of Oracle FLEXCUBE.

It provides an overview to the module, and provides information on using the central liability module of Oracle FLEXCUBE.

Besides this User Manual, you can find answers to specific features and procedures in the Online Help, which can be invoked, by choosing 'Help Contents' from the *Help* Menu of the software. You can further obtain information specific to a particular field by placing the cursor on the relevant field and striking <F1> on the keyboard.

1.2 <u>Audience</u>

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

Role	Function
Back office clerk	Input functions for contracts
Back office managers/officers	Authorization functions
Product Managers	Product definition and authorization
End of day operators	Processing during end of day/ beginning of day
Financial Controller / Product Managers	Generation of reports

1.3 <u>Organization</u>

This manual is organized into the following chapters:

Chapter 1	*About this Manual* gives information on the intended audience. It also lists the various chapters covered in this User Manual.
Chapter 2	*Central Liability - an Overview* is a snapshot of the features that the module provides.
Chapter 3	*Maintaining Liability Details* – Gives information pertaining to the maintenance of liability details.
Chapter 4	*Maintaining Issuer Details* – Gives details on maintaining Issuer details.
Chapter 5	*Maintaining Security Details* — explains the maintenance of securities that you would accept as valid Collateral from your customers.
Chapter 6	*Maintaining Collateral Details* – describes the details of collateral offered to

ORACLE®

	back the credit that you grant under a credit line.
Chapter 7	*Setting up Limit Templates* - discusses how you can set up limit templates.
Chapter 8	*Maintaining Credit Limits* – talks about how you can assign limits on the credit you grant to your customers to make tracking effective.
Chapter 9	*Tracking Credit Limits* – deals with the tracking of credit limits.
Chapter 10	*Revaluation* – talks about the revaluation of credit limits.
Chapter 11	*Maintaining Collateral and Price Code Types* – talks about the maintenance of collateral's and price codes.
Chapter 12	*Tracking Unutilized Limit Lines* – discusses how you can define attributes specific to a Limits product.

1.4 <u>Related documents</u>

- The Procedures User Manual
- The Settlements User Manual

ORACLE

2. Central Liability — An Overview

2.1 Introduction

The bank's liability arises out of the credit facilities granted to the customers of the bank. The Central Liability (CL) module, which is at the core of Oracle FLEXCUBE, provides extensive facilities for monitoring limits and exposure across all the modules of Oracle FLEXCUBE.

Credit lines are set up for the various products handled by your bank like loans, foreign exchange, overdrafts etc. These lines are then linked to customers and their accounts. All transactions are then tracked against these credit lines. You can further set up credit limits for each customer-product combination.

All the front-end modules of Oracle FLEXCUBE are linked to the Central Liability subsystem. Every debit entry made to a customer account, by any of the front-end modules, is monitored by the Central Liability sub-system. Before the entries are booked, the system will check for the availability of funds. If the entry creates an overdraft situation, appropriate messages are flashed at the time of input as well as during authorization of such contracts.

2.2 Features

The module has certain unique features that help in the monitoring of limits and exposure across both customer and account levels. They are as follows:

Credit Line Definition

The process of monitoring liabilities revolves around defining credit limits, limits and liability numbers.

The hierarchy of lines and sub-lines can be established and separate credit limits can be assigned for them.

Depending on the characteristics of the line, they can be termed as revolving or Non-revolving.

- Revolving lines are those where a repayment increases the availability of funds against the line. On utilization of the limit under the line, whenever there is a repayment, it restores the amount of credit available to the original level.

- Non-revolving lines are those where a repayment does not increase the availability under the line. These lines are also called Special transaction Lines. For such lines, any utilization of the credit limit under the line reduces the availability under the line by an equivalent amount and a repayment does not restore availability under the line.

In addition, Oracle FLEXCUBE also handles 'omni-lines'. Omni-lines are global lines that are used across products or accounts.

Efficient Tracking of Liabilities

A customer may have several accounts and use several services offered by you in many of the modules of Oracle FLEXCUBE. You can set up limits at three different levels:

- Account level
- Customer level
- Customer group level

When a transaction is input, the system checks for availability of funds against the line before the actual booking is made. This check is made on-line across the front-end modules. Utilization against uncollected funds can also be tracked separately.

Definable Limit Enforcement

Oracle FLEXCUBE provides you the option to decide the extent to which the limits that you have defined should be enforced. You can configure it to be one of the following:

- Override messages - indicating that when a limit excess is encountered the user has the option to override the situation and continue with processing the transaction. This will be recorded as an "override" and will be reported whenever the details of the transaction are retrieved.
- Error messages - indicating that a transaction cannot be stored if a limit has been busted as a result of the transaction.
- Ignore messages - indicating that the limit excess need not result in an error message. A message will be displayed when the transaction is stored. However, the transaction can be saved inspite of the limit excess.

Revaluation of Exposure

The setting up of Limits involves different types of currencies and collateral backed by marketable securities. Exchange rates and the value of marketable securities are driven by market forces and hence tend to fluctuate over a period of time.

Hence, Oracle FLEXCUBE provides for revaluation so that the limits that have been set are realistic and reflect the current market trends. In Oracle FLEXCUBE revaluation is of two types:

Limits Revaluation

The exposure against individual limits may include accounts in more than one currency. On account of exchange rate fluctuations the actual exposure may vary from day to day without balance movement. Your exposure after the currency change will be automatically updated and tracked.

Collateral Revaluation

A change in the market price of a marketable security backing collateral beyond the sensitivity range that you specify sparks off a revaluation of the collateral contribution to the credit limit.

Restrictions

The system provides the option to define currency restrictions for credit lines. If this option is selected, Oracle FLEXCUBE ensures that the currency of the credit utilization and the line are not different.

If you do not specify currency restrictions, the account currency and the line currency can be different. In this case, the exchange rate as of the day is used to convert the contract amount into the line currency before checking for availability of funds.

Marketable and Non-marketable Collateral

The collateral that the customer offers can back the credit limit that you grant under a credit line. A collateral can back only one credit line but each credit line can be backed by several collateral.

ORACLE®

By default, the entire value of a collateral will contribute to the credit limit assigned to the customer. In some cases, you may not wish to offer the entire face value of the collateral as the credit limit. In such a case, you can set aside a margin and offer the rest as the limit contribution.

The credit that you grant to the customers of your bank can backed by collateral which in turn are backed by a Marketable or a Non-Marketable security.

A Marketable Security is one that is highly liquid on account of the fact that there is a ready market where they can be traded. The forces of short-term demand and supply that operate in the markets where these securities are traded determine the value of the marketable security. Bonds, Shares and Debentures are examples of marketable security.

There are categories of marketable security that, although the investor might be able to market, he or she will consider them a fixed part of the portfolio. These are considered to be Non-Marketable security. A non-marketable security is not tradable and hence is not liquid in nature. Long-term forces of demand and supply drive the value of such assets.

For example, investors who own their own home can market it, but they will not often consider switching houses as part of changes in their 'investment portfolio'. This is due in part, to large transaction costs and also because of non-monetary factors. Other examples of non-marketable assets are social security payments, retirement benefits etc.

A marketable security used as collateral would imply a '*Marketable Collateral*'. A non-marketable security used as collateral would imply a '*Non-Marketable*' collateral.

Securities are issued with a set of specifications that determine their market value. Standard specifications include the general features of the issuer's company like, board of directors, company balance sheets, projection of company investments, etc. The bank would be interested in recording the specific features hence Oracle FLEXCUBE provides for the capturing of information like the type of security (shares or debentures), issuer details, validity of the security (start and end dates) etc.

Since market forces drive market-based securities, the price of such securities tends to rise or fall in value. These fluctuations have a direct effect on the collateral value of the security and Oracle FLEXCUBE provides a feature to update the value of a collateral if the value of the security that backs it fluctuates beyond the increase and decrease sensitivity that you specify.

Information services for managerial and statistical reporting

To assist your bank in the important function of limit monitoring, the module enables you to generate various reports, which can be viewed on the screen or printed. Based on your requirement, reports can be generated to show the position of the outstanding either at the end of a business day or real time.

The utilization made by a customer against a line is available in the form of a report. This report includes the utilization made due to contracts that the customer has entered into.

You can generate the following reports:

- Bank-wide Clean Risk Report
- Collateral Utilization by Collateral Party
- Collateral Utilization by Credit Line
- Country Exposure Report
- Credit Lines by Maturity Date
- Credit Movements Report

ORACLE®

- Credit Rating Report
- Foreign Exchange Clean Risk Report
- Issuer Exposure Report - By collateral type
- Issuer Exposure Report - By security
- Limits Exposure Report
- Overdrawn Lines Report
- Product Exposure Report

ORACLE

3. Maintaining Liability Details

3.1 Introduction

Every customer of your bank who enjoys credit facilities should be assigned or linked to a Liability Code, several customers can be linked to the same Liability Code. Therefore, you could have a customer, whose customer and Liability Code are the same.

This leads to a two level hierarchy, wherein the customers linked to a Liability Code are subordinate to it. Customers linked to a common Liability Code form what is called a customer group.

Consider a situation where a customer's Liability Code and Customer Code are the same. In such a case, Oracle FLEXCUBE tracks the liability of this customer against the limits granted to him.

Now, consider a scenario wherein the Liability Code is different from the Customer Code. In such a case, Oracle FLEXCUBE tracks the liability of this customer against its parent customer. This way you can enter the same liability structure for a group of customers. This feature is useful when you have several subsidiaries reporting to the same parent company.

If customers belonging to a group are linked to a common Liability Code you should also maintain limits for the Liability Code. The Liability Code is thus the parent against which the liability of a customer(s) is maintained and tracked.

Liability Code

Customer A   **Customer B**   **Customer C**

Customer Group
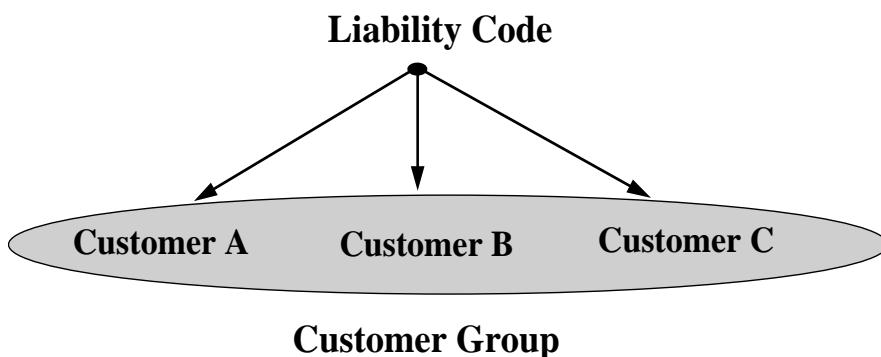
3.2 Invoking the Liability Maintenance screen

If the liability Id and CIF Id are different, you need to indicate the liability details in the 'Liability' maintenance screen'. Invoke the screen from the Application Browser under Limits Maintenance and thereafter Liabilities.

🛑 If the liability Id = CIF Id, the liability details for the customer are maintained in the 'Limits' screen from the Customer Information Maintenance File. Refer to the 'Core Entities' user manual for further information.

ORACLE®

3.2.1 Features of the Liability Details screen

You can maintain the following details for a Liability Code that you have specified in the CIF screen:

Specifying Liability ID and name

The liability Id should match with the Liability Id mask as specified in the Branch Parameters screen. You also need to enter the name of the liability customer.

Switching off credit monitoring

In Oracle FLEXCUBE, you can opt to switch off credit monitoring for the specified liability. Leave the box positioned next to the Limit Tracking field to enable this feature. Consequently, credit monitoring will not be done for customers linked to the specified liability.

If credit monitoring is switched off, the system will suppress the utilization of limits for the customers linked to the specified liability.

Defining an Overall Credit Limit for the Liability Code

To recall, several customers can be grouped under one Liability Code. Therefore, you should fix an overall credit limit for a Liability Code.

The aggregate utilization by the customers linked to this Liability Code cannot exceed the limit that you assign to the Liability Code.

Defining Clean Risk Limits for a Liability Code

The Liability Clean Risk limit indicates the maximum limit that all customers linked to a Liability Code can reach for foreign exchange transactions settling on a particular day.

This limit is the overall clean risk limit for the Liability Code. It means that all customers linked to a Liability Code cannot book FX deals settling on a particular day, beyond this limit.

However if the customer(s) linked to this Liability Code exceed the limit you specify here, you will be prompted with an appropriate message indicating that the Liability clean risk limit has been exceeded.

ORACLE

By defining a clean risk limit for a Liability Code, your bank can track its exposure to the foreign exchange deals entered into with customers linked to the Liability Code.

Rating a Customer's Credit Worthiness

Your bank may have its own convention of rating the credit worthiness of a customer. Based on this convention you can award a customer a rating, which indicates the credit worthiness of the customer, linked to this Liability Code.

Example

You want to specify the credit worthiness of a customer. If the rating convention at your bank is as follows:

Grade	Description
A	Excellent
B	Good
C	Satisfactory
D	Irregular
E	Sick

Here, you can specify the grade that portrays best, the credit worthiness of the customer in question

Defining a date by which the limits have to be revised

You can also specify the date on or before which you can revise the credit facilities granted to a Liability Code. A situation might arise when you would want to evaluate your customer's credit worthiness. Fixing this date will enable you to take suitable action as and when required.

The limits that you specify for a Liability Code will continue to remain effective beyond this date if you do not revise them on the day it is due. You can generate a report, which will display all those Liability Codes that are due for revision on the next day.

Regulating exposure by netting balances in customer accounts

You can opt to "net" the credit and debit balances in specific accounts of a customer to regulate your exposure to the customer.

🛑 You have to choose the netting option at three levels in order to regulate exposure to a customer:

- When defining limits for the accounts of the customer
- When maintaining Liability details for the customer
- When maintaining the Line linked to the Liability

The following example illustrates how netting facilitates regulation of your exposure to a customer.

Example

You would like to track your exposure to a customer, Edward Driffield (Global) Publishers. The company has four accounts with you, two of which are defined for netting, as follows:

ORACLE®

- Account 1 (Netting Required – Yes)
- Account 2 (Netting Required – No)
- Account 3 (not linked to any line)
- Account 4 (Netting Required – Yes)

You have maintained a Liability Code, L01, for the company, and linked a line OD1 to this Liability Code. You have chosen the netting option for both the liability (L01) and the line (OD1).

Since you have opted to net the balances in Account 1 and Account 4, the net credit balance of these accounts will increase the availability under the line OD1. The credit balance of Account 2 will not increase the availability under the line OD1. However, the debit balance of Account 2, Account 1 and Account 4 will increase the utilization under the line OD1.

Since Account 3 is not linked to any line, its balance, whether debit or credit, will not affect the tracking of your exposure to Edward Driffield (Global) Publishers.

🛑 All the entries you make in this screen are specific to the Liability Code. But the Foreign Exchange Clean Risk Limit, Securities Clean Risk Limit and Securities Pre Settlement Risk Limit can be specified for the Liability Code and the Customer separately under the sections 'Liability Risk Limit' and 'Customer Risk Limit' respectively.

3.2.1.1 <u>To view the Last Authorized data</u>

The View last authorized check box is enabled only in the Query mode (F7 and F8). Once you execute the query, the system will display the latest authorized version.

🛑 However, you are not allowed to create, copy, close, reopen or amend a record in the 'View Last Authorized' Mode.

ORACLE

4.   Maintaining Issuer Details

4.1 Introduction

A customer is granted credit on the basis of his credit worthiness. The credit worthiness of a customer can however depend on the assets that constitute the customer's portfolio. The type of collateral that a customer offers can be in the form of marketable or Non-Marketable Securities. Marketable collateral are driven by market forces and tend to fluctuate unpredictably. Therefore it is essential to monitor your exposure to the issuer of such collateral.

You can set up limits for the issuers of Collateral at two levels:

- An overall limit for each Issuer
- A limit for the Securities issued by an Issuer

4.2 Invoking the Issuer Details screen

In the Application Browser, this function is available under the module **Limits Maintenance**, under **Issuer**.
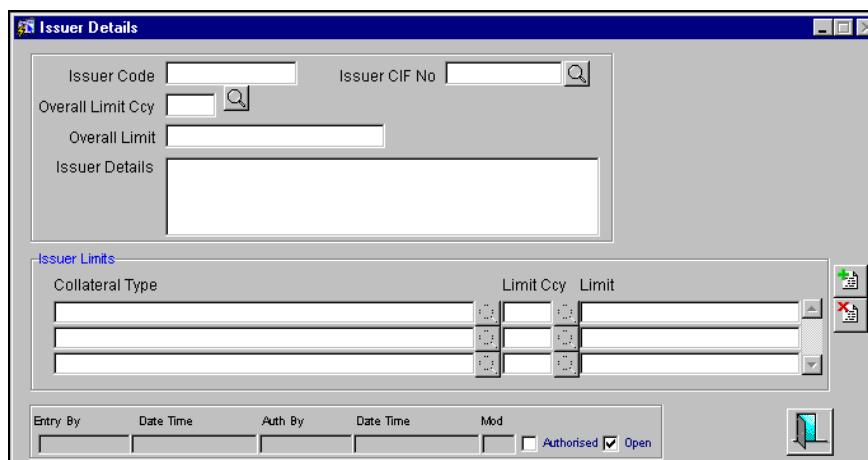
After you have made the required mandatory entries and saved the record, your user Id will be displayed in the **Entry by** field at the bottom of the screen. The date and time at which you saved the record will be displayed in the **Date Time** field.

A record created by you, should be authorized by a user bearing a different Login Id, before the EOD is run. Once the record is authorized, the Id of the user who authorized the record will be displayed in the **Auth By** field. The date and time at which the record has been authorized will be displayed in the **Date Time** field positioned next to the Auth By field. The status of the record will be displayed in the check box marked 'Authorized'. The field will remain unchecked until the record is authorized.

ORACLE

4.3 <u>Features of Issuer Details screen</u>

Specifying an Issuer Code

Each Issuer whose securities your bank accepts should be assigned a unique code. The Issuer will be identified by this code, besides you can use this code to retrieve information about the Issuer.

Example

Company Name	Issuer Code
Reliance Industries	Reliance
Tata Iron and Steel Company	TISCO
Tata Engineering and Locomotives	TELCO

Defining an Overall Limit for an Issuer

An issuer can issue different types of market based securities; these could be debentures, shares, bonds etc. By defining an overall limit for an Issuer, you can limit your exposure to the issuer. This limit indicates the maximum beyond which you would not like to expose yourself to the Issuer.

When the total of all the collateral given by your customer in the form of market based securities exceeds the limit specified for the Issuer, the system will prompt you with an appropriate message indicating that you have busted the limit.

Defining Limits for Collateral Types

An Issuer of securities can come out with issues of different types, which your customer can use as collateral for the credit he avails from your bank. These could be debentures, shares, bonds, commercial papers etc., these securities are referred to as Collateral types.

Collateral Type
Debentures
Shares
Commercial Papers
Bonds

For each security type that you accept as collateral from the issuer, you can specify a limit indicating the maximum amount (in value) that you would like to expose yourself to the issuer for this security type.

When the total of the collateral given by your customer in the form of a particular collateral type exceeds the limit set for the Issuer, the system will prompt you for an override.

ORACLE

Example

You wish to set up Issuer limits for the Issuer -- Creativity Inc. The overall exposure limit set for Reliance is 3M USD. Reliance issues Debentures, Shares, Commercial Papers and Bonds, which you accept from your customers as collateral.

You specify the following under issuer details:

Collateral Type	Limit	Currency
Debentures	500,000	USD
Shares	500,000	USD
Commercial Papers	1,000,000	USD
Bonds	2,000,000	USD

This indicates that at any given time your exposure to Creativity Inc. for debentures should not exceed $ 500,000.

The total of all the limits that you specify for each Collateral type can exceed the Overall limit for the Issuer. However your exposure to all the collateral types at a given time should not exceed the overall limit specified for the Issuer.

Example

You wish to set up Issuer limits for the Issuer -- Creativity Inc.

The overall exposure limit set for Creativity Inc. is 3M USD. Creativity Inc. issues Debentures, Shares, Commercial Papers and Bonds, which you accept as collateral from your customer.

Collateral Type	Limit	Currency
Debentures	500,000	USD
Shares	1,000,000	USD
Commercial Papers	1,000,000	USD
Bonds	2,000,000	USD
Total	USD 4,500,000	

In the example cited above you will notice that the sum of the limits specified for the Collateral types issued by the issuer amounts to 4,500,000M USD, whereas the overall limit specified for the issuer is 3M USD. What is important is that your exposure to all the collateral types at a given point in time should not exceed 3M USD.

ORACLE

5.   Maintaining Security Details

5.1 Introduction

The credit facilities granted to the customers of your bank under a Credit Line can be backed by the Securities that your customer offers as collateral. In this screen you can maintain a list of the Securities that you would accept as valid Collateral from your customers.

Securities are issued with a set of specifications that determine their market value. Standard specifications include the general features of the issuer's company like, board of directors, company balance sheets, projection of company investments, etc. The bank would be interested in recording the specific features like the type of security (shares or debentures), issuer details, validity of the security (start and end dates) etc.

This information can be accessed to determine the limit granted under a particular security and its credit worthiness when used as a collateral.

Since market based securities are driven by market forces, the price of such securities tends to rise or fall in value. These fluctuations have a direct effect on the collateral value of the security and Oracle FLEXCUBE provides a feature to update the value of a collateral if the value of the security that backs it fluctuates beyond the increase and decrease sensitivity that you specify.

5.2 Invoking Securities Maintenance Screen

To invoke this screen, choose **Security** under **Limits Maintenance** in the Application Browser. The detailed and the summary options will be displayed. The summary option displays details of the table in a tabular form while the detailed option displays all the details of the record.
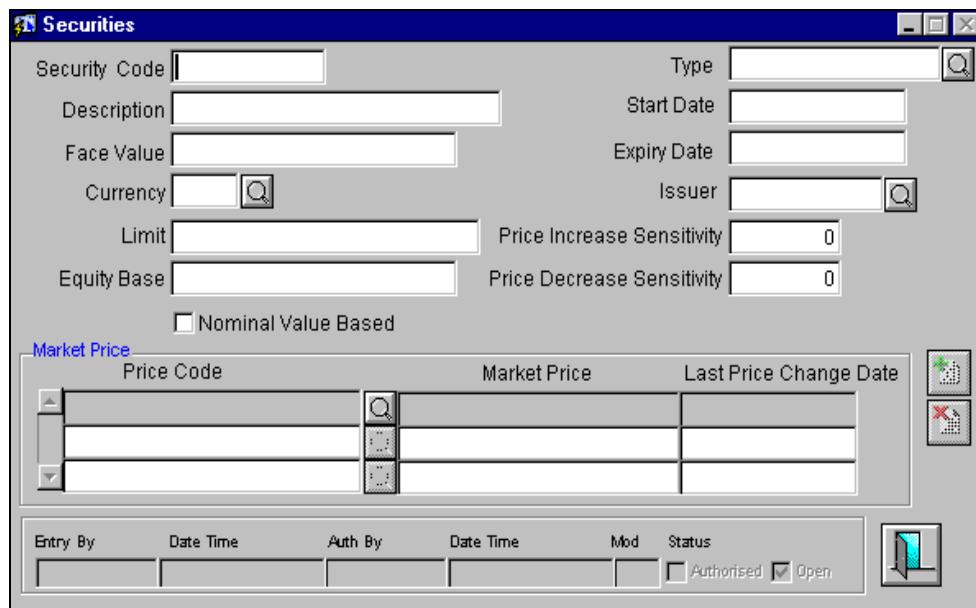
After you have made the required mandatory entries and saved the record, your user Id will be displayed in the **Entry by** field at the bottom of the screen. The date and time at which you saved the record will be displayed in the **Date Time** field.

ORACLE

A record created by you, should be authorized by a user other than you bearing a different User Id, before the EOD is run. Once the record is authorized, the Id of the user who authorized the record will be displayed in the **Auth By** field. The date and time at which the record has been authorized will be displayed in the **Date Time** field positioned next to the Auth By field. The status of the record will be displayed in the check box marked 'Authorized' The field will remain unchecked until the record is authorized.

5.3 Capturing Details of Marketable Securities

To maintain details of the marketable securities that your bank accepts as collateral, you should first assign a unique code to identify the security for which you are maintaining details. This code is called the Security Code.

For a Security Code you should capture the following details:

- Details of the issuer of the security
- The face or par value of the security in the currency in which it is quoted.
- For a tenor based securities (like bonds, debentures, etc.,) you can enter tenor details of the security

5.3.1 Capturing Price Related Details for Marketable Securities

Specifying the equity base of an issue

You can specify the equity base for the security i.e. The total amount raised by the issue of this security (this is for information purposes only.)

Example

Gem-granites has come out with Debentures '98 and has raised US $1 Million through this issue. This US $1M that Gem Granites has raised constitutes the equity base for Debentures '98.

Specifying the limit of exposure for a security

You can fix a limit on your exposure to a particular issue of the security. It indicates the maximum limit beyond which you would not expose yourself for this security.

An excess to this limit will be reported in limits related reports.

Example

Gem Granites has issued Debentures 98, which you accept as collateral from your customers. You have set the maximum limit for your exposure to this issue at US $200,000.

Issuer	Security	Maximum Exposure
Gem Granites	Debentures'98	US $200,000

This indicates that you will accept shares from Gem Granites for their issue Debentures'98 up to the tune of US $200,000. The value of each unit of Debentures'98 is determined by its market value.

Security	Date	Market value
Debentures '98	01 February 1998	US $150

Case 1

Your customer Wendy Klien pledges 1000 units of Debentures'98 with you on 01 February 1998. Based on the market value of the debenture the system calculates the value of the collateral. In our case it will be (1000 units x $150). This transaction will not bust the limit you specified for the issue.

Security	Date	Market value
Debentures 98	10, Feb'98	US $200

Case 2

Your customer Silas Reed pledges 250 units of Debentures'98 on 10 February 1998, which when calculated on the market value of the day amounts to $50,000. This transaction will not exceed the issuer limit you have set which is now 150,000 + 50,000 (250 units x $ 200).

Case 3

On 15 February 1998 your customer Tanya Agnihotri approaches you for a loan and offers 500 units of Debentures'98 worth US $50,000 as collateral. The collateral utilization related reports for the day will indicate that by processing this transaction, you exceeded the exposure limit for the security type Debentures'98.

Indicating the increase and decrease sensitivity

If the value of a collateral is backed by a marketable security (whose value is driven by market forces) you may want to revalue the collateral so that it's value reflects the current market price of the security, which backs it.

To do so, you should specify your sensitivity to the security. Your sensitivity to the security can be defined as the percentage increase or decrease (the upper and lower limits) beyond the current market price, which should trigger off the revaluation process.

The price sensitivity of a security is expressed as a percentage. You should specify the percentage increase or decrease (the upper and lower limits) above or below the current market price, which should trigger off the revaluation process. The revaluation process will automatically revalue the collateral if the price of the securities that backs it fluctuates above or below the sensitivity you have defined.

Increase sensitivity

Increase sensitivity denotes the percentage increase in the market price that should trigger a revaluation of the Collateral. This means, if the current market price of the security rises above the old market price by the percentage you have defined as the Increase sensitivity for the security, the revaluation process will be automatically triggered off.

Example

Consider a case wherein you have specified the price increase sensitivity for Debentures'98 to be 15%. If the market price of the security has increased from $100 to $125. At this rise in the market price of the security (which is 25% above the old market value), the revaluation process will be triggered off, so that the Collateral value of the security reflects it's current market value.

Decrease sensitivity

Decrease sensitivity denotes the percentage decrease in the market price of the security that should trigger a revaluation of the Collateral. This means, if the current market price of the security falls below the old market price by the percentage you have defined as the decrease sensitivity for the security, the revaluation process will be automatically triggered off.

ORACLE®

Example

Consider a case wherein you had specified the price decrease sensitivity of Debentures'98 to be 15%. If the market price of the security has decreased from US $100 to US $75. At this fall in the market price of the security (which is 33.33% below the old market value of the security), the revaluation process will be triggered off, so that the Collateral value of the security reflects it's current market price.

Maintaining market prices

If the security is quoted in different markets, its value would differ in different markets. You should capture their prices in different markets.

The Price Code indicates the market place for which the price is quoted, the market price, and the date on which the market price was last changed.

ORACLE

6. Maintaining Collateral Details

6.1 Introduction

The details of collateral offered to back the credit that you grant under a credit line are captured through the Collateral table.

A collateral can back only one credit line but each credit line can be backed by several collateral. The issuer of the collateral should have been assigned a code in the Issuer Maintenance screen and the security offered as collateral should have been maintained in the Security Maintenance screen.

By default, the entire value of a collateral will be considered for credit limit calculation. In some cases, you may not wish to offer the entire face value of the collateral as the credit limit. In such a case, you can set aside a margin and offer the rest as the limit contribution.

The details that you specify for a collateral are determined by whether it is backed by a Marketable or a Non-Marketable security.

A Marketable Security is one, which is highly liquid on account of the fact that there is a ready market where they can be traded. The value of a marketable security is determined by the forces of short-term demand and supply that operate in the markets where they are traded. Bonds, Shares and Debentures are examples of marketable security.

There are categories of marketable security that, although the investor might be able to market, he or she will consider them a fixed part of the portfolio. These are considered to be Non-Marketable security. A non-marketable security is not tradable and hence is not liquid in nature. The value of such assets is driven by long-term forces of demand and supply.

For example, investors who own their own home can market it, but they will not often consider switching houses as part of changes in their 'investment portfolio'. This is due in part, to large transaction costs and also because of non-monetary factors. Other examples of non-marketable assets are social security payments, retirement benefits etc.

A marketable security used as collateral would imply '*Marketable Collateral*'. A non-marketable security used as collateral would imply '*Non-Marketable*' collateral.

Securities are issued with a set of specifications that determine their market value. Standard specifications include the general features of the issuer's company like, board of directors, company balance sheets, projection of company investments, etc. The bank would be interested in recording the specific features like the type of security (shares or debentures), issuer details, validity of the security (start and end dates) etc.

Since market based securities are driven by market forces, the price of such securities tends to rise or fall in value. These fluctuations have a direct effect on the collateral value of the security and Oracle FLEXCUBE provides a feature to update the value of a collateral if the value of the security that backs it fluctuates beyond the increase and decrease sensitivity that you specify.

6.2 Invoking the Collateral Details screen

In the Application Browser this option is available under Limits Maintenance under Collaterals. In this screen you can specify the contribution that a collateral should make to the limit assigned to a customer under a credit line.

ORACLE

6.2.1 Specifying Details for a Collateral

Specifying a Collateral Code

To maintain details of a collateral that you accept from a customer, choose New from the Processing Menu or click from the toolbar. Then, from the picklist, select the credit line to which you want to link the collateral.

After this you should specify details of the security that backs the collateral. If the collateral is backed by a marketable collateral you should specify details of the marketable security. Marketable securities that can be used as collateral should be maintained in the Securities details screen.

Specifying the Value of a Collateral

On specifying the code that identifies the security, the price details and the value of the collateral is displayed. If you are estimating the value of a Non-Marketable Collateral you can specify its value and the currency in which the security is defined.

In the case of a Marketable Collateral you need not enter its value, as it will be automatically calculated based on the price details specified in the Securities Maintenance screen.

Based on the convention at your bank you can indicate the contribution that the collateral should make to the credit limit of the customer. It is important to note that the entire value of the collateral need not contribute to the credit limit of the customer.

Specifying the contribution of the collateral to the credit limit of a customer

To recall, the entire face value of the collateral need not contribute to the credit limit of the customer. Instead, you may set aside a margin and offer the rest as the limit contribution.

ORACLE

You can express the contribution of the collateral to the credit limit of a customer either as a percentage (margin percentage) of the actual value of the collateral or as a flat amount (Limit contribution).

Example

A collateral is valued at $1000, and you wish to offer the customer credit only worth $ 900. This amount is the margin amount.

(1000 - 900) / 1000 = 10 % is the margin percentage

This means you want to keep a "margin" of 10%.

For instance, if you enter the margin percentage, then based on the value you enter, the limit contribution will be calculated. If you enter the Limit Contribution, the margin % will be calculated based on the amount that you specify.

Specifying the Tenor of the Collateral

You may want to consider a security as a collateral for a particular period. You can do so by specifying the start and expiry date of this period. The collateral is considered effective during this period.

The start date indicates the date from which the collateral becomes effective. The end date that you specify indicates the date on which the collateral ceases to exist. On the expiry date that you specify for a collateral, the credit limit under the line which the collateral backs will be reduced by the amount that the collateral contribution to the line.

Example

Creativity Inc. has come out with the issue of Debentures 98. The tenor of this security spans between 01 January 1998 and 30 December 2000.

Gem Granites has offered you Debentures '98 worth US $1M as collateral. You have linked the collateral to the Credit Line 'LOANS" which has a credit limit of US $3M. You consider (01 January 1998 to 30 December 2000) as the start and expiry dates of the collateral.

ORACLE

On 01 January 1998,

Line Limit	=	US $3M
Collateral Contribution	=	US $1M
Availability under the Line	=	US $4M

On 31 December 2000,

Line Limit	=	US $3M
Collateral Contribution	=	NIL
Availability under the Line	=	US $3M

6.3 <u>Specifying Details for Marketable Collateral</u>

To use marketable securities as collateral, you should link the collateral code to a security code. You can link the codes through this screen. In order to link a collateral code to the marketable security it represents, you should specify the code that identifies the security.

Specifying the number of units that constitute the collateral

To recall, the collateral value of Marketable Securities will be computed by multiplying its market value (which is picked up from the Securities maintenance screen) by the number of units of the security that constitutes the collateral. Therefore, for if you are maintaining details of Marketable Collateral, it is mandatory for you to specify the number of units of the Marketable asset that constitutes the collateral.

If the security is nominal value based, then you should input the nominal value of the security.

If it is a unit quoted security, you should enter the number of units of the security that you accept as collateral.

Example

Input in case of a nominal quoted security

Nominal Amount	Price Code	Market Price	Collateral Value [(Market price/100) * Nominal Amount]
10,00,000	BOM1	65	(65/100) * 10,00,00=650000
5,00,000	BOM2	70	(70/100) * 5,00,000= 350000
7,00,000	BOM3	80	(80/100) * 7,00,000= 560000

ORACLE

Input in case of a unit quoted security

Number of Units	Price Code	Market Price	Collateral Value (Number of Units * Market price)
65	BOM1	120	7800
70	BOM2	130	9100
40	CAL1	95	3800

Specifying a cap amount

As the prices of marketable securities tend to fluctuate based on the forces of demand and supply, you can specify an upper limit on the contribution of this security to the collateral value, as a result of an increase in the price of the security. This upper limit is called the Cap Amount.

The Cap Amount indicates that at any point in time the limit contribution of the collateral cannot exceed this amount, even though its actual computed value is much higher. However if the actual computed value of the collateral is lower than the Cap Amount, then the system picks up the collateral value as the actual computed value.

Example

Actual Collateral Value (Number of Units * Market price)	Cap amount	System Considered Collateral Value
7800	7000	7000
9100	7000	7000
3800	7000	3800

Defining a date by which the collateral details have to be revised

You can specify the date on or before which you can revise the details you have entered for the collateral.

As certain details of a collateral are subject to the fluctuations of the market, a situation might arise when you would want to evaluate the details entered for the collateral. Fixing this date will enable you to take suitable action as and when required.

The details you specify for a Collateral code will continue to remain effective beyond this date if you do not revise them on the day it is due.

ORACLE

6.4 Capturing Collateral Pool Details

The details of collateral offered to back a credit line are captured through the Collateral Details screen where you specify whether the collateral for which you are capturing details is a Marketable or a Non-Marketable collateral.

Grouping together of a set of collateral's into pools can be achieved through the Collateral Pools screen. You can invoke this screen by clicking on **Collateral Pools** under **Limits Maintenance** in the Application Browser.

If you are maintaining details of a new pool click on in the toolbar or New from the Actions Menu. This screen will be displayed with no values in the fields.

If you are calling a record that has already been created, click on Summary View. The details of the records created earlier will be displayed in a tabular form. From the summary screen you can choose to open an existing record by double clicking it.

6.4.1.1 Creating Collateral Pools

Any number of collateral's can be linked to a particular pool. You have to indicate whether the collateral is a deposit, account or any other type of collateral.

To add a new collateral click on the button, specify the relevant details and save the record. Conversely if you want to delete an existing collateral click on the button and save the record.

ORACLE

🛑 While creating collateral pools please remember that:

- A collateral can back only one pool but one pool can be backed by several collaterals. For instance you have linked the collaterals 'ISDP16924', 'AC777228' and 'COLSHRS15' to the pool code 'LOANP001'. The same collaterals cannot be linked again to pool - 'LOANP002'.

- A credit line can be backed by only one pool but a single pool can back multiple credit lines.

6.4.1.2 Specifying the Linked Amount and the Pool Currency

You have to indicate whether the pool contribution amount is less than or equal to the collateral amount. Hence, for every collateral that you choose to include in the pool you can indicate whether the entire collateral amount or only a part it should contribute towards the pool amount.

In addition to specifying the linked amount you also have to indicate the currency of the pool. This is essential because the collaterals linked to a pool can be in different currencies.

For instance, you have linked the pool 'LOANP001' to the liability 'BIRLA0001'. LOANP001 is in turn backed by the following collaterals:

Type	Collateral Code	Ccy	Collateral Amount	Linked Amount
Deposit	ISDP16924	DEM	100,000	75,000
Account	AC777228	GBP	55,000	55,000
Collateral	COLSHRS15	INR	2,000.000	1,500,000
Collateral	COLHS819	USD	1,500,000	1,500,000

Now the pool currency specified is USD. Therefore the system does the necessary calculations and converts the linked amount into the currency of the pool and displays the pool amount in the respective field.

ORACLE

7. Setting up Limit Templates

7.1 Introduction

You can specify the following in the template that you create for a line:

- Product, branch, tenor and currency restrictions
- And the nature of the line, i.e., whether it is a revolving or a non-revolving line.

The template will serve as a base upon which you can specify limits and other details specific to a Line-Liability combination. You can do so, by changing only those details that are specific to the Line-Liability combination you are defining. This renders the input of the details of a Credit Line faster and easier. To invoke this screen, from the Application Browser, choose Limits Maintenance and thereafter, Templates.

ORACLE
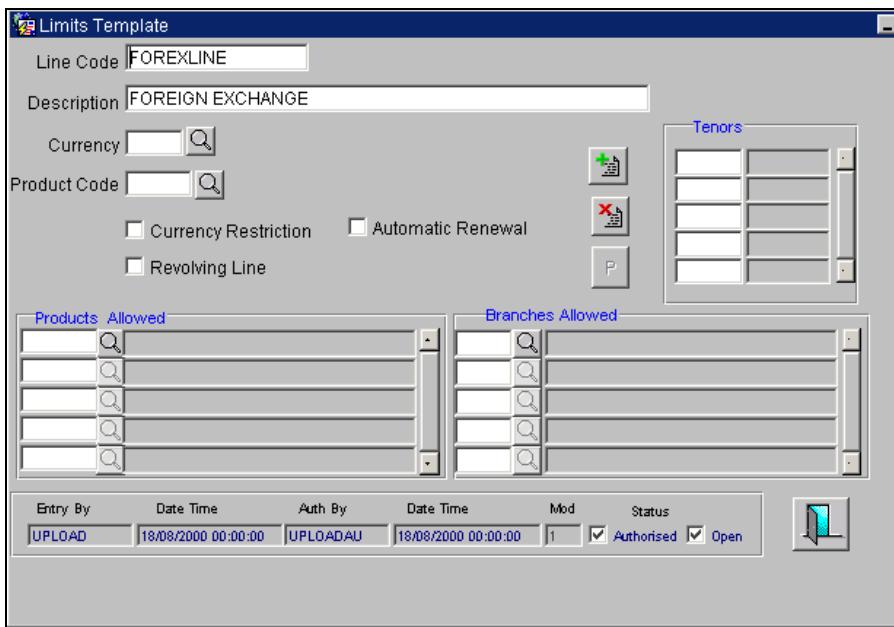
7.2 <u>Features of this screen</u>

Defining a Line Code

To define a credit line you should first assign a unique code to identify the line. Besides helping you to identify the line you can use it to retrieve information about the line.

Specifying a currency for the Line Code

You can specify the currency in which the Limit under this line should be defined. The currency that you select will have the following implications on the Line Code:

- The limits that you specify for the Line-Liability combination are taken to be in this currency (line currency).
- The line code that you are defining will be available for utilization only in the line currency, unless you specify otherwise under Currency Restrictions while defining the line.

If the limit allotted to this Line-Liability combination can be utilized by accounts and transactions in currencies other than the line currency, the limit utilization will be arrived at by using the mid rate for the currency pair as of that day.

You can open a sub line in a currency other than the currency of the main line to which it is linked. The system will convert the amounts using the mid-rate from the currency table.

Associating a Product with the template

With each template that you create you will need to associate a limit product, which is a limit line category. The association of a limit product with a template helps in tracking limit lines of various categories.

While defining credit lines through the Limit screen, the product associated with the line will be defaulted, you have the option of changing it.

Maintaining Currency Restrictions

The Limit that you define for a line can be restricted to a particular currency (the Line Currency) or can be made available in all currencies.

When the credit limit specified for a line is restricted to only the limit currency, it means that the limit can be utilized only by accounts and transactions in that Currency.

If you make the line available in all currencies, (i.e., you do not specify currency restrictions for it) the accounts and transactions can utilize the limit under this line irrespective of the currencies they involve.

We shall first examine a case wherein currency restrictions have been maintained for the line. The Line currency assigned to the Line Code 'LOANS' is USD.

We shall first examine a case wherein currency restrictions have been maintained for the line.

If a customer linked to this line wants to avail a loan in GBP (Contract currency), the customer will be restricted from doing so, as only USD accounts and transactions can utilize the limit available under this credit line.

Now imagine a scenario where no currency restrictions have been maintained, and the line currency is USD.

In this case the customer will be allowed to avail the loan in any currency, as no currency restrictions have been maintained. The mid rate as of the transaction date will be applied to the currencies involved in the transaction.

7.2.1 <u>Specifying whether the Line is revolving</u>

A revolving credit line indicates that a repayment of the utilized credit should reinstate the credit limit.

Example

You have defined the credit limit for your customer ABC Corporation to be $1 Million and the credit line to be a revolving credit line.

ABC Corporation takes a loan for $ 300,000 on 1, Jan'98. ABC's credit limit now stands at $700,000 as it is reduced by $300,000 on account of the loan.

The repayment schedule for the loan is as follows:

USD 100,000 to be repaid on 01 February 1998

USD 100,000 to be repaid on 01 March 1998

USD 100,000 to be repaid on 01 April 1998

On 01 February 1998, when ABC repays $100,000, its credit limit is reinstated by $100,000. Therefore on 01 February 1998 the Credit Limit of ABC will stand reinstated at $800,000.

You can define a credit line as Non-revolving for a special transaction line or to allot a one-time credit facility to a customer.

Example

You have defined the credit limit for your customer ABC Corporation to be $1 Million and the credit line to be a non revolving credit line.

ABC Corporation takes a loan for $ 300,000 on 1, Jan'98. ABC's credit limit now stands at $700,000 as it is reduced by $300,000 on account of the loan.

The repayment schedule for the loan as follows:

USD 100,000 to be repaid on 01 February 1998

USD 100,000 to be repaid on 01 March 1998

USD 100,000 to be repaid on 01 April 1998

On 01 February 1998, when ABC repays $100,000, it's credit limit will not be reinstated by $100,000. Therefore, on 01 February 1998 the Credit Limit of ABC will continue to stand at $700,000 inspite of the repayment.

ORACLE

7.3 Specifying Branch, Product and Tenor Restrictions

Maintaining Branch Restrictions

You can restrict the usage of a credit line that you have created to certain branches of your bank. When you invoke this screen for the first time and if you have not maintained branch restrictions for the line in the Limits template, nothing is displayed in the column 'Branches Allowed'. To move a branch (es) to this column, click on the [Q] button. A list of all the branches maintained in your bank will be displayed. Select the appropriate branch (es) from this list. The selected branch (es) will be allowed to use the credit line.

You can disallow a branch(s), from using this line by selecting the code that identifies the branch and clicking on [X].

You can remove the restrictions earlier imposed on a branch i.e., (to allow a restricted branch usage of the limit under this line). To allow a restricted branch usage of a line, select the code that identifies the branch from the pick list and click on [+].

The restrictions that you specify for a Line Code will be defaulted to the Limits Maintenance screen. You can modify them.

Maintaining Product Restrictions

To recall, for the different lines of business of your bank, you can offer different products to your customers. You can restrict certain products from using the limit under this line. However, unless you include a product (s) in the 'Products Allowed' column, it will not be allowed to use the limit under this line.

From the list of allowed products, you can restrict certain products, usage of the line. You can restrict a product from utilizing the credit under this line, by highlighting the product code and clicking on [X].

You can remove the restrictions earlier imposed on a product i.e., (allow a restricted product usage of the limit under this line). To allow a restricted product usage of a line, select the code that identifies the branch from the pick list and click on [+].

Specifying a Tenor list

You can track your exposure for different tenors, by defining limits based on the tenor of the contracts that utilize the limit. Therefore, you will need to define a tenor list for transactions that involve a Tenor (e.g., Loans, Money, Market Transactions etc.,).

You can only maintain a list of tenor-based transactions for which you would like to track your exposure. You can specify limits for each of these tenor restrictions in the Limits Maintenance screen.

Maintaining Tenor Restrictions for a sub-line

You can define a sub-line tenor list and also define limits for each of them. To recall, a sub line falls under the umbrella of the Main Line to which it is linked. Therefore, the maximum tenor that you define for a sub-line should not exceed the maximum tenor defined for the main line to which it is linked. The limit amount that you define for each sub-line tenor cannot be higher than the tenor limit defined for the main line to which it is linked.

ORACLE

You can add to the list of tenors maintained for a Main Line by specifying the tenor restriction and clicking ⬛. If you want to remove a tenor restriction from the list of tenor restrictions, click ⬛.

🛑 Remember, tenors and limits can be placed at both the sub line and main line levels. But the maximum tenor of a sub line cannot exceed the maximum tenor defined for the main line to which it is linked.

Specifying whether Automatic Renewal of the Credit Line is allowed

Automatic Renewal indicates that the credit line will get renewed automatically a day before the expiry date, for the same amount and tenor.

🛑 If the Credit Line is marked as 'Track Delinquency', then it will not be renewed automatically under the following circumstances:

- If the status of the account linked to it is Closed, Frozen, Write-Off or Dormant.
- If the limit line is Over-Limit (usage has exceeded the Line amount) or Cancelled (Line has expired).
- If the status of the account linked to it is 'Adverse'.

ORACLE

8.   Maintaining Credit Limits

8.1 Introduction

The question of Customer Liability arises out of the credit facilities availed by the customer. To make tracking effective, it is necessary for you to assign limits on the credit you grant to your customers for various purposes.

In the Liability Maintenance screen, you have maintained an Overall limit for a Liability Code. This overall limit covers all kinds of credit availed by your customer. These could be Foreign Exchange transactions, Loans, Remittances, Overdrafts etc.

You can define and track your exposure for the credit facilities granted to your customers under each type of business, through *Credit Lines*. One of the primary attributes of a credit line is whether it is a *Main Line* or a *Sub-Line.* Whenever you create a line for the first time it is a Main Line. Thereafter you can create many lines, which in turn report to this Main Line. The lines reporting to a Main Line are sub-lines.

You can define a Credit Line as a *main line* or as a *sub-line*. The decision on whether to use only a main line or a combination of the two depends on how you offer credit facilities to your customers.

Example

For Letters of Credit, you may decide to define just one line. This line is offered to the customer irrespective of whether it is utilized for Sight LCs, Usance LCs or a combination of both.

If however, you wish to offer different credit limits depending on whether it is a Sight LC or a Usance LC, you should set up:

- The Main line for the LC
- A Sub Line for Sight LCs and
- A sub-line for Usance LCs

To track your exposure against a customer for a specific credit facility, you should set up limits for each line. If a line has sub lines reporting to it, you should also set limits for each of the sub-lines reporting to the main line.

A transaction with the customer may utilize the limits set for the Main or the Sub line. As sub lines fall under the umbrella of the Main line, the utilization of a sub-line is taken as a utilization of the Main Line to which it is linked. (Refer to the chapter on tracking of limits).

ORACLE®

8.2 Invoking the Limits Screen

In the Application Browser this function is available under 'Limits Maintenance' under 'Limits'.

8.3 Features of Limits Maintenance

To recall, you have created Liability Codes in the liability maintenance screen and also defined credit lines under the name 'Line Code' in the Limits template screen. In this table, you can maintain 'Credit Limits' for a Line Code-Liability Code combination.

We shall first discuss the procedure of maintaining limits for a Line-Customer combination wherein the Customer and Liability code are the same.

Linking a Line Code to a Liability Code

Once you have specified the Liability Code for which you are defining details, you should also specify the code of the Line to which you are linking the liability code. You can then proceed to allocate credit limits for the Line-Liability combination. The customer(s) who fall under this Liability Code will in turn avail credit facilities under this Credit line.

By linking a Credit Line to a Liability code you are actually linking the customer to the line. This is true because you have assigned a Liability code to every credit seeking customer and the credit facilities granted to the customer are defined and tracked against this code.

The Serial Number

Each time you specify a customer - line code combination, Oracle FLEXCUBE assigns a unique serial number to the combination. This serial number is unique to the line-liability code combination. Thus, for every new record entered for a Line-Liability combination, a new serial number is generated. The Line - Liability - Serial number combination is a unique combination.

Associating a Product Code with the Liability Code

As a branch preference if you have indicated that unutilized limit lines should be tracked, you have to identify the product which is to be associated with the liability code for which you are maintaining details.

A list of all the unutilized limit line types which you have defined as products through the Limit Product Definition screen are displayed in the option list positioned next to this field. You can select the appropriate.

8.3.1 Specifying Details for a Credit Line

Linking a Sub-line to a Main Line Code

To recall, credit lines can be classified into *Main lines* and *Sub lines.* You can track your exposure to the credit facilities granted to a customer either at the Main or Sub line level.

As sub lines fall under the umbrella of a Main line, they report to the Main line. A transaction with the customer linked to a Credit Line may utilize the Main or the Sub line limit. Therefore, the utilization of a sub-line is also taken as a utilization of the Main Line to which it is linked.

You should first define a Main line, thereafter you can specify details for a sub-line which in turn reports to the Main line. You define a sub line just as you would a main line; the only difference being that for a sub line you will have to specify the Main line to which you want to have it linked. A credit line becomes a sub line only when you link it to a Main Line.

Example

You define the line 'LOANS' and then link it to the Liability Code 'Creativity Inc.' (the Liability and the Customer Code in this case are the same). The limit set for the line - 'LOANS" is US $ 1Million.

Main Line Code — LOANS

The loans that this customer can avail can be further classified into Short, Medium and Long Term Loans.

For our example we shall make Short Term (STLOANS), Medium Term (MTLOANS) and Long Term loans (LTLOANS) sub lines under the Main Line 'Loans'. It is only when you link these lines to the Credit Line 'Loans' that they become sub-lines and the line 'Loans' becomes a Main line.

Sub Line Code

- STLOANS
- MTLOANS
- LTLOANS

You can enter into any number of transactions with (Creativity Inc.) under any of the above sub lines. For example, you may grant two short-term loans, one Medium term loan and say two Long-term loans.

ORACLE

```
                        ┌─────────────────────┐
                        │   CREATIVITY INC.   │
                        └─────────────────────┘
                           ↗        ↑        ↖
          ┌──────────────┐  ┌──────────────┐  ┌──────────────┐
          │   FOREIGN    │  │              │  │    MONEY     │
          │   EXCHANGE   │  │    LOANS     │  │    MARKET    │
          └──────────────┘  └──────────────┘  └──────────────┘
       (Main Line)              (LOANS)
                              ↗      ↑      ↖
          ┌──────────────┐  ┌──────────────┐  ┌──────────────┐
          │    Short     │  │    Medium    │  │     Long     │
          │    Term      │  │    Term      │  │     Term     │
          └──────────────┘  └──────────────┘  └──────────────┘
       (Sub Line)  (STLOANS)     (MTLOANS)        (LTLOANS)
```
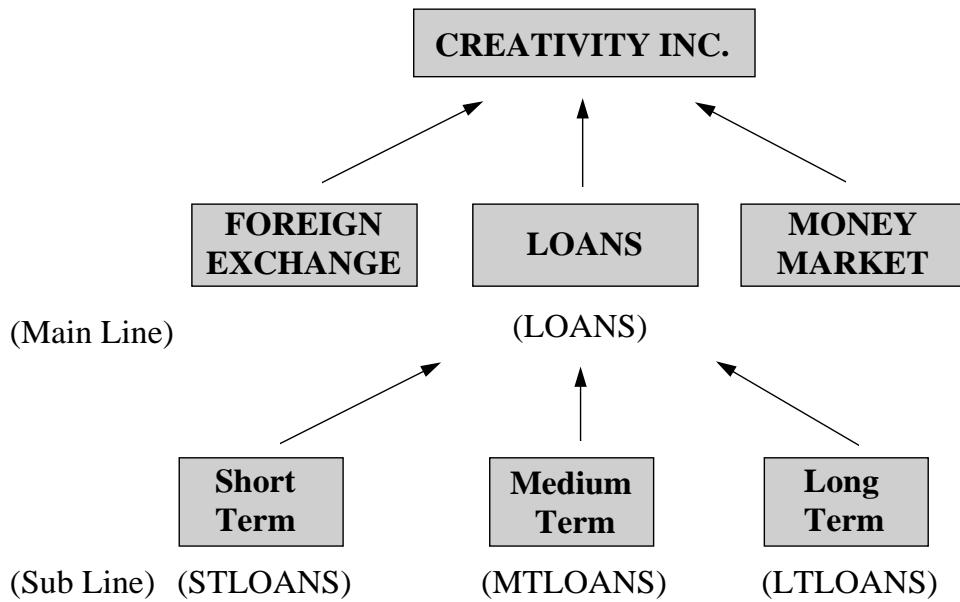
You can, at any time, track your exposure to this customer at any level of the hierarchy represented above.

Specifying a Currency for the Line Code

You can specify the currency in which the Limit is defined. The currency that you select will have the following implications:

- The limit amounts that you specify for this Line-Liability combination are taken to be in this currency (line currency).
- The line that you are defining will be available for Utilization only in the line currency, unless you specify otherwise under Currency Restrictions in this screen.

If the limit allotted to this Line-Liability combination can be utilized by accounts and transactions in currencies other than the limit currency, the limit utilization will be arrived at by using the mid rate for the currency pair as of that day.

🛑 You can open a sub line in a currency other than the currency of the main line to which it is linked. The transaction amounts are converted using the mid-rate from the currency table as of the transaction date of the contract.

Specifying whether the Line is Revolving

A revolving credit line indicates that a repayment of the utilized credit should reinstate the credit limit of the customer.

Example

You have defined the Credit Line for your customer ABC Corporation for Loans to be $1 Million. You also define the credit line to be revolving.

ABC Corporation takes a loan for $ 300,000 on 01 January 1998. ABC's credit limit now stands at $700,000 as it is reduced by $ 300,000 on account of the loan.

The repayment schedule for the loan as follows:

ORACLE

- USD 100,000 to be repaid on 01 February 1998
- USD 100,000 to be repaid on 01 March 1998
- USD 100,000 to be repaid on 01st April 1998.

On 1 February 1999, when ABC repays $ 100,000 it's credit limit is reinstated by $100,000. Therefore on 01 February 1998, the available Credit Limit of ABC stands reinstated at $ 800,000.

You can define a credit line as Non-revolving for a special transaction line or to allot a one-time credit facility to a customer. This will ensure that the line is used for just one transaction and repayments on that transaction will not make the limit available again.

Example

You have defined the Credit Line for your customer ABC Corporation for Loans to be $1 Million. You also define the credit line to be non-revolving.

ABC Corporation takes a loan for $ 300,000 on 01 January 1998. ABC's credit limit now stands at $700,000 as it is reduced by $ 300,000 on account of the loan.

The repayment schedule for the loan as follows:

- US $100,000 to be repaid on 01 February 1998
- US $100,000 to be repaid on 01 March 1998
- US $ 100,000 to be repaid on 01 April 1998

On 1 February, 1998, when ABC repays US $100,000 it's credit limit will not be reinstated by US $100,000 repayment. Therefore on 01 February 1998, the Credit Limit available to ABC will remain at US $700,000.

Specifying whether Automatic Renewal of the Credit Line is allowed

Automatic Renewal indicates that the credit line will get renewed automatically a day before the expiry date, for the same amount and tenor.

🛑 If the Credit Line is marked as 'Track Delinquency', then it will not be renewed automatically under the following circumstances:

- If the status of the account linked to it is Closed, Frozen, Write-Off or Dormant.
- If the limit line is Over-Limit (usage has exceeded the Line amount) or Cancelled (Line has expired).
- If the status of the account linked to it is 'Adverse'.

Latest Renewal Number

The number of times the credit line has been renewed automatically is displayed here.

8.3.2 Indicating Currency Restrictions

The limit that you define for a line can be restricted to a particular currency (the line currency) or can be made available in all currencies.

When the credit limit specified for a line is restricted to only the line currency, it means that the limit can be utilized only by accounts and transactions in the line currency.

If you make the line available in all currencies i.e., (you do not specify currency restrictions for it) the accounts or transactions linked to this line can utilize it irrespective of the currencies they involve.

ORACLE®

The Limit assigned to the line 'LOANS' is defined in USD (line currency). We shall first examine a case wherein currency restrictions are maintained for the line.

If a customer linked to this line wants to avail a loan in GBP (contract currency), he will be restricted from doing so, as only USD accounts and transactions can utilize the limit available under this credit line.

Now imagine a scenario where no currency restrictions have been maintained and the limit currency is USD.

In this case the customer will be allowed to avail the loan in any currency, as no currency restrictions have been maintained. The mid rate, as of the transaction date of the contract, will be applied to the currencies involved in the transaction.

8.3.3 Regulating exposure by netting balances in specific customer accounts

You can opt to "net" the credit and debit balances in specific accounts of a customer to regulate your exposure to the customer. You have to choose the netting option at three levels in order to regulate exposure to a customer:

- When defining limits for the accounts of the customer
- When maintaining Liability details for the customer
- When maintaining the Line linked to the Liability

The following example illustrates how netting facilitates regulation of your exposure to a customer.

ORACLE

You would like to track your exposure to a customer, Edward Driffield (Global) Publishers. The company has four accounts with you, two of which are defined for netting, as follows:

- Account 1 (Netting Required – Yes)
- Account 2 (Netting Required – No)
- Account 3 (not linked to any line)
- Account 4 (Netting Required – Yes)

You have maintained a Liability Code, L01, for the company, and linked a line OD1 to this Liability Code. You have chosen the netting option for both the liability (L01) and the line (OD1).

Since you have opted to net the balances in Account 1 and Account 4, the net credit balance of these accounts will increase the availability under the line OD1. The credit balance of Account 2 will not increase the availability under the line OD1. However, the debit balance of Account 2, Account 1 and Account 4 will increase the utilization under the line OD1.

Since Account 3 is not linked to any line, its balance, whether debit or credit, will not affect the tracking of your exposure to Edward Driffield (Global) Publishers.

Specifying the Availability of the Line

By making a credit line unavailable, you actually disallow the customer(s) linked to it from using the line. By default, a credit line is 'available'; this means that the customer(s) linked to the line can utilize the limit available under it.

If at any point in time you want to prevent a customer from utilizing a particular line you can do so by specifying that the line is 'unavailable'. The transactions already entered into with the customer remain, however further utilization of the line will not be allowed. You need not close the line to make it unavailable to the customer.

Example

You define a line for 'Loans' and link it to your customer Richardson and Stewart Inc. Richardson and Stewart Inc. can avail $100,000 under this line. The start date and expiry date of the line is 01 January 1999 and 31 November 1999, respectively.

On 01 February 1999, Richardson and Stewart Inc. avails a loan of $50,000. On 15 February 1999, for some reason, you make this line unavailable to Richardson and Stewart Inc. This implies that Richardson and Stewart Inc. cannot avail credit under this line after this 15 February 1998. If you decide to make the line available to this customer again, the $50,000 that is unutilized under the line will become available for utilization again.

🛑 This feature enables you to make the credit line unavailable to a customer(s) without closing the line.

Specifying the Last Date upto which the Line is Available

You can disallow fresh utilization under this credit line after the Last Available Date.

This implies that the customer(s) linked to a credit line have to utilize the limit assigned to it before this date. After this date, the credit line becomes unavailable even if there is a balance left "Unutilized". After the last date that you specify for a credit line, the credit line code will not appear in any of the picklists of the contract screens; indicating that the line is not available for utilization.

Example

You define a Line for Loans and link it to the Liability Code -- Creativity Inc. You also assign it a limit of $100,000. The last available date specified for the Line is 01 March 1999 (which means that all loans entered into with the customer should have a start date before this date).

ORACLE

On 1, Feb'99, Creativity Inc. avails a loan of $80,000. If on 2, March'99, the customer attempts to avail another loan under this line, the loan will not be granted inspite of the fact that $20,000 is left unutilized under this line.

🛑 All transactions that you link to this line should have a start date, which is before the Last Available Date specified for the Line.

Specifying the life span of a Line

A line can be made available for a specific period. The Start date of this period indicates that the line comes into effect from this date. You can specify the start date, to be a date in the past or a date in the future. The Expiry date indicates that the Line ceases to exist and hence the customer cannot avail credit facilities under this line.

Accounts and Contracts can use this line only upto the date you specify as the expiry date.

The last available date for utilization of the Line is 1, March'99 (which means that all transactions entered into with the customer under this line should have a start date before this date).

Example

You define a Line for Loans and link it to the Liability Code - CREATIVITY INC. You also assign it a limit of US $1 Million. The start date of the line is 1, Jan'99 and the expiry date of the line is 31, Dec'99.

Line Code	Liability Code	Start Date	Expiry Date	Limit
Loans	Creativity Inc.	1, Jan'99	31,Dec'99	US $1 Million

On 31, Jan'99,

Creativity Inc. avails a loan of US $200,000 under this line, which matures on 15, Nov'99. The utilization of the line increases by the loan amount (US $200,000) and the Available amount under the line decreases to US $800,000 as indicated in the table.

On 30, June'99,

Creativity Inc. avails another loan of US $700,000 under this line. In this case the utilization of the line increases to US $900,000 and the Available amount under the line decreases to US $100,000 as indicated in the table.

ORACLE

On 30, Nov'99,

Creativity Inc. approaches you for another loan of US $200,000. At the time of saving the contract, you will be prompted with an appropriate message indicating that Creativity Inc. has busted the limit assigned to it under this credit line.

You allow the override and grant the loan.

Date	Loan Availed	Line Utilization	Available Amount	Line Limit	Status
31, Jan'99	US $200,000	US $200,000	US $800,000	US $1 Million	
30, June'99	US $700,000	US $900,000	US $100,000	US $1 Million	
30, Nov'99	US $200,000	US $1.1 Million	US $100,000	US $1 Million	Busted

The customer has not yet made repayments for the availed loans. On 31 December 1999, when the line expires the customer will be reported with an overdraft of US $100,000.

8.3.4 Specifying Amount Details for the Line

Specifying a Limit for the Line

In order to limit your exposure to a customer linked to a line code, you should specify the credit limit that is available for the customer, under this line. This limit is taken to be in the currency you specified as the Line Currency.

If you are specifying limits for a main line the limit amount should be less than or equal to the overall credit limit specified for the Liability code.

If you are specifying a limit for a sub line, the sum of all the limits set for the sub lines can exceed the limit set for the main line to which they are linked. However at any point in time, the utilization of the sub lines should not exceed the limit set for the main line. (See example)

Main Line Code	Limit
LOANS	$ 1 Million

ORACLE

The following sub-lines are linked to this Main Line.

Sub Line Code	Limit
STLOANS	$ 200,000
MTLOANS	$ 500,000
LTLOANS	$ 500,000
Total	1.2 Million

In the above table you will notice that the sum of the limits set for the sub lines amount to $1.2 million, which exceeds the main line limit by $200,000. What is important is that at any point in time the utilization under these sub lines should not exceed $1 Million which is the Main line Limit.

The field 'Blocked Amount' will display the amount blocked for the Liability – Line Code – Serial No. combination. The amount will be blocked to the extent of commitment booked under the credit line. This amount will be displayed only for those loans and deposit products to which a limits block is applicable (the box 'Allow Limits Block is checked in the Loans and Deposits Product – Preferences screen). If the product that you select does not meet this criterion, the field 'Blocked Amount' will carry the value '0'.

🛑 If line linked is a sub line, the details will be propagated to the main line to reduce the availability of the main line.

A limits block can be understood better through the following example:

Example

Consider the following example:

Line Amount – 100 million currency units

Commitment Amount – 10 million currency units

If you have checked the box 'Apply Limits Block', the Blocked amount will be 10 million currency units and the Available Amount will be 90 million units.

Say, for example, a loan contract under this commitment contract is booked for 5 million currency units. Then:

Blocked Amount will reduce to 5 million currency units

Available Amount – 90 million currency units

The Utilization Amount will be 5 million currency units.

Repayment of Loan

On repayment of the loan amount, the blocked amount increases for a revolving commitment. The blocked amount remains the same for a non-revolving commitment.

🛑 On the Maturity Date, for both, revolving and non-revolving commitment, the blocked amount will reduce to the extent of the outstanding commitment amount.

The field 'Blocked Amount' will be updated whenever there is a change in the portion of the commitment that has not been availed, as shown below:

Action	Effect on Block	Increase/Decrease in line

ORACLE®

Action	Effect on Block	Increase/Decrease in line
Commitment Transaction Input	Increase	Blocked amount will increase to the extent of the commitment contract amount
Commitment Transaction Reversal	Decrease	Blocked amount will decrease to the extent of the commitment contract reversal. It also has an effect when reversal is done (whether the reversal is done after booking a contract or reversal done before booking any contracts under this commitment).
Commitment Transaction Amendment	Increase / Decrease	Blocked amount will increase/decrease based on the commitment contract amendment
Loan Linkage to Commitment	Decrease	Blocked amount will decrease to the extent of the loan drawn against the commitment. The utilization of the line will increase to the extent of decrease on the blocked amount.
Repayment of Loan	Increase / Decrease	Revolving Commitment - If the commitment is revolving, the blocked amount will increase. Non-revolving Commitment - If the commitment is non-revolving, there will be no effect on the blocked amount.

8.3.5 Maintaining Credit Line Renewal Preferences

You can specify the details of a credit line marked for Automatic Renewal, in this screen.

Check the box Account Restrictions to indicate some restrictions have been placed on the account. The Status of the account and the Frequency or the number of times the account has been placed under that status in a given time interval, will determine whether or not the credit line will be renewed automatically.

Example:

You specify the Status of the account as 'PDO', the Frequency as 3 and the Period in Months as 7. The system will check if the account has come under the status 'PDO' a minimum of three times in the last seven months. If it has, it will NOT renew the credit line automatically. If it has not, it will renew the credit line automatically.

ORACLE

To invoke this screen, click [P] in the Limits Maintenance Detailed screen.
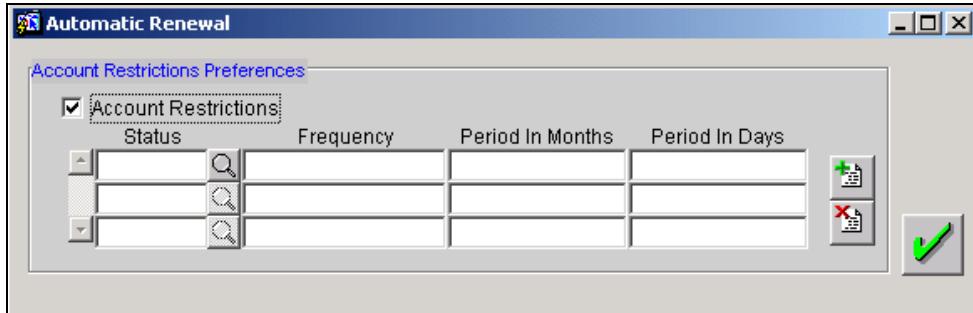
When a credit line is marked for Automatic Renewal, the Last Available Date and Expiry Date will be updated for the same tenor as that specified for the credit line. The Start Date of the renewed credit line will be the same as that of the original credit line. The details of renewal will be displayed in the following screen:
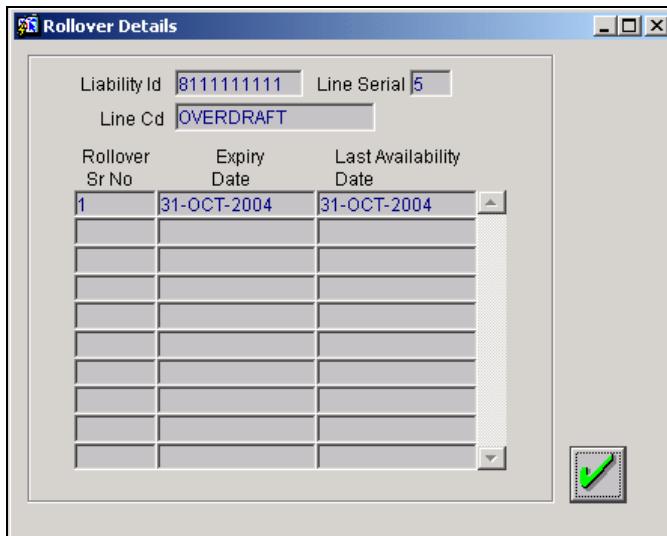
Click on the [↻] button to invoke this screen

8.4 Maintaining Customer, Branch and Product Restrictions

You can restrict the limit available under the credit line you have defined to certain customers, branches and products. By default all customers, branches and products of your bank can utilize the limit under the credit line.

You can maintain Branch, Product and Tenor restrictions for a line in the Limits Template or in this screen (Limits-Restrictions). If you have specified restrictions for the line in the Limits Template, they are defaulted to this screen. In which case you can modify the restrictions that are defaulted.

You can use this screen to specify restrictions for a line, only if you have not defined them in the Limits Template. To restrict the usage of the line to specific customers, branches and products you should invoke the Limits Restrictions screen.

ORACLE

To invoke the restrictions screen, click ![icon] in the Limits Maintenance Detailed screen.
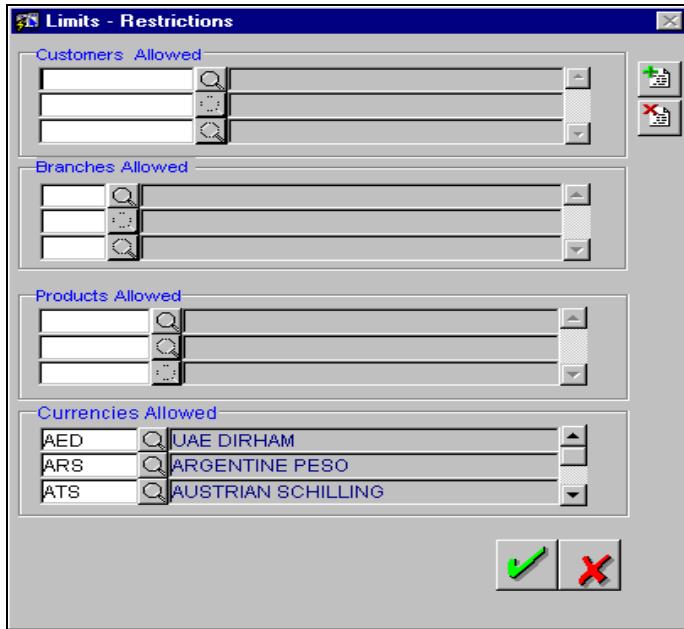
8.4.1 Maintaining Customer Restrictions for a Line

To recall, you assign a limit to a Line-Liability combination. A liability code can have several customers linked to it. By default, the line that you define is available to all customers linked to the liability code.

You can restrict the limit available under this line-liability combination to specific customers. If you are maintaining restrictions for the first time, the list of customers that are linked to a liability code is displayed under the 'Customers Allowed' column (indicating that they are allowed to use the line).

You can restrict a customer(s), from using the credit under a line by highlighting the code that identifies the customer and clicking ![icon].

You can remove the restrictions earlier imposed on a customer i.e., (allow a restricted customer usage of the limit under a line). To allow a restricted customer usage of a line, select the customer code from the pick list and click ![icon].

8.4.2 Maintaining Branch Restrictions for a Line

You can restrict the usage of a credit line that you have defined to certain branches of your bank. When you invoke this screen for the first time and if you have not maintained branch restrictions for the line in the Limits template, a list of all the branches of your bank is displayed under the column 'Branches Allowed' (indicating that all branches of your bank can use the line). From this list of allowed branches you can restrict a certain branch(s) form using the line.

If you have already specified branch restrictions for the line in the Limits Template, these restrictions will be defaulted here. You can modify the branch restrictions defaulted from the Limits Template.

ORACLE

You can disallow a branch(s), from using this line by selecting code that identifies the branch and clicking .

You can remove the restrictions earlier imposed on a branch i.e., (to allow a restricted branch usage of the limit under this line) To allow a restricted branch usage of a line, select the code that identifies the branch from the pick list and click .

8.4.3 <u>Maintaining Product Restrictions for a Line</u>

To recall for the different lines of business of your bank, you can offer different products to your customers. You can restrict certain products from using the limit under this line.

If you have already specified product restrictions for the line in the Limits Template, these restrictions will be defaulted here. You can modify the product restrictions defaulted from the Limits Template.

The list of products allowed to use the limit under this line is displayed under the column 'Products Allowed'. From the list of allowed products, you can restrict the usage of the line by certain products.

You can restrict a product from using this line, by highlighting the product code and clicking .

You can remove the restrictions earlier imposed on a product i.e., (allow a restricted product usage of the limit under this line). To allow a restricted branch usage of a line, select the code that identifies the branch from the pick list and click .

ORACLE

8.5 Maintaining Tenor Restrictions for a Line

You can define Limits based on the tenor of the contracts that utilize the limit. Click on ▦ from the Limits Maintenance Detailed screen to maintain Tenor restrictions for the limit you have specified for the Line-Liability combination.

You can maintain tenor restrictions for a line either in the Limits Template or in this screen. If you specify limit restrictions for tenor-based transactions linked to this line in the Limits Template, they will be defaulted here. In this case you can only modify or add to the list of defaulted Tenor Restrictions. If you have not maintained Tenor Restrictions for the line in the Limits Template you can do so here. You will need to enter details in this screen only for transactions that involve a Tenor (e.g., Loans, Money market transactions etc.,).
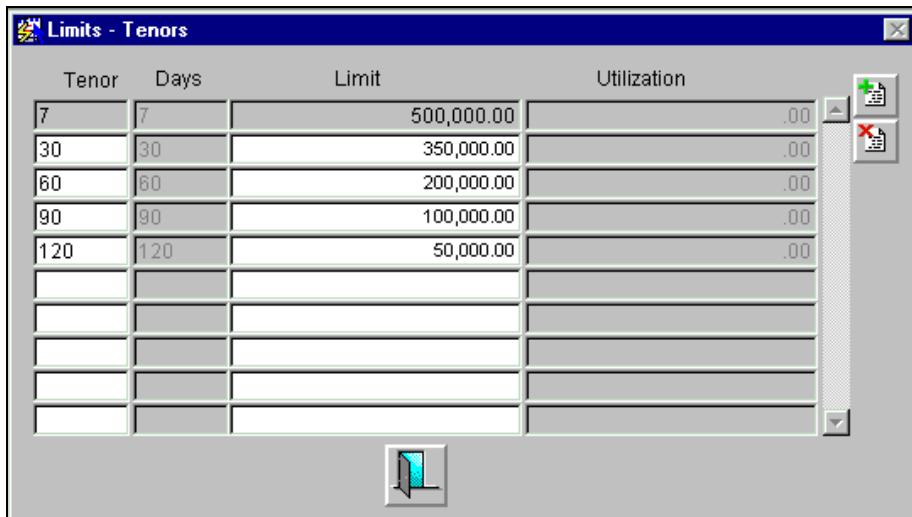
Tenor	Days	Limit	Utilization
7	7	500,000.00	.00
30	30	350,000.00	.00
60	60	200,000.00	.00
90	90	100,000.00	.00
120	120	50,000.00	.00

Through this screen you can specify a list of Tenors and the associated limit that tenor based transactions can utilize under this line.

8.5.1 Maintaining Tenor Restrictions for a Main Line

For a main line, you can:

- Specify the list of tenor restrictions for which you would like to limit your exposure
- Assign limits for the Tenor restrictions.

8.5.2 Maintaining Tenor Restrictions for a Sub-Line

You can define a sub-line tenor list and also define limits for each of them. To recall, a sub line falls under the umbrella of the Main Line to which it is linked. Therefore, the maximum tenor that you define for a sub-line should not exceed the maximum tenor defined for the main line to which it is linked. The limit amount that you define for each sub-line tenor cannot be higher than the tenor limit defined for the main line to which it is linked.

🛑 Remember, tenors and limits can be placed at both the sub line and main line levels. But the maximum tenor of a sub line cannot exceed the maximum tenor defined for the main line to which it is linked.

ORACLE

Example

You define a Line 'LOANS' and link it to the Liability Code 'CREATIVITY INC. ' (the Liability and the Customer Code in this case are the same). The limit set for this line - 'LOANS" is $ 1Million.

Main Line Code
LOANS

You define a credit limit of $ 1 Million for Creativity Inc. under this Credit Line. You also specify the tenor Restrictions for the line to be the following 30D, 60D and 90D.

Main Line Tenor List	Limit
30D	0.5M
60D	0.3M
90D	0.25M

The loans that this customer can avail can be further classified into Short, Medium and Long Term Loans.

For our example we shall make Short Term, Medium Term and Long Term loans as sub lines under the Main Line 'Loans'. It is only when you link these credit lines to the Credit Line 'Loans' that it becomes a Main line.

Sub Line Code
STLOANS
MTLOANS
LTLOANS

You can define a tenor list and have tenor based limits for both the *Main Line* and *Sub Lines*. So we shall also maintain tenor based limits for the sub line 'STLOANS' (as shown in the table below):

Sub-Line Tenor List	Limit
30D	0.3M
60D	0.2M
90D	0.1M

You can add to the list of tenors maintained for a Main Line by specifying the Tenor restriction under the head 'Tenor' and clicking 📄. If you want to remove a tenor restriction from the list of tenor restrictions highlight it and click 📄.

8.5.3 Maintaining Limits for a Liability Code to which Several Customers are Linked

As discussed in the Liability Maintenance screen a liability code can have several customers linked to it. In the following paragraphs we shall discuss the procedure for maintaining limits for such liability codes.

ORACLE

Step 1: Define a Credit line for the parent company and assign a limit to it.

Step 2: After you have created a line for the parent company, define sub lines for each of the customers linked to the liability code and assign limits to each of these sub-lines.

Step 3: In the customer restriction screen of each of the sub-lines, you can allow only that customer to utilize the credit available under the line.

Example

Assume the following set-up. Your customer Creativity Inc. is a parent company with three subsidiary companies reporting to it. You want to assign limits for the loans that you grant to Creativity Inc. and its subsidiaries.

Creativity Publications

Parent

Children's Publications	Gourmets Publications	Creativity Encyclopedia
(Subsidiary 1)	(Subsidiary 2)	(Subsidiary 3)
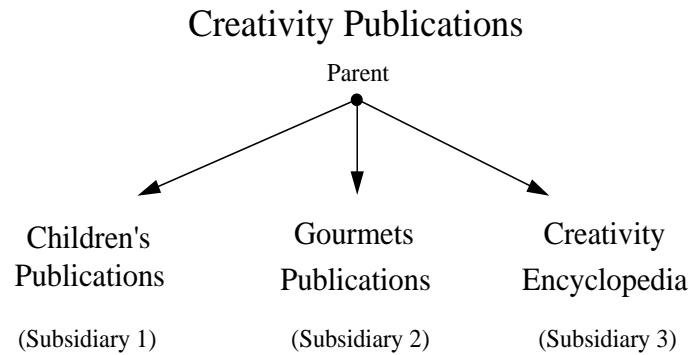
You should first set-up a credit line involving the liability code - Creativity Inc. and the line code LOANS and assign it a limit of $ 5 Million. Then go on to define sub-lines for each of the subsidiaries of CREATIVITY INC and link them to the Main Line-'Loans'.

Sub-Line	Limit
Children Publications	$2.0 Million
Gourmet Publications	$1.5 Million
Creativity Encyclopaedia	$2.5 Million

In the customer restrictions screen, you should allow only the subsidiary to utilize the credit under the sub-line. For example if you have created a sub-line for Gourmet Publications then in the customer restrictions screen, you should allow only Gourmet Publications to use the credit available under this line. Similarly, you should specify the same for the other sub-lines.

By doing so, you can effectively monitor the credit facilities that you grant to each customer under a liability code. In the chapter 'Tracking' we shall see how these limits that you have defined will be tracked.

8.5.4 Linking a Pool to a Liability

The collateral pools that you define in the Collateral Pool Maintenance screen can in turn be linked to a liability at the time of Limits Maintenance.

In the Limits Maintenance screen click on , the Collateral Pool Linkages screen is displayed.

ORACLE

Once you invoke this screen the system automatically assigns a Pool Utilizer code, which is a combination of the Liability ID, the Line Code and the Serial Number.

Apart from this the currency of the line and the liability ID will also be reflected in the respective fields.

8.5.4.1 Specifying the Pool Code

You can specify the pool code to which the line is to be linked. Since you can link the same pool to one or more lines the details of the pool amount such as the total amount, the utilized amount and the amount available for utilization will be displayed.

If the pool currency is different from the line currency then the amount available for utilization is reflected in the currency of the line in the respective field. This conversion is done by the system automatically.

8.5.4.2 Specifying the Amount

You have the option of specifying an amount that is less than or equal to the amount available in the line currency or you can specify that only a percentage of the pool amount should be made available for the line.

Example

The pool amount for the pool 'LOANP025' is 3655000 DEM. You have already linked this pool to two other lines as a result of which 2000000 DEM has already been utilized. Now you want to link it to a new line EXPORTFIN whose liability ID is 'BIRLA0005'.

You want to link only a part of the amount in the line currency to this line. Enter 1600000 in amount field.

Let us assume that instead of specifying a particular amount you want only 6% of the pool amount to be linked to this line. Enter the percentage in the Pool % field. The system will do the necessary calculations and display the line amount as 219300 DEM.

8.5.5 Limits Checking by Tenor

To guard against borrowings for an indefinite period, Oracle FLEXCUBE offers you the facility to track limits utilization for different tenors. When maintaining line details in the Limits Maintenance screen, you can also define the different tenors along which you would like to track limits utilization.

ORACLE®
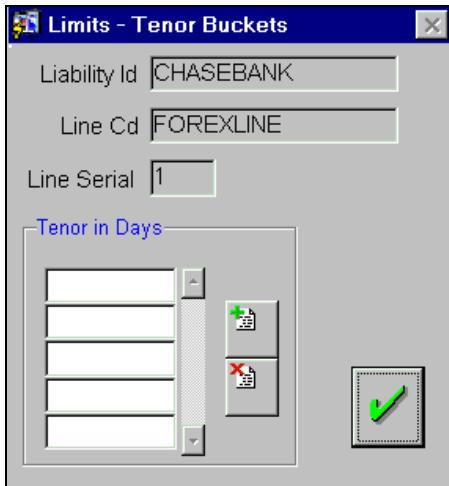
To invoke the Limits– Tenor Buckets screen, choose the [clock icon] button in the Limits Maintenance screen. The following example illustrates how Limits utilization is tracked against different tenors.

Example

In the Limits Maintenance screen, you have specified the Limit Amount for a line as SGD 100,000. You have maintained different tenors for this line: 10, 20, and 30 days.

On 01 January 2001, assume your customer utilizes SGD 50,000 against this line. This date is recorded as the First Utilization Date in the Limits Maintenance screen.

On 12 January 2000, if your customer utilizes a further SGD 20,000, the system displays an override message informing you that the utilized amount (SGD 50,000) remains unpaid for 10 days. Note: even though the utilization amount is less than the Limit Amount of SGD 100,000, it is reported.

Similarly, on 25 January 2000, if the customer utilizes an additional SGD 10,000, the system displays two override messages informing you that the utilized amount (SGD 50,000 and SGD 20,000) remains unpaid over two tenors – that is, for 10 days and 20 days respectively.

On 26 January 2000, if the customer repays the utilized amount (say, the entire SGD 70,000), the system resets the First Utilization Date to '0'.

8.5.6 Maintaining Overdue Debit Tracking preferences for a liability

When maintaining the preferences for your branch, if you have opted to track overdue debits for customer accounts, you have to maintain the debit tracking preferences at the liability level also. You can maintain these preferences in the 'Overdue Debit Liability Preferences' screen, available under 'Limits Maintenance' in the Application Browser.

ORACLE
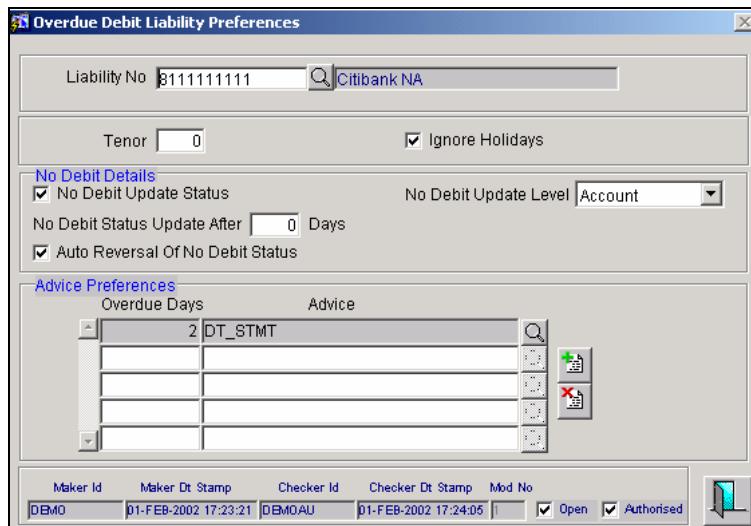
The following preferences have to be maintained:

Liability No

As the overdue tracking preferences are maintained at the liability level, you have to select the liability number for which the preferences have to be maintained. All the liability numbers maintained at your bank will be available in the option-list provided. You may select the appropriate number from this list.

Upon selection of the number, the liability name will be displayed alongside.

Tenor

Specify the number of days after which the system will begin to calculate the penalty interest on the amount overdue. The tenor will be calculated from the value date of the debit entry. Interest will be applicable after the lapse of the tenor maintained.

🛑 For interest calculation, the system will first consider the tenor maintained for the customer (in the Customer Information Maintenance screen), if not found, the tenor associated with the liability line will take precedence. The tenor maintained at the branch level will take priority ONLY if the same is not maintained for the customer or the liability line.

Ignore Holidays

You may encounter holidays during the tenor period for interest application on overdue debits. For such instances, you have to specify the holiday handling preference for the liability number.

There are two options:

- You can ignore the holidays by selecting the 'Ignore Holidays' option. In this case, penalty interest would commence from the penalty start date irrespective of whether the penalty start date is a holiday or not.
- If the holidays are to be considered, do not select this option. In this case, if the penalty start date happens to be a holiday, then the effective penalty start date will be taken as the next working day.

ORACLE

No Debit Update Status

You have the option of placing the accounts in a 'No Debit' status if the debit continues to be overdue even after the lapse of the grace period (this is in addition ot the normal tenor maintained). The system will not allow you to post debit entries after the account is placed in this status. You have to select the 'No Debit Update Status' option to avail of this feature.

If you select this option, you will be required to maintain the following preferences also:

- The level at which the 'No Debit' update should be exercised.
- The number of days, grace period in other words, after which the update should be triggered.
- Whether the 'No Debit' status should be reversed when a payment is made.

The above options are discussed below.

No Debit Update Level

You can update the 'No Debit' status at the following levels:

- Customer
- Account

If you choose to update at the customer level, all the accounts of the customer (across branches) will be considered for 'No Debit' status update. The system will mark the accounts with the 'No Debit' Status if the account continues to be overdue even after the lapse of the grace period. The grace period (days after which the update should be triggered) is in addition to the tenor maintained.

If the account level is chosen, only the specific account that goes into delinquency will be marked with the 'No Debit' status.

Days for No Debit Status Update

You have to specify the number of delinquency days (grace period) after which the system should mark the account with the 'No Debit' status. This is in addition to the tenor maintained earlier.

Auto Reversal of No Debit Status

You can opt for this option if you want the system to automatically reverse the 'No Debit' status on payment of the overdue amount. If you do not select auto reversal option, you will be required to manually update the status back to active.

🛑 Please note that the no debit preferences will be allowed only if you opt for the 'No Debit Update' option.

For generation of customer advices, you have to maintain the following preferences:

Overdue Days

In this field, you have to maintain the number of delinquency days after which the advice is to be generated.

Advice

Select the format of the advice that is to be generated after the lapse of the overdue days, maintained earlier. The advice formats maintained through the 'Format File Maintenance' screen will be available for selection in the option-list provided. You may select the appropriate format for this list.

Refer the 'Messaging System' User Manual for details on maintaining advice formats.

The overdue debit tracking advices will be generated if:

- Advices are maintained for the customer or at the branch level.
- An overdue debit record exists even after the normal tenor and the number of days maintained for advice generation.

The advice will include the following information:

- Start date of the overdue debit
- Outstanding overdue debit amount
- 'No Debit' status
- Level of 'No Debit' status updated

For processing the overdue debit tracking, the system will first consider the preferences maintained for the customer/liability. The branch level preferences will be used only if the same are not maintained at the liability level.

Refer the Core Entities (CE) and the Core Services (CS) User Manuals for more information on maintaining the overdue tracking preferences for a customer and branch, respectively.

8.5.7 <u>Indicating Facility Risk Rating and classification ranking</u>

In Oracle FLEXCUBE, you can rate the customers through facility risk rating and classifications. You can maintain facility risk rating and classification rankings according to the requirements of the bank. The facility risk ratings are maintained in the 'Facility Risk Rating' screen. Invoke this screen from the Application Browser under Limits Maintenance under Facility Risk Ratings.

In this screen, you can indicate the facility risk rating and the corresponding rankings.

ORACLE

For example, you can indicate FRR1, FRR2, FRR3- etc as FRR and the ranking as A, B, C etc. You can allot the values for FRR and ranking according to any convention that your bank decides to follow. Similarly, you can specify classification ranking for rating the customers. This is done in the 'Classifications' screen. Invoke this screen from the Application Browser under Limits Maintenance under Classifications.
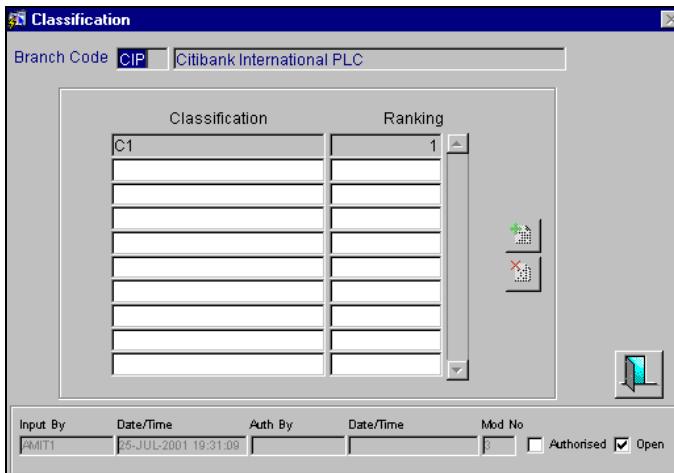
In this screen, you can indicate classification and ranking for each classification to rate the customers.

You need to indicate the values for FRR and classifications for the branch. Consequently, the system will compare the FRR and classifications maintained in the Limits maintenance with the FRR and classification ratings for the branch during credit line utilization.

The system will display an override if any of the following conditions are satisfied:

- If FRR ranking of the credit line being used > Ranking of FRR maintained as part of Branch parameters AND Classification ranking of credit line being utilized > Ranking of Classification maintained for the branch.
- If FRR ranking of the credit line being utilized > Ranking of FRR maintained for the branch.
- Classification ranking of the credit line being utilized > Ranking of classification maintained for the branch.

8.5.8 Querying Information Relating to Limits

You can use the Limits Query screen to query information relating to a liability. You can drill down to three levels of information:

- Group Level Information (Liability Summary)
- Details of Lines belonging to the Liability (Line Summary)
- Utilization Details (All utilizations against a line)

You can invoke the Limits Query screen from the Application Browser under Queries and then Limits. The liability Summary screen appears. Double click the required Liability ID. The Customer wise Summary screen appears.
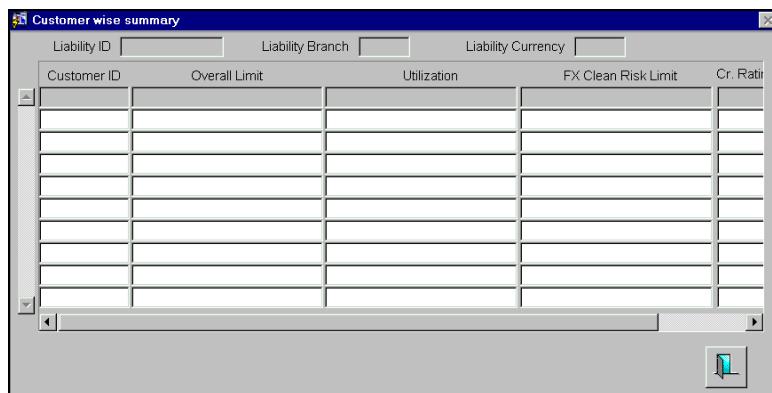
ORACLE

8.5.8.1 Viewing the minimum available amount across the entire line hierarchy

In Oracle FLEXCUBE, you can maintain a three-level structure as shown below for limits.
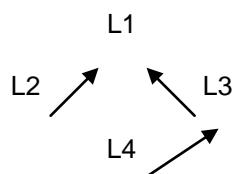
In the above hierarchy,

- L1 is referred to as the Global Line (G) or Grand Parent.
- L2 is referred to as the Omni Bus Line (O) or Major
- L4 is referred to as Regular Line (R) or Minor

You can also maintain a two-level and single level structure.

Oracle FLEXCUBE will display the minimum available amount for each of the limits. You can view the minimum available for each line code in the Limits Line Summary screen. Invoke this screen from the Application Browser.
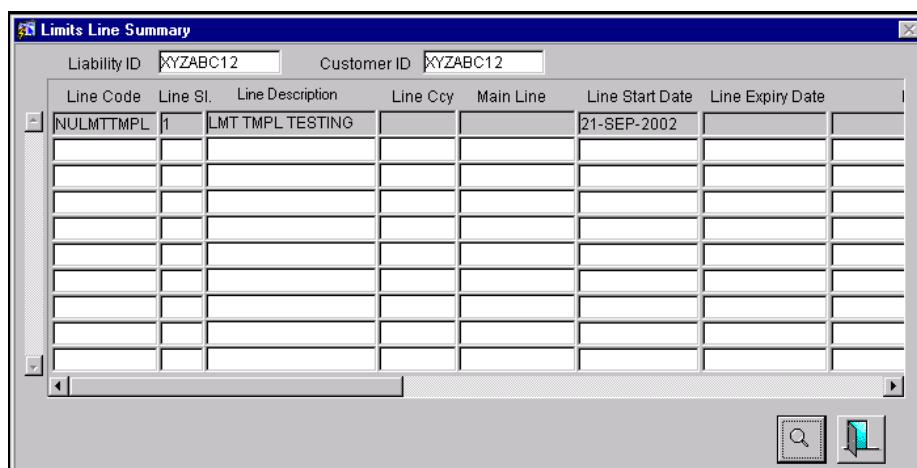
Example

Let us assume that you have maintained a three level limit line hierarchy as shown below:

Available amount: 3000

ORACLE

CUSTGE0011   Min. Available amount: 3000

GETELE001
Available amount: 4000
Min. Available amount: 3000

GEINSY001
Available amount: 2000
Min. Available Amount: 2000

GELTNG001
Available amount: 4000
Min. Available Amount: 2000
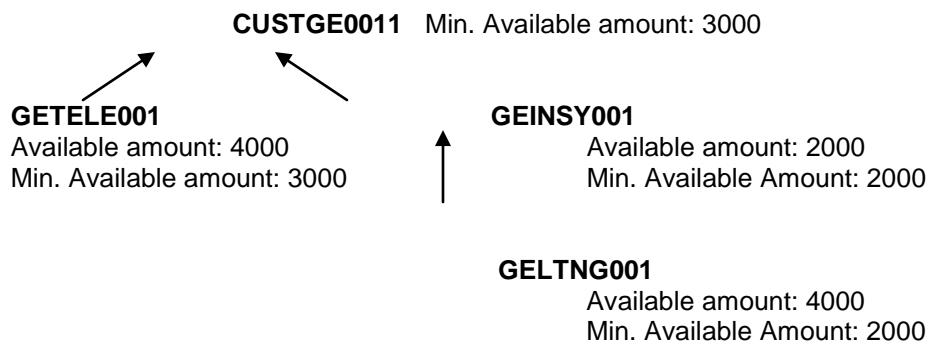
ORACLE

With reference to the above illustration of hierarchy, Oracle FLEXCUBE will display the minimum available amount for each line code as follows:

Liab. ID	Cust.	Line Code	Line Sr	Type	Limit Amt	Utilization	Available Amount	Min Available amount	Main Line
HINDLL01	HINDLL01	CUSTGE001	1	G	10,000	7,000	3000	3000	
HINDLL01	KISSAN01	GETELE01	1	R	5000	1000	4000	3000	CUSTGE0011
HINDLL01	LUXPRE01	GEINSY001	1	0	5000	3000	2000	2000	CUSTGE001
HINDLL01	SUNSLK01	GELTNG001	1	R	5000	1000	4000	2000	GEINSY0011

8.6   Capturing Clearing Line Details

Oracle FLEXCUBE allows you to capture details of clearing credit lines from Rapid system, using the 'Clearing Line' screen. You can invoke this screen from the Application Browser by clicking on **Approved Credit Limits**, then selecting **Clearing Limits** and clicking on **Detailed** under it.

Note that you can only view clearing line details that flow in from Rapid system. You will not be able to edit any record. You will not be able to create a new record either using this screen.

8.7 Viewing Clearing Lines Summary

You can view a summary of all clearing lines available in the system, by invoking the 'Clearing Lines Summary View' screen. You can invoke this screen from the Application Browser by clicking on **Approved Credit Limits**, then selecting **Clearing Limits** and clicking on **Summary** under it.

Auth Stat	Rec Stat	Liability	Cluster ID	GFCID	Rapid ID	Line Code
A	O	024297		1002894374	4000007	000000101
A	O	024297		1002894374	4000008	000000121
A	O	024297		1002894374	15041407	000000261

Auth Stat
A - Authorised
U - Unauthorised

Rec Stat
O - Open
C- Closed

You can view the following details:

- Authorization Status
- Record Status
- Liability
- Cluster ID
- GFCIS
- Rapid ID
- Line Code
- Serial Number
- Line Currency
- Line Amount
- Available Amount
- Blocked Amount
- Daylight OD Amount
- Utilised Amount
- Loans Utilisation
- Commitments Utilisation
- Main Line Code
- Revolving Line

ORACLE

- Currency Restriction
- Available
- Start Date
- Expiry Date
- Last Available Date

9. Tracking Credit Limits

9.1 Introduction

Tracking is the process by which an on-line check is kept on the utilization of credit limits. Thus, ensuring that a customer's liability to the bank at a given point in time remains within a predefined limit. A limit overdraft situation arises if the customer's liability towards the bank exceeds the credit limit allotted.

The credit limit allotted to a customer is tracked for utilization at various levels, depending on the way you have set-up credit limits. To recall, you can set-up limits for a customer as follows:

- Overall Liability Limit
- Main Line Limit
- Main Line Tenor Limit
- Sub-Line Limit
- Sub-Line Tenor Limit
- Liability Clean Risk Limit
- Customer Clean Risk Limit
- Uncollected Funds Limit

9.2 Configuring On-line Credit Limit Tracking

On-line tracking is in the form of messages that are flashed each time you attempt to save a contract that results in exceeding the credit limit assigned to the customer.

ORACLE

This message can be configured to be one of the following:

- Override messages (meaning that the user who encounters the message can specify to the system that the transaction should be stored despite the message. This will be recorded as an 'override' and will be retrieved whenever the details of the transaction are retrieved.)
- Error messages (meaning that a transaction cannot be stored if the error condition is encountered.)
- Ignore messages (meaning that the error condition need not result in an error message. The transaction will be stored despite the error condition, without the message being recorded anywhere. Only a message will be displayed when the transaction is stored.)

Depending on this configuration, you will be prompted with the appropriate message at the time a customer exceeds the limits you have assigned.

Example

Case 1

You specify that for a sub-line excess, you want only an 'Ignore' message to be flashed. This means that each time you attempt to save a contract that exceeds a limit that you have specified, the contract will be processed without the excess being recorded anywhere -- only a message will be flashed indicating that you have exceeded a sub-limit.

Case 2

You configure that main-line excess should be indicated with override messages. This means that each time you attempt to save a contract that exceeds a Main line limit you have specified, you will be prompted with an override message.

When an override message is flashed, you can choose to either:

- Ignore the message (in which case the contract will be processed inspite of the fact that it exceeds the main line limit.) or
- Indicate that the processing of the contract should be stalled.

The contract will be stored only if the override is given and the override will be recorded and retrieved whenever the details about the contract are retrieved.

Case 3

You configure that liability code excesses should be indicated with error messages. This means that each time you attempt to save a contract that causes the limit set for a liability code to be busted, an error message will be flashed.

You will not be able to store the contract unless you change the contract amount so that it does not exceed the limit set for the liability code.

Besides the messages that flash indicating that the customer has busted the defined limits, you can also generate reports that indicate your status in connection to the limits that you have set up.

9.3 Tracking FX Clean Risk Exposure

Clean risk refers to all FX contracts maturing on a particular date. It is also known as Mean Daily Delivery Risk. In order to track your clean risk exposure to deals entered into with the customer(s) of your bank, you have set up Clean Risk Limits. To recall, clean risk limits can be set up at two levels:

- For the liability code (which is applicable to all customers linked to the Liability Code)
- And subsequently for each customer linked to the Liability Code.

ORACLE

All FX deals that you enter into with a customer utilize the customer clean risk limit and in turn also hits the limit set for the liability code to which the customer is linked. Thus you can track your Clean Risk exposure for a specific customer and also for the Liability Code to which the customer is linked.

In addition, you can generate a report, which gives you details of your bank's clean risk exposure. That is, the sum of all FX contracts maturing on a particular day, entered into with *all* the customers of your bank.

9.3.1 Tracking Customer-Wise Clean Risk Exposure

Customer Clean Risk limit is used to track the utilization by Maturity date. It indicates the maximum limit that a customer, linked to a Liability Code, can reach for all Foreign Exchange contracts maturing on a particular day, irrespective of the currencies involved in the deals.

To recall, you have set up Clean Risk Limits for a customer and for the Liability Code to which the customer is linked. These limits have been expressed in a particular currency, which we call the limit currency. The FX deals that you enter into with the customer are in different currencies. For the purpose of Clean Risk calculation and Tracking, the deal currencies are converted into the limit currency using the mid-rate as of the transaction date of the deal.

For the purpose of customer clean risk tracking, the 'Bought Amounts' of all the deals with a customer settling on a particular day will be summed up, to arrive at the Clean Risk Utilization amount for the customer for the day. The Clean Risk Utilization of the customer is then compared against the Clean Risk Limit set for the customer and also against the clean risk limit specified for the Liability code to which the customer is linked.

The following is an example of Clean Risk Tracking when the customer and liability code are the same:

Assume the following set up:

Liability Code	Customer Code	Liability Clean Risk Limit	Customer Clean Risk Limit
Creativity Inc.	Creativity Inc.	$60,000	$60,000

ORACLE

You enter into the following deals with your customer Creativity Inc.

Deal No	Liab No	Cust	Tr. Date	Bought Amt	Sold Amt	Sett Date
1	Creativity Inc.	Creativity Inc.	01 Jan'99	USD 10,000	DEM 15,000	01 Feb'99
2	Creativity Inc.	Creativity Inc.	15 Jan'99	GBP 5,000	USD 6,200	01 Feb'99
3	Creativity Inc.	Creativity Inc.	01 Jan'99	USD 5,000	DEM 7500	01 Feb'99
4	Creativity Inc.	Creativity Inc.	01 Jan'99	USD 30,000	BHD 10,000	01 Feb'99
5	Creativity Inc.	Creativity Inc.	15 Jan'99	USD1000	INR 36,000	01 Feb'99

The Clean Risk exposure is to be tracked in USD.

Since all these deals mature on the same date, they contribute to the Clean Risk utilization of the customer for that day. The Clean Risk under these conditions is the sum of the Bought Amounts.

On 01 Jan'99, you enter into Deals 1, 3 and 4 with the customer. Since these deals mature on the 01 Feb'99 they will contribute to the clean risk of the customer.

Clean Risk exposure as of 1/1/99 for the maturity date 1/2/99 = USD 45,000

This amount will be compared with the limit of USD 60,000 assigned to the customer. Since Clean Risk Utilization is less than the Clean Risk Limit, the deals will be processed.

On 15 Jan'99, you enter into Deal 2 with the customer. Deal 2 also matures on 01 Feb'99. The bought amount of this deal (GBP 1000) will add to the already existing Clean Risk Utilization of USD 45,000 for the settlement date 02 Feb'99.

Clean Risk exposure as of 15 Jan'99 = USD 45,000 + 5000 GBP

As you have defined the clean risk limit in USD, the deal currency (GBP) of Deal 2, will be converted using the exchange rate as of the transaction date 15 Jan'99. The exchange rate prevailing as of 15 Jan'99 is

Currency Pair	Exchange Rate
GBP - USD	1.25

Therefore, after the currency conversion, 5,000 GBP = 6,250 USD

Clean Risk exposure (in USD) as of 15 Jan'99 = USD 51,250

On 15/1/99, you enter into Deal 5 with the customer.

Deal 5 also matures on the 1 Feb'99. The Bought Amount of this deal (USD 10,000) will be added to the already existing Clean Risk of USD 51,250.

Clean Risk exposure (in USD) as of 15 Jan'99 = USD 61,250

ORACLE®

At the time of saving you save this contract, then your Clean Risk exposure to this customer - USD 61,250, is compared with the Clean Risk Limit specified for the customer - USD 60,000.

In this case, your Clean Risk Exposure to Creativity Inc. exceeds the Clean Risk Limit by USD 1,250. You will be prompted with an appropriate message, indicating that you have exceeded the clean Risk limit specified for the customer.

9.3.2 <u>Tracking Clean Risk for Netted Deals</u>

You can opt to net FX deals at the time of settlement if the deals:

- are in the same currency (pair-wise netting)
- involve the same currency pair or (currency pair netting)
- involve the same customer
- have the same value date

The netting of Foreign Exchange contracts is done either pair-wise or currency-wise based on the netting definition you specified for the customer in the Netting Agreements table.

The options available are:

- No Netting
- Pair wise Netting
- Currency wise Netting

If you choose to net contracts for the customer, the netted clean risks (arrived at based on the netting type you specify) for customers reporting to a liability code are then aggregated and compared to the Clean Risk Limit specified for the customer and the Liability code.

You enter into the following deals with your customer Creativity Inc. –

Deal No	Bought Leg			Sold Leg		
	Date	Amount	Currency	Date	Amount	Currency
1	01 Jan'99	1,000	USD	01 Jan'99	32,000	INR
2	03 Jan'99	30,000	INR	01 Jan'99	900	USD
3	01 Jan'99	4,000	INR	01 Jan'99	125	USD

No netting

You have specified that these deals entered into with this customer should not be netted. In this case

Clean risk = USD 1000 + INR 34,000

In order to track Clean Risk Utilization of deals involving currencies other than the Clean Risk limit currency, the mid rate as of the Transaction date of the deals is used in the conversion.

Pair-wise Netting

Pair wise netting is done for FX deals that have the same currency pair, irrespective of the whether they are bought or sold. If you specify that deals for this customer should be netted Pair-wise then Contracts 1 and 3 will be netted Pair-wise.

= USD 875 (after pair-wise netting of contracts 1 & 3) + INR 30,000 (contract 2)

Clean Risk = USD 875 + INR 30,000

In order to track Clean Risk Utilization of deals involving currencies other than the Clean Risk limit currency, the mid rate as of the Transaction date is used in the conversion.

The clean risk utilization after the netting will be compared with the Clean Risk Limit specified for the customer. If the Clean Risk Exposure to the customer exceeds the specified Clean Risk Limit, you will be prompted with appropriate messages.

Currency-wise Netting

If you specify that the contracts for this customer should be netted Currency-wise then Deals 1, 2 and 3 will be netted currency pair wise. In this case after currency-wise netting:

USD = 1000 - 900 - 125 = X

INR = 30,000

Clean Risk = INR 30,000

Therefore your clean risk exposure on account of these deals is 30,000 INR

Clean Risk = INR 30,000

In order to track Clean Risk Utilization of deals involving currencies other than the Clean Risk limit currency, the mid rate as of the Transaction date is used in the conversion.

Note that Clean Risk exposure (with no netting) is greater than or equal to Clean Risk exposure (Pair-wise Netting), which in turn is greater than or equal to Clean Risk (Currency-wise Netting)

Clean Risk (no netting) > or = Clean Risk (pair-wise netting)

Clean Risk (pair-wise netting) > or = Clean Risk (currency-wise netting)

9.3.3 Summary of Bank-Wide Clean Risk Exposure

Bank-wide Clean risk indicates your exposure to all Foreign Exchange deals entered into with all the customers of your bank settling on a particular day. Clean Risk exposure at the bank wide level is not limit based and hence it is not tracked on-line.

You can only obtain information on your bank's Clean Risk exposure in the form of a report. This report gives you details of your banks overall exposure to deals settling on a particular date, irrespective of the customers, currencies and the type of deal -- spot or forward.

ORACLE

You can also obtain a report on your bank's overall clean risk exposure across currencies translated into the local currency of your bank. The mid rate prevailing as of that day will be used in the conversion of the foreign currency.

9.4 Tracking Limits Set for an Account

Every Account has a sub-limit, a temporary overdraft and an uncollected funds limit and an off-line limit specific to itself. Each time you enter a transaction involving this account, the limits set for the account are validated. If a transaction involving this account exceeds the limit specified for it, you will be prompted with appropriate messages indicating the overdraft.

These checks are specific to the transaction account and do not involve a credit line or any other account. The account balance is considered as utilizing a line only if the net balance of the account is in debit.

An account can have a credit line associated with it. Therefore, limit tracking at the account level is dependent on whether the account is linked to a credit line or not.

If an account reports to a credit line, its debit balance is considered as a utilization of the credit limit assigned to the Line to which it is linked. In this case limit tracking is done not only against account specific limits, but also against the Credit Limit assigned line to which the account is linked.

However, if an account is not linked to a line, the overdraft checks are made specific to the account and do not involve the credit line. You can obtain further details about these checks in the 'Core Services' User Manual.

The available amount under a credit line consists of three components.

- Line Amount (Unsecured component)
- Collateral Amount (Secured Amount)
- The uncollected funds line

If an account is linked to a Credit Line which has an uncollected funds line reporting to it, the calculation and tracking for the account is done in the following manner:

The uncollected funds of all the accounts linked to the credit line is aggregated and compared with the uncollected line limit that you have specified for the Line. The lower of the two is then added to the line amount and the collateral contribution to arrive at the Total Credit Amount available for the customer under a Credit Line.

9.5 The Effect of Contract Status on the Limits Assigned to a Customer

The front end modules of Oracle FLEXCUBE like Loans, Letters of Credit, Bills, Money Market, etc. process contracts and thereby utilize the limits that you have set up. Tracking at the contract level registers the utilization and provides you with information on the status of lines in the form of on-line messages when storing a Contract. You can also obtain information on the status of a line by generating reports.

The status of a contract affects the 'available amount' under the Credit Line to which it is linked. Therefore, we will examine the bearing of contract status on the credit limit under a Credit Line.

ORACLE

9.5.1 Initiation of a Contract

Whenever you enter into a contract with your customer, who in turn is linked to a credit line:

- The utilization of the line to which the customer is linked, increases by the amount involved in the contract and
- The 'available amount' under the line is reduced by the utilization.

A contract linked to a sub-line not only utilizes the limit under the sub-line but also reduces the available amount assigned to the Main line to which it is linked.

If the contract amount exceeds the available amount under a line, you will be prompted with an appropriate message indicating that if you store the contract you will exceed the relevant limit. You can choose to override and save the contract. Otherwise you can close the contract without saving it. The same is true when the line is a mainline.

9.5.2 Amendment of a Contract

The amendment of the financial details of a contract directly affects the utilization and the availability of credit under the line to which the contract is linked.

Example

You assign a limit of $1 Million to the line 'LOANS' and grant a customer under this credit line a loan of $100,000, The credit limit available under the Line, is reduced to $900,000 and the utilization of the line would be 100,000 on account of the loan.

You later increase the principal amount to $125,000. The availability of credit under the line increases by the difference in the old and new loan principal which is $ 25,000. The utilization of the line increases by $25,000 and stands at $125,000 on account of the amendment.

9.5.3 Reversal of a Contract

When you reverse a contract, the accounting entries that were passed for the contract will be reversed. On initiation of the contract the available amount under the credit line reduces and its utilization increases.

On reversal of the contract, the available amount under the line increases and utilization of the line reduces.

9.5.4 Deletion of a Contract

At the time you initiate a contract and save it, the available amount and the utilization of the Credit line to which it is linked is affected.

A contract need not be authorized for the utilization to be updated in the credit line.

On deletion of a contract, all the accounting entries passed for the contract will be deleted. Therefore, the availability of credit under the line increases.

9.5.5 Payment against a Contract

Payments made against a contract, affects the credit line to which it is linked, only if the line is a revolving line. Consider this example of a revolving line.

You have defined the credit limit for your customer Gem Granites to be $1 Million and the credit line to be a revolving credit line.

ORACLE

Gem Granites takes a loan for $ 300,000 on 1, Jan '99. Gem Granite's credit limit now stands at $700,000 as it is reduced by $ 300,000 on account of the loan.

The repayment schedule for the loan is as follows:

- USD 100,000 to be repaid on 1 February 1999
- USD 100,000 to be repaid on 1 March 1999
- USD 100,000 to be repaid on 1 April 1999

On 1 February 1999, when Gem Granites repays $ 100,000 it's credit limit is reinstated by $100,000. Therefore on 1 February 1999 the available Credit Limit of Gem Granites stands at $ 800,000.

If the line is a non-revolving line any payments made against the contract, does not affect the credit line at all.

The effects of pre-payment and part-payment on a credit line are exactly similar to the payments made on seclude.

9.5.6 Rollover of a Contract

The effect of the rollover of a contract on a credit line is dependent on whether the line is a revolving line or a non-revolving line.

At the time you initiate a loan, linked to a revolving credit line, the availability of credit under the line is reduced and utilization increases by the loan amount. After the lapse of the tenor, the loan is partially liquidated. The outstanding amount of the loan is rolled over. Therefore the initial utilization of the credit line is now nullified. The rolled over amount is treated as a fresh utilization.

At the time you initiate a contract you can specify whether the credit limit utilization is to be updated when a loan is rolled over. That is, the interest that has been accrued on a loan is also considered as a part of the "utilized amount" for the purpose of risk tracking. The following example illustrates how this concept works.

Example

Silas Reed has taken a loan of USD 10,000 under Short Term Loans for Individuals from you, on June 1, 1997 at 20% interest. The entire loan is to be liquidated at maturity on December 31, 1997. Mr. Reed's central liability limit is USD 11,000.

Now, Silas Reed's loan is not liquidated at Maturity and you plan to renew it, by rolling it over into a new contract. If you have opted to update the credit limit utilization, his total liability on December 31, 1997 is USD 1,1167 (USD 10,000 + USD 1,167 as of December 31-- Interest calculation method Actual/365). And since the "utilized amount" is above his central liability limit (USD 11,000), he will not be eligible for the rollover or renewal of the loan. However, if you have not opted to update the credit limit utilization, then he will be eligible for the rollover of the loan if it has been indicated for rollover with interest.

In case the contract is linked to a non-revolving line, the initial utilization is not nullified. The rolled over amount is treated as a fresh utilization.

Effectively,

For a revolving credit line

Availability on initiation = Credit limit - Loan amount

Availability on rollover = (Availability on initiation + Liquidated Amount) - Rolled over amount

For a non - revolving credit line

Availability on initiation = Credit limit - Loan amount

Availability on rollover = Availability on initiation - Rolled over amount

ORACLE

Effect of linking a contract to a tenor based credit line

Whenever you link contracts of Foreign Exchange, Money Market, LCs, Loans and Bills to a credit line, the tenor-based limits of this line will be active. The reason for this is that the tenor concept is relevant only to these products.

9.6 <u>Tracking against Main Line and Sub-Line Limits</u>

Each time you enter a contract, which exceeds a limit that you have defined, you will be prompted with appropriate messages. A maximum of five limit overrides are possible. Depending on the type of contract you enter and on the line it reports to. You may encounter the following overrides:

- Sub-line overall override
- Sub-line tenor override
- Main line overall override
- Main line tenor override
- Liability level override

9.6.1 <u>Non-Tenor Based Overrides</u>

All transactions other than Foreign Exchange, Money Market, Loans & Deposits, and Bill transactions are considered non-tenor based transactions.

Contracts with a tenor of zero days, e.g. overdue loans, are considered as non-tenor based transactions.

Contracts reporting to	Non Tenor based overrides
A sub-line	Sub-line overall override Main line overall override Liability level override
A Main Line	Main line overall override Liability level override

To recall, you have defined Limits for a Liability code. You later grant credit to this customer under various lines and sub-lines. In order to track your exposure to this customer you further define limits at the Main line and sub-line level.

You have defined limits for a Credit Line, in a specific currency, called the line currency. While defining a limit, you have also defined whether the line can be used by deals involving currencies other than the line currency.

If the Line Currency for the customer is not the same as the transaction Currency and the limit has been defined for utilization by contracts in any currency, the deal amount will be converted to the Line Currency using the existing conversion rate between the two currencies as of the transaction date.

We shall examine a case where the limit you define for a customer is applicable for deals in all currencies.

ORACLE

Assume the following set up:

Liability Code	Liability Limit
Creativity Inc.	US $5Million

You have linked this Liability Code to the following Credit Lines

Liability Code	Main Line Code	Main Line Limit
Creativity Inc.	Current Account	GBP 1 Million
Creativity Inc.	Forex	DEM 2 Million
Creativity Inc.	LCs	US $3 Million

The mid rate as of the transaction date of the contracts involving other currencies is used to calculate the credit utilization of the customer. Utilization of these contracts are updated and tracked against the $ 5 Million assigned to this liability code.

9.6.2 **Tenor Based Overrides**

When you store a contract which is tenor based, the contract amount will be checked against the tenor limits specified for the line. Remember only Foreign Exchange, Money Market, Deposits, LCs, Bills and Loan contracts are treated as tenor based products. All other transactions are considered non-tenor-based transactions.

In Oracle FLEXCUBE, all tenor calculations are done in days. Contracts with a tenor of zero days are considered as non-tenor-based transactions.

There are two methods of tracking exposure:

- Fixed tenor and
- Rolling tenor

Once the tenor of the contract you have entered is known, its contract amount is treated as a utilization of the tenor limit defined for the corresponding tenor range. A contract utilizes the limit defined for the tenor equal to or greater than the tenor of the contract.

Example

You have defined limits for tenors of 180D and 360D, then all contracts with tenors of 180 days or less will utilize the 180D day limits and all contracts with tenors of 181D to 360D will utilize the 360D limit.

Whenever utilization for a given tenor range exceeds that tenor's Limit, the excess is considered a utilization of the next tenor limit.

In the earlier example, if the 180-day limit is USD 10,000 and the utilization in the 1 to 180 days tenor range is USD 12,000, then USD 2,000 will be added to the 181 to 360 day utilization. However, in the Limits Tenor Utilization screen, US $ 12,000 will be shown against the tenor 180 D, internally, US $2000 will be used from limit available under the 360D tenor.

🛑 You will be confronted with a tenor-based override situation, only when the last tenor limit is exceeded.

Here is an exhaustive list of overrides that you can encounter while storing a transaction. In any given situation, while entering a transaction, you will be prompted only with appropriate messages of the limits that you have busted.

Contracts reporting to	Tenor based overrides
A sub-line	Sub-line tenor override
	Sub-line overall override
	Main line tenor override
	Main line overall override
	Liability level override
Contracts reporting to	Tenor based overrides
A Main Line	Main line tenor override
	Main line overall override
	Liability level override

9.6.3 **Main Lines with Single Tenor Restriction**

Assume the following setup of credit lines:

You define a Line 'LOANS'. The limit set for this line - 'LOANS" is $1,000.

Main Line Code	Main Line Ccy	Main Line Tenor List	Limit Amt
LOANS	USD	360D	$1,000
Main Line Total			$1,000

The following sub-lines are linked to this main line:

Sub-line Code	Sub-line ccy	Sub-Line Tenor List	Limit Amount
STLOANS	USD	90D	$500
MTLOANS	GBP	180D	$600
LTLOANS	INR	360D	$700
Sub-line Total			$1800

The total amount of the sub-lines is $1800, which is greater than the main line amount of $1000, but each sub-line amount is less than the main line amount.

Example 1

Entries passed to sub-line STLOANS with no prior entries to any of the other sub-lines or the main line, and falling within a time code of 90D may be:

ORACLE

- Upto $500 with no sub-line or main line overrides
- Over $500 and upto $1000 with only a sub-line override
- Over $1000 with both sub-line and main line overrides

Example 2

If an entry of $700 has been passed to sub-line LTLOANS, then entries passed to sub-line MTLOANS falling within the time code of 180 days may be:

- Upto $300 with no sub-line or main line overrides
- Over $300 and upto $1000 with only a sub-line override
- Over $600 with both sub-line and main line overrides

9.6.4 Main Lines with Multi-Tenor Restrictions

This is a Main Line with more than one time code. Tracking the utilization of the lines with equal or higher time codes is performed.

After the sub-line check is made, an overdraft may occur during the main line check because the amounts available from all the main lines with tenors equal to or greater than the time code of the entry have been utilized or is insufficient. In this case, there could still be a usable portion of the total line.

Assume the following setup:

Main Line Code	Main Line Ccy	Main Line Tenor List	Limit Amt
LOANS	USD	90D	$1,000
LOANS	USD	180D	$600
LOANS	USD	360D	$700
Main Line Total			$2,300

The following sub-lines are linked to this main line:

Sub-line Code	Sub-line ccy	Sub-Line Tenor List	Limit Amt
STLOANS	USD	90D	$1,000
MTLOANS	GBP	180D	$600
LTLOANS	INR	360D	$700
Sub-line Total			$2,300

Example 1

Entries passed to sub-line STLOANS with no prior entries to any of the other sub-lines or main line, and falling within a time code of 90D may be:

ORACLE®

- Upto $1000 with no sub-line or main line overrides
- Over $1000 and upto $2300 with only a sub-line override; and Main Line 180 D tenor
- Over $2300 with both sub-line and main line overrides

Example 2

Entries falling within the 180D tenor passed to sub-line MTLOANS with no prior entries to any of the other sub-lines or main line may be:

- Upto $600 with no sub-line or main line overrides
- Over $600 and upto $1300 with only a sub-line override
- Over $1300 with both sub-line and main line tenor overrides
- Over $2300 with both sub-line and Main Line overrides

Example 3

If an entry of $700 has already been passed to sub-line LTLOANS, then entries falling within the time code of 180 days passed to sub-line MTLOANS may be:

- Upto $600 with no sub-line or main line overrides
- Over $600 with both sub-line and main line tenor overrides

9.6.5 Clearing Limit

In Oracle FLEXCUBE, you can maintain a Clearing Line with a defined limit. This clearing limit utilization comes into play when an account balance check is requested from Oracle FLEXCUBE. That is, if the transaction amount exceeds the credit line limit, and you have indicated that the Clearing Line can be used for the excess amount, Oracle FLEXCUBE checks for availability of funds as follows:

1. Checks available balance in the account.

2. If insufficient, checks for account credit line and its sub-limit line (that is, for the uncovered amount).

3. If the account is a concentration account, the credit check is performed for both minor as well as major accounts.

4. If insufficient, checks for Clearing Limit for the uncovered amount.

9.6.6 Limits in hierarchical account structures

In a hierarchical account structure, an overdraft in a minor account or a sub account could result in movement or sweeping of funds from the major account or grand-major account to cover the shortfall. The movement or sweeping of funds occurs within the limits (available balance including the available line amount) for the major and grand-major accounts.

When the minor account is debited by an amount in excess of its balance Oracle FLEXCUBE initiates an amount block on the major account or/ and grand major account in that order, to the extent of the transaction amount exceeding the available balance of the minor account, subject to the maximum of the available balance in the major account and grand major account. When a credit amount is posted to the minor account, the system generated amount block is released from the grand-major and major account in that order, to extent of the credit posting, thus decreasing the previous utilization of the credit balance.

During the End of Day batch processing, all system generated amount blocks on major and grand major accounts are cleared, to the extent of credit postings to the corresponding minor accounts.

ORACLE®

__Example__

You have maintained the following hierarchical account structure for one of your customers, Global Financial Solutions Corporations, at the London branch of your bank:

- Grand Major Account (USD) GFSC10000
- Major Account (USD) GFSC11000
- Minor Account (USD) GFSC11100

On 5th June 2001, there is an overdraft in the minor account GFSC11100 to the extent of 1000 USD. Funds are swept in (or moved) from the major account GFSC11000 to cover the shortfall. The limit placed on the major account to cover overdrafts in the minor account is 750 USD. Therefore, the remaining amount, 250 USD, is swept out of the grand major account GFSC10000. The system initiates an amount block on the major account, to the extent of 750 USD, and another amount block on the grand major account, to the extent of 250 USD.

On the same day, a credit amount to the extent of 5000 USD is posted to the minor account GFSC11100. During transaction processing, the amount block of 250 USD placed on the grand major account GFSC10000 is released first, and subsequently, the amount block of 750 USD on the major account GFSC11000 is released. This decreases the utilization figures for the major account and the grand major account, to the extent of the credit posting in the minor account GFSC11100.

ORACLE®

10. Revaluation

10.1 Introduction

The setting up of Limits involves different types of currencies and collateral backed by marketable securities. Exchange rates and the value of marketable securities are driven by market forces and hence tend to fluctuate over a period of time.

Hence, revaluation becomes essential so that the limits that have been set are realistic and reflect the current market trends.

Revaluation can be of two types:

- **Limits Revaluation** - The changes in the exchange rates of currencies involved in the active contracts, accounts and collateral linked to the line affects the Credit Limit under the line.
- **Collateral Revaluation** - A change in the market price of a marketable security backing a collateral sparks off a revaluation of the collateral amount.

10.2 Limits Revaluation

Limits revaluation is triggered off as a result of:

- A change in the exchange rate between the line currency and the currency of a contract or account utilizing the limit under the line; or
- A change in exchange rates between the Credit Line currency and the currency of the collateral

The revaluation in both cases is triggered off automatically whenever there is a change in the exchange rates.

When the currency of the commitment contract is different from the currency of the credit line, the blocked amount will be displayed in the Limits screen as per the latest exchange rate between the two currencies.

10.2.1 Contracts and Limit Revaluation

In the Currency Table of the Core Services Module, you maintain exchange rates for currency pairs that your bank deals with. Along with this, you also specify the mid rate and the buy or sell spread for various currency pairs. After you update the Rates you also need to authorize the changes you have made. After you have authorized the new exchange rates, they become effective.

To recall, while defining a credit line, you have the option of maintaining currency restrictions for the line. If you do not specify currency restrictions for a line, then accounts and contracts having currencies other than the line currency, can utilize the limit under the credit line. The revaluation process is applicable for such a line.

If the above conditions hold good, then a change in the exchange rate will trigger of the revaluation process. The system calculates the Line currency equivalent of all the contracts linked to the line (using the new exchange rates) and updates the utilization and available amount under the line.

ORACLE®

You have defined a line for 'Loans', and linked the Liability Code Creativity Inc. to it. The credit limit assigned to the credit line is 50,000 and the limit currency is USD. No currency restrictions have been maintained for the line.

Liability Code	Line code	Line Limit	Line Currency
Creativity Inc.	Loans	50,000	USD

On 1/1/99 you enter into the following Loan contracts, which are linked to this Credit Line. At the time of saving these contracts, the line utilization will be computed based on the exchange rates as of the transaction date (i.e. 1/1/99) of these contracts.

The following table contains the details.

Loan Amount	Exchange Rate	Line currency Equivalent (USD)	Utilization	Availability
AUD 15,000	1.275	11,764.70	11,764.70	38,235.3
DEM 2,000	1.06	1,886.79	1,886.79	36,348.51
GBP10, 000	0.535	18,691.58	18,691.58	17,656.93
INR 72,000	36.00	2,000.00	2,000.00	15,656.93
Total			$34343.07	15,656.93

On 1 Feb'99 the exchange rates have changed. After the exchange rate revision has been changed and authorized, the revaluation process scans the contracts linked to the line, converts the contract currency to the Limit currency (using the new exchange rates) and updates the line's utilization and available amount. The following table indicates these details:

Loan Amount	Exchange Rate	Line currency Equivalent (USD)	Utilization	Availability
AUD 15,000	1.324	11,329.30	11,329.30	38,670.70
DEM 2,000	1.01	1,980.19	1,980.19	36,690.70
GBP10, 000	0.525	19,047.61	19,047.61	17,643.09

Loan Amount	Exchange Rate	Line currency Equivalent (USD)	Utilization	Availability
INR 72,000	35.00	2,057.14	2,057.14	15,586.09
Total			$34414.24	15,586.09

ORACLE

10.2.2 <u>Collateral and Limit Revaluation</u>

At the time you update and authorize the exchange rates in the currency table, the system scans all the collateral linked to a line (bearing different currencies). The collateral contribution is then converted the into the line currency (using the latest exchange rates). After the conversion, the collateral contribution to the line is updated.

Example

You define a Line and assign it a limit of $1 Million. The Limit currency is USD.

The Collateral contribution to this limit is GBP 100,000. The exchange rate between the currency pair GBP-USD, as of today is 1.25. Therefore the collateral contribution to the limit amount in USD is $125,000.

On 01 Feb'99 the exchange rates between the currency-pair USD-GBP changes and stands at:

GBP-USD is 1.50

As a result of this change in the exchange rate, the collateral contribution to the overall limit of the customer has changed. At this point the revaluation process is immediately triggered off. The collateral contribution will now stand at $ 150,000 as a result of the revaluation.

10.3 Collateral Revaluation of Marketable Securities

The credit facilities granted to a customer are generally backed by the assets that the customer offers as collateral. Your customers can offer 'marketable securities' as Collateral. As Marketable Securities are by nature given to fluctuations based on the forces of short-term demand and supply, their value also tends to fluctuate.

A rise or fall in the market value of a security, affects its collateral value. Therefore the value of a collateral should reflect the changes in the value of the securities backing it.

Revaluation of a Collateral is triggered off only if the value of the marketable security that backs the collateral, fluctuates beyond the price sensitivity you prescribed for the security in the Securities Maintenance screen. Based on these changes the collateral contribution to the overall limit of the customer increases or decreases. Hence the availability under the line will also change.

In a nutshell, after you authorize the price change:

- The price change is compared with the last price stored in the Collateral Maintenance screen.
- If the price change (in percentage) of the security is greater than the Price-Increase-Sensitivity defined for the collateral or less than the Price-Decrease-Sensitivity defined for the collateral, the revaluation process will be triggered off. Otherwise the price change will not effect the existing collateral value.

If the revaluation causes the collateral value to rise, this new value is compared with the Cap Amount that you specified for the collateral in the Collateral Maintenance screen.

If the revalued collateral contribution to the overall limit of a customer exceeds the Cap Amount, the revaluation process will set the collateral contribution to the cap amount specified for the collateral.

If the computed value is less than the cap amount then the collateral contribution will be increased to that effect on account of the revaluation.

The available amount under the credit line increases

ORACLE®

Similarly, if the market price of the security decreases, the collateral contribution to the overall limit of the customer also decreases and as a result, the available amount under the credit line reduces.

Example

Your customer Keturah Smith has 1000 units of Debentures'99 that have been issued by Reliance as part of her portfolio, which you consider as Collateral. The Market value of the Debentures'99 is $ 50 per unit. You have defined the Price Increase and Decrease Sensitivity for this security to be 8% and 5% respectively.

You have specified that this collateral's contribution to the overall Limit of the customer should be $ 50,000 and the maximum amount that it can contribute to the overall limit of the customer as $ 60,000 (Cap Amount).

Liability Code	Liability Limit	Collateral Contribution	Cap Amount
Creativity Inc.	$1 Million	$50,000	$60,000

A rise in Value

The market value of Debentures'99 has increased to $55, which is a 10% increase over the old market price of $50.

At the time you update the Market price of Debentures'99 in the Securities Maintenance screen, the revaluation process is triggered off as the increase (10%) is higher than the Increase sensitivity (8%) defined for Debentures '99. The value of this collateral now stands at $ 55,000. As this amount is less than the Cap Amount you specified for the collateral the Credit Limit available to the Keturah Smith has increased by $ 5,000 as a result of the revaluation.

A rise in Value beyond the Cap Amount

The market value of Debentures'99 has increased to $65. Which is a 30% increase over the old market price of $50.

At the time you update the Market price of Debentures'99 in the Securities Maintenance screen, the revaluation process is triggered off as the increase (30%) is higher than the Increase Sensitivity (8%) defined for Debentures'99. The value of this collateral now stands at $ 65,000. As this amount is more than the Cap Amount of $60,000 that you specified for the collateral, the Credit Limit available to the Keturah Smith will be increased. However the increase will not exceed the Cap Amount.

Keturah Smith's Credit limit will now stand at $ 60,000 (cap Amount) and not at $65,000 (market value) as a result of the revaluation.

A fall in value

The market value of Debentures'99 has decreased to $45, which is a 10% decrease from the old market price of $50.

At the time you update the Market price of Debentures'99 in the Securities Maintenance screen, the revaluation process is triggered off as the decrease (11.11%) is higher than the decrease sensitivity (5%) defined for Debentures'99. The market value of this collateral now stands at $ 45,000.

Keturah Smith's credit limit will stand decreased by $ 5,000 as a result of the revaluation.

11.   Maintaining Collateral and Price Code Types

11.1 Introduction

A 'type' has to be allotted to each:

- Collateral that you accept in your bank (called the collateral type); and
- 'Market' for which you want to track the prices of securities that you take as collateral (called as the price code type)

11.2 Invoking the Collateral and Price Code Types screen

In the Application Browser, the screen for maintaining collateral and price code types is available under **Limits Maintenance** under **Types**.
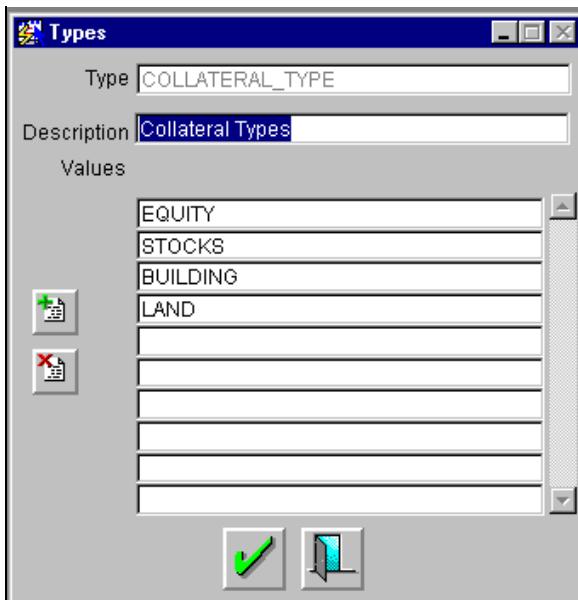
11.3 Maintaining a Collateral Type List

To maintain a list of types of collateral your bank accept as collateral, select COLLATERAL_TYPE at Type. Enter the names of the collateral types in the rows under the column 'Values' and click [icon]. To remove a collateral type from the list, highlight it and click [icon].

The list of Collateral Types that you maintain in this screen is displayed in the form of picklist, which you can use while specifying details for the collateral in the Collateral Maintenance screen.

11.4 Maintaining a List of Price Codes

To maintain a list of types of collateral your bank accept as collateral, select PRICECODE_TYPE at Type. Enter the names of the market places where you want to track the prices for a security. In the rows under the column 'Values' and click [icon]. To remove a price code type from the list, highlight it and click [icon].

ORACLE

The list of Price Codes that you maintain is displayed while you are maintaining details for the Price codes in the Securities maintenance screen.

12. Tracking Unutilized Limit lines

12.1 Introduction

In this chapter, we shall discuss the manner in which you can define attributes specific to a Limits product.

You can create a limit product in the Limit Product Definition screen, invoked from the Application Browser under Limits Maintenance under Limits Categories. In this screen, you can enter basic information relating to a limit product such as the Product Code, the Description, etc.
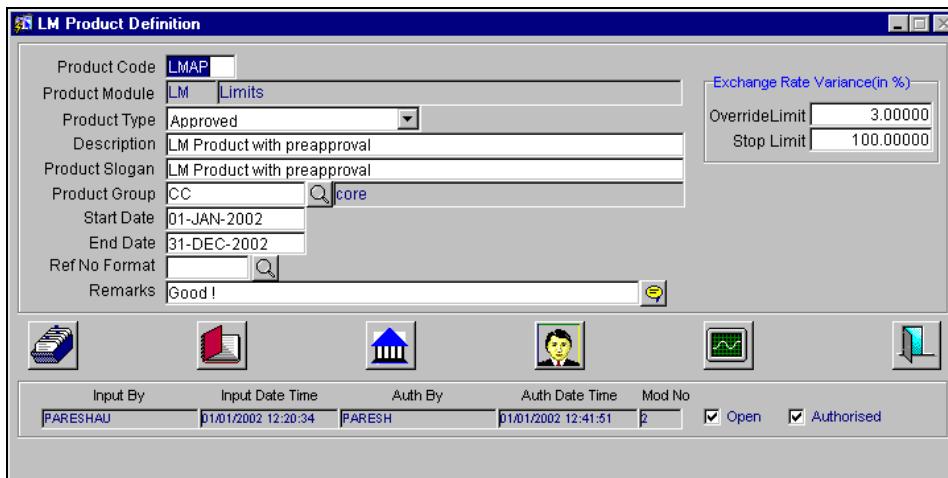
For any product you create in Oracle FLEXCUBE, you can define generic attributes, such as branch, currency, and customer restrictions, interest details, tax details, etc., by clicking on the appropriate icon in the horizontal array of icons in this screen. For a limit product, in addition to these generic attributes, you can specifically define other attributes. These attributes are discussed in detail in this chapter.

You can specify the Product Type of the limit product you are defining through the Limit Product Definition Main screen.

For further information on the generic attributes that you can define for a product, please refer the Products User Manual.

12.1.1 Specifying the product type

You might wish to segregate limit lines belonging to the following categories:

- Lines having no pre-approval.
- Lines having pre-approval.
- Internal Lines.

The system tracks limit lines as per the categorization you maintain in this screen.

12.2 Accounting Entries

Given below is a list of suggested event-wise accounting entries for unutilized limit lines.

12.2.1 Amount Tags

The amount tags listed below are hard-coded in Oracle FLEXCUBE.

Amount Tag	Description
LIMITAMT	Limit Amount
LMAVAILAMT	Limit Available Amount
LIMTOVAMT	Limit Turnover Amount = The amount utilized on a particular date – amount reinstated on that date.

12.2.2 Accounting Roles

The following list contains the accounting roles that are applicable to unutilized limit lines.

Accounting Role	Description	Role Type
UNUTLLMTGL	Unutilized limit GL	Contingent Asset
UNUTLLMTOFF	Offset Unutilized limit GL	Contingent Liability

12.2.2.1 INIT: Initiation

This event is triggered during the authorization of the credit line maintenance.

Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
UNUTLLMTGL	LIMITAMT	Debit
UNUTLLMTOFF	LIMITAMT	Credit

12.2.2.2 LINK: Linkage of limits

This event is triggered during the EOFI stage for accounting for unutilized limit lines if the amount utilized on that date is greater than the amount reinstated on that date.

ORACLE

Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
UNUTLLMTGL	LIMTOVAMT	Credit
UNUTLLMTOFF	LIMTOVAMT	Debit

12.2.2.3 <u>DLNK: Release of Linkage of limits</u>

This event is triggered during the EOFI stage for accounting for unutilized limit lines if the amount utilized on that date is less than the amount reinstated on that date.

Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
UNUTLLMTGL	LIMTOVAMT	Debit
UNUTLLMTOFF	LIMTOVAMT	Credit

12.2.2.4 <u>CLOS: Closure</u>

This event is triggered when the credit line expires, is closed or marked as unavailable.

Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
UNUTLLMTGL	LMAVAILAMT	Credit
UNUTLLMTOFF	LMAVAILAMT	Debit

12.2.2.5 <u>DECR: Decrease</u>

This event is triggered when the credit line amount is decreased.

Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
UNUTLLMTGL	LIMITAMT	Credit
UNUTLLMTOFF	LIMITAMT	Debit

ORACLE

12.2.2.6 <u>INCR: Increase</u>

This event is triggered when the credit line amount is increased.

Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
UNUTLLMTGL	LIMITAMT	Debit
UNUTLLMTOFF	LIMITAMT	Credit

Also note:

- The LCY equivalents of accounting entries in FCY will be passed with the Standard exchange rate.
- The limits accounting will take place after Limits Processing at EOFI.
- The Limits accounting entries will bear reference numbers taken from the product code. These reference numbers will be used during the entire life cycle of the credit line.

ORACLE