

Derivatives  
Oracle FLEXCUBE Universal Banking  
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# 1. About this Manual

## 1.1 Introduction

This manual is designed to help you maintain and process Derivative instruments in Oracle FLEXCUBE. It also assists you in handling all the necessary activities in the life-cycle of a derivative once it is booked. This includes the generation of messages and reports, the accrual and liquidation of interest components, the application of charges and taxes and so on.

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 Audience

This manual is intended for the Customer Service Representatives (CSRs) and staff in charge of setting up new products in your bank.

## 1.3 Acronyms and Abbreviations


The following are some of the acronyms and abbreviations you are likely to find in the manual:

<b>DV</b>	Derivatives
<b>FRA</b>	Forward Rate Agreements.
<b>CCS</b>	Cross Currency Swaps.
<b>IRS</b>	Interest Rate Swaps.
<b>MA</b>	Master Agreement.
<b>SWIFT</b>	Society for Worldwide Inter-bank Financial Telecommunication.
<b>ISDA</b>	International Swaps and Derivatives Association.
<b>EOD</b>	End of Day
<b>BOD</b>	Beginning of Day

## 1.4 Organization

This manual is organized as follows:

<b>Chapter 1</b>	<i>About this Manual</i> gives information on the intended audience. It also lists the various chapters covered in this User Manual.
<b>Chapter 2</b>	<i>Derivatives - An Overview</i> is a snapshot of the features that the module provides.
<b>Chapter 3</b>	<i>General Maintenance for the derivative module</i> deals with the maintenance of basic information that needs to be set up before the Derivatives module becomes operational.
<b>Chapter 4</b>	<i>Defining Attributes Specific to Derivative Products</i> describes the procedure to define attributes specific to derivative products.
<b>Chapter 5</b>	<i>Processing a Derivative Contract</i> lists and explains the details of a derivative that should be captured. It also explains how to associate a DV product with a DV contract.
<b>Chapter 6</b>	<i>Batch Processing</i> documents the Beginning and End of Day functions that are processed by the system.
<b>Chapter 7</b>	<i>Error messages for Derivatives</i> lists the error messages that you encounter while working with Oracle FLEXCUBE.
<b>Chapter 8</b>	<i>Annexure A - Accounting Entries and Advices</i> contains an event-wise list of suggested accounting entries and advices for the Derivatives module
<b>Chapter 9</b>	<i>Reports</i> provide a list of reports that can be generated in this module and also explains their contents.



Important information is preceded by the  symbol.


















## 1.5 Related Documents

- The Procedures User Manual
- The Messaging System User Manual
- The Central Liability User Manual

### 1.5.1 Glossary of Icons

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

<b>Icons</b>	<b>Function</b>
	New
	Copy

	Save
	Delete
	Unlock
	Print
	Close
	Re-open
	Reverse
	Template
	Roll-over
	Hold
	Authorize
	Liquidate
	Exit
	Sign-off
	Help
	Add row
	Delete row

Refer the Procedures User Manual for further details about the icons.

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## 2. Derivatives - An Overview

### 2.1 Introduction

Derivatives are contracts which derive their value from one or more underlying assets. The underlying assets can be stocks, bonds, commodities, currencies, interest rates, market indexes or even the weather. The value of the derivative is determined by fluctuations in these underlying assets.

Derivatives are generally used as an instrument to hedge risk. Additionally, it can also be used for the following purposes:

- To speculate - to reflect a view on the future direction of the market
- To enhance liquidity
- To change the nature of an investment without incurring the costs of selling one portfolio and buying another

#### 2.1.1 Types of Derivatives

There are two distinct groups of derivative contracts which are distinguished by the way they are traded in the market.

Based on the market in which they can be traded, derivatives are broadly classified as:

- Over-the-counter (OTC) derivatives – These are contracts that are traded (and privately negotiated) directly between two parties, without going through an exchange or other intermediary. Products such as swaps, forward rate agreements, and exotic options are almost always traded in this way.
- Exchange-traded derivatives (ETD) – These are derivatives products that are traded via specialized derivatives exchanges or other exchanges.

The most common types of derivative instruments are as follows:

- Futures and Forwards – Futures/Forwards are contracts to buy or sell an asset on or before a future date at a price specified today. A futures contract differs from a forward contract in that the futures contract is a standardized contract written by a clearing house that operates an exchange where the contract can be bought and sold, while a forward contract is a non-standardized contract written by the parties themselves.
  - A Forward rate agreement (FRA) is a specific type of a Forward. FRA is a contract between two parties in which one party agrees to lend and the other agrees to borrow a specific amount at a specified interest rate for a specified tenor. FRAs are settled through cash payments that represent the difference between the contracted rate and the spot value of the pre-determined market benchmark rate



- Options - An option is a contract between a buyer and a seller that gives the buyer the right but not the obligation to buy or to sell a specified amount of a particular asset (the underlying asset) at an agreed price on or before a particular day. In return for granting the option, the seller collects a payment called the 'premium' from the buyer. A 'call' option gives the buyer the right to buy an underlying asset; a 'put' option gives the buyer of the option the right to sell an underlying asset.
- Swaps - A swap is a transaction in which two counterparties agree to exchange one stream of cash flows against another stream over time. These streams are called the *legs* of the swap. Most swaps are traded over-the-counter. The most common type of swaps are:
  - Interest Rate Swaps – also known as Vanilla Swaps. It represents contracts between two parties to exchange calculated interest obligations related to a certain amount of principal without exchanging the principal amount itself. For e.g. One series of fixed rate interest rate flows is exchanged for another series of floating rate interest flows
  - Cross Currency Swaps – A cross-currency swap is a contract between two counterparties for the exchange of loans in different currencies. Principal amounts are exchanged at the inception, with a re-exchange upon closure. Between the inception and the closing dates, a series of cash flows are made between the two parties reflecting the interest payments on the two swapped principal amounts

## 2.1.2 **Features of Derivatives Module**

The Derivatives module in Oracle FLEXCUBE supports the processing of all types of Forward Rate Agreements, Interest Rate Swaps and Cross Currency Swaps.

The Oracle FLEXCUBE Derivatives module caters to the following requirements:

- Processing the following types of instruments:
  - Forward Rate Agreements (FRAs)
  - Interest Rate Swaps (IRS)
  - Cross Currency swaps (CCS)
- Creating products/instruments to suit the bank's requirements
- Segregating hedge and trade deals increasing the flexibility to define the required accounting treatment
- Integrating with standard Treasury front office systems to provide seamless processing

### 2.1.2.1 **Derivatives Workflow**

The various operations and events in the life cycle of a derivatives contract are summarized below:

- Booking, amendment, termination and settlements
- Accounting treatment for life cycle events
- Initial and final exchange of principal (if applicable) and interest schedules
- Assumptions/purchase and assignments/sale of running contracts (trade deals)
- Brokerage Processing

- Revision of floating interest indices and interest accruals
- Revaluation of contracts
- Amortizations – Inception and Termination gains/losses
- Counterparty limit tracking under credit lines
- Exposure tracking under ISDA and other Master agreements
- SWIFT Messaging including multi-party messaging
- Queries and reports

### **2.1.2.2 Maintaining Mandatory Details**

For Derivatives module to become completely operational you need to set up certain mandatory information. Before doing the module specific maintenance you need to complete the core static maintenance of Customer, GL, Accounts, Currency etc.

The information that you need to maintain in the Derivatives module includes:

- Defining Derivative Types
- Bank and Branch Parameter details
- Revaluation details
- Specifying Limits
- Messaging party details
- Counterparty details
- Interest, Tax and Charge classes.

*For more details on module specific and generic maintenance that you need to do, refer the chapters titled 'General Maintenance for the Derivatives Module' and 'Defining Attributes Specific to Derivative Products' in this User Manual*

### **2.1.2.3 Defining Fair Price Revaluation Methods**

In Oracle FLEXCUBE, you can revalue the worth of contracts by using either one of the following methods. They are as follows:

- Maintaining Contract Fair Prices - whereby you have to indicate the fair price of individual contracts, which will be used for revaluation.
- Maintaining Branch Interest Rates - whereby you can maintain branch level forward interest rates, which will determine the fair price to be used for revaluation.
- Maintaining Contract Interest Rates - whereby you maintain contract specific forward interest rates which will determine the fair price to be used for revaluation.

### **2.1.2.4 Reports in Derivatives Module**

In Oracle FLEXCUBE, you can generate following reports for the Derivatives module:

- Interest Accrual report
- Back Dated Deals report
- Contract Activity report
- Customer-wise Details report
- Customer-wise Summary report
- Process Exception report
- Revaluation Log report
- Settled Deals report

*For more details on generating reports in Derivatives module, refer the chapter titled 'Reports' in this User Manual.*

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## 3. General Maintenance for the Derivatives Module

### 3.1 Introduction

Before you begin any operations in the Derivatives module you have to maintain certain basic information. This information is necessary for the successful functioning of the module. The information that you need to maintain includes:

- Defining Derivative Types
- Bank and Branch Parameter details
- Revaluation details
- Specifying Limits
- Messaging party details
- Counterparty details
- Interest, Tax and Charge classes.

Although you maintain this information at the out set before beginning any transactions in this module it is imperative that you periodically review and update this information to reflect the latest changes.

The procedure to maintain these details is documented in the subsequent sections:

### 3.2 Maintaining Derivative Types

The difference between this module and the other modules in Oracle FLEXCUBE is that before you begin to maintain products you are required to define Derivative Types. In maintaining derivative types you can broadly classify the derivative instrument as an FRA, CCS or IRS.

Additionally you can also capture relevant information about the instrument. For instance indicating whether schedules are allowed or whether interest is to be paid in advance or in arrears and so on.

The advantage of defining derivative types is that at the time of creating a product you need to specify the code assigned to the derivative type. The basic details you have specified for the derivative type will be automatically inherited by the product and consequently by any contract entered using that product.

You can invoke the 'Derivative Type Maintenance' screen by typing 'DVDDTMNT' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button. The 'Derivative Type Maintenance' screen will be displayed.

If you are maintaining details of a new derivative type, select 'New' from the Actions menu in the Application tool bar or click new icon. The 'Derivative Type Maintenance detailed' screen will be displayed without any details.

If you are calling a derivative type maintenance record that has already been defined, choose the Summary option under Derivative Type. From the 'Summary' screen, double click a record of your choice to open it.

## Derivative Type

The first attribute that you define for the derivative is its type. A type defines the basic characteristics of the instrument. It indicates whether the:

- Deal involves a single currency or two currencies.
- Deal involves multiple interest schedules.
- Interest will be liquidated in a single payment.

By suitably defining a derivative type, you will be able to define the following basic instrument types and their variants:

- Forward Rate Agreements (FRA).
- Cross Currency Swaps (CCS).
- Interest Rate Swaps (IRS).

## **Type Description**

You can also assign a brief description for the derivative type that you are defining. This description will be associated with the type only for information purposes. Under each Derivative Type you can create any number of products.

## **Principal Details**

As part of specifying the principal details you have to indicate whether two separate currencies can be maintained for both the inward and outward legs of all the contracts linked to the derivative type you are creating. If you choose allow cross currencies for the in and out legs of contracts linked to the derivative type then you have to also indicate whether the contract principal has to be exchanged upon initiation and maturity.

Apart from this you also have to indicate whether multiple schedules can be defined for the principal component. If you choose to define multiple schedules then the frequency of these schedules can be indicated at the time of specifying the product preferences. You can select any one as the frequency for the principal schedules:

- Daily
- Weekly
- Monthly
- Quarterly
- Half-yearly
- Yearly

But if you choose not to define multiple schedules then the principal liquidation for all the contracts linked to this type will be done on contract maturity.

Also the in leg and out leg principal schedules that you define for a contract need not be in sync with each other. You can choose to have asynchronous schedules for both the in and out legs of the contract.

## **Amortization Start Date**

In the case of termination of hedge deals, you have to indicate the date from which the amortization of gains and or losses should start. While terminating swaps, amortization should start as of the termination date and in the case of FRAs amortization should start as of the settlement date.

## **Holiday Treatment**

You can indicate the way in which a particular schedule date should be treated if it falls due on a holiday. The holiday movement of the principal, interest and revision schedules for each of the in and out legs can be based on:

- The holiday table maintained for a single financial center or single currency specified at the leg level, or

- The combination of holiday tables of multiple financial centers/currencies.

Select the Combined option in this screen if you want the movement of schedules to be based on the combination of holiday tables maintained for multiple financial centers/currencies at both the legs of the contract. This will be applicable if the holiday treatment (specified at the contract level) is based on the holiday calendars of the currencies or financial institutions involved in the contract.

Your specification will be automatically inherited by the product associated with the derivative type and consequently by any contract entered using the respective product.

### **Interest Details**

Specify the following details.

#### **Netting Required**

If two or more accounting entries for an interest schedule payment are to be passed in the same currency on the same Value Date, then in Oracle FLEXCUBE you are allowed to net these entries.

However netting of entries is allowed only in the case of single currency derivative types. If you are maintaining details of a cross currency type you will not be allowed to net entries.

#### **Asynchronous Schedules**

Netting for asynchronous schedules is allowed only for derivative types that do not define a cross currency swap. The in leg and out leg payment methods should also be synchronous (both Advance or both Arrears) for selecting the Netting required option for Asynchronous schedules.

### **In/Out Leg Interest Details**

#### **Interest Schedules Allowed for the leg type**

While maintaining the derivative type you are required to indicate whether contracts linked to the derivative type can have multiple schedules or whether the schedules have to be bulleted.

In Oracle FLEXCUBE you can choose to have multiple schedules for one leg and bullet schedules for the other leg. For instance you can indicate that the in leg schedules have to be bulleted and the out leg schedules have to be multiple. Consequently for all contracts linked to this type the in leg schedules will be bulleted while the out leg can have multiple schedules.

You can also choose to define multiple schedules for both the inward and outward legs and indicate that the frequency of repayment should differ.

#### **Revision schedules allowed for the leg type**

Just as in the case of interest schedules so also revision schedules too can either be multiple or bulleted, depending upon your specification.

A revision schedule is the time period for which a floating interest rate is to be used. Normally this would be the same as the interest schedule but in Oracle FLEXCUBE you are allowed to maintain separate interest and revision schedules. Therefore you have to specify whether the revision schedules defined for the particular (In or Out) leg of the contract need to be in sync with the interest schedules or whether they can be asynchronous. For instance you may like to permit contracts with semi-annual interest payments with quarterly revision in interest rate.

### **Payment Method**

Interest amount repayments for both the inward and outward interest legs can be made either at the start of the interest period or at the end of the interest period. For instance a typical FRA would require a discounted cash-flow to be paid at the commencement of the period while an interest rate swap would require cash-flows to be exchanged at the end of each interest period.

Your choice of the payment method at the derivative type definition level will be defaulted to all the contracts linked to the derivative type.

### **Internal Remarks**

When creating the derivative type you can capture additional information about the type intended for the internal reference of your bank. Your remarks will not be printed on any correspondence with the customer.

However you can choose to include these remarks in the reports that you generate.

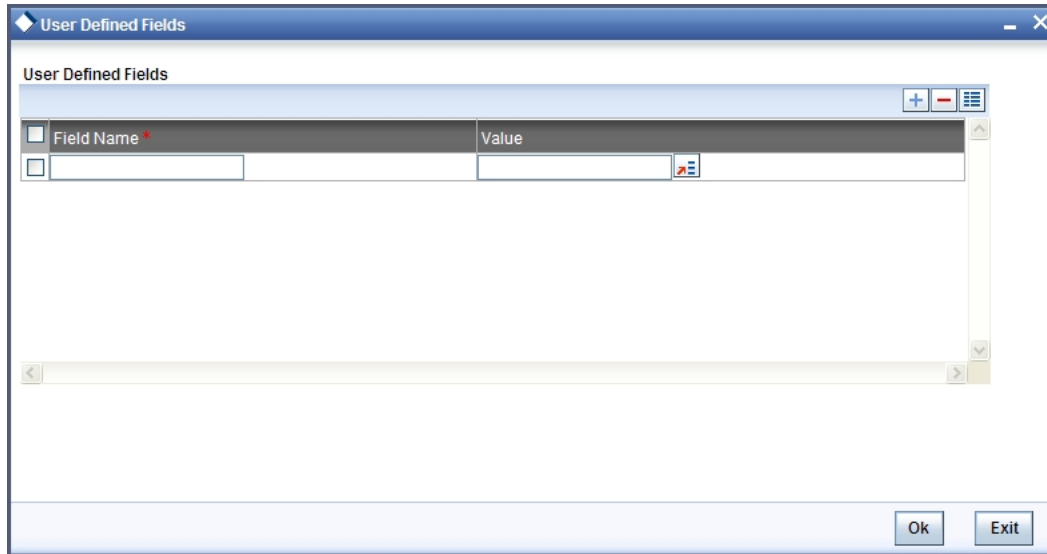


You will not be allowed to change the details of an existing derivative type except change the Description Type and the Internal Remarks.



### 3.2.1 Maintaining User Defined Fields

You can associate values to all the User Defined fields created and attached to the 'Derivative Type Maintenance' screen. You can view the list of User Defined fields associated to this screen by clicking 'Fields' button in the 'Derivative Type Maintenance' screen.



You can specify the value for the UDFs listed here in the 'Value' column.

*For more details on how to create user Defined fields, refer chapter 'Creating custom fields in Oracle FLEXCUBE' in the User Defined Fields User Manual under Modularity.*

### 3.3 Maintaining Branch Parameters

You can maintain branch level parameters that govern the processing of derivatives in a particular branch of your bank through the 'Derivatives Branch Parameters Maintenance' screen.

You can invoke the 'Derivatives Branch Parameter Maintenance' screen by typing 'DVDBRNPM' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The 'Derivatives Branch Parameter Maintenance' screen will be displayed.

The screenshot shows a software window titled "Derivatives Branch Parameters Maintenance". The window contains the following elements:

- Branch Code \***: A text input field with a dropdown arrow icon.
- Description**: A text input field.
- Process Till Next Working Day**: A checkbox.
- Revaluation Reversal**: A section with two radio buttons:
  - Along with Revaluation
  - Next Day in Beginning of Day
- Fields**: A section at the bottom containing:
  - Input By**: Date Time
  - Authorized By**: Date Time
  - Modification**: Number
  - Authorized
  - Open
  - Exit**: A button.

Those events, which have to be triggered automatically, will be processed accordingly during batch process. However you are required to indicate how automatic events falling due on a holiday should be processed.

### Process till Next Working Day

You have the option to specify whether the batch process should process automatic events falling due on a holiday either

- as part of the EOD process on the last working date before the holiday; or
- as part of the BOD process on the next working day after the holiday.

### Example

Assume today is 15<sup>th</sup> November 2000, 16<sup>th</sup> November 2000 and 17<sup>th</sup> November 2000 are holidays. If you check this field, during the Automatic Batch Update function run, only the events scheduled for 15<sup>th</sup> November 2000 will be processed.

The events scheduled for the holidays, i.e., 16<sup>th</sup> November 2000 and 17<sup>th</sup> November 2000 will be processed during the Automatic Batch Update function run during beginning of day operations on 18<sup>th</sup> November 2000.

### Revaluation Reversal

As a branch level parameter you can indicate the manner in which deal level reversal of Unrealized Revaluation with Previous Year Adjustment should be processed. The options available are:

- Along with Revaluation – reversals of entries for a particular revaluation will be performed at the time of the next revaluation.

- Next Day in BOD – select this option to indicate that any revaluation gain/loss should be reversed the very next day during the BOD process. If the BOD processing date happens to be the first day of the financial year, revaluation reversal will be done from the Previous Year Adjustment GL maintained in the Chart of Accounts.

**Example**

You have entered a deal with the following parameters:

- Revaluation method is Fair Value
- Revaluation Netting Required option is set to Yes; and
- Revaluation Frequency is monthly
- Frequency Start Day as 1.

Assume that the deal comes into existence on the 15<sup>th</sup> of July. The fair value of the In Leg is USD 500 and that of the Out Leg is USD 350 as on the 1<sup>st</sup> of August. This results in a revaluation gain of USD 150 (500 – 350)

**Scenario I - Along with the next Revaluation**

Accounting entries passed on the 1<sup>st</sup> of August will be as follows:

**Event DRVL (Contract Revaluation)**

Accounting Role	Amount Tag	Debit/Credit Indicator	Amount
CONT_FAIR_VAL (Contract Fair Value GL)	CUR_NETRVL_INC	Debit	150
NET_RVL_INC (Revaluation Income)	CUR_NETRVL_INC	Credit	150

There is a net revaluation loss of USD 75 on the 1<sup>st</sup> of September. When the event DRRL (Revaluation Reversal) is triggered, the entries posted are as follows:

Accounting Role	Amount Tag	Debit/Credit Indicator	Amount
NET_RVL_INC (Revaluation Income)	PRV_NETRVL_INC	Debit	150
CONT_FAIR_VAL (Contract Fair Value GL)	PRV_NETRVL_INC	Credit	150

Next, the DRVL for the day is triggered.

Accounting Role	Amount Tag	Debit/Credit Indicator	Amount
NET_RVL_EXP (Revaluation Expense)	CUR_NETRVL_EXP	Debit	75
CONT_FAIR_VAL (Contract Fair Value GL)	CUR_NETRVL_EXP	Credit	75

**Scenario II - Next Day in BOD**

Accounting entries passed on 01 August EOD

**Event DRVL (Contract Revaluation)**

Accounting Role	Amount Tag	Debit/Credit Indicator	Amount
CONT_FAIR_VAL (Contract Fair Value GL)	CUR_NETRVL_INC	Debit	150
NET_RVL_INC (Revaluation Income)	CUR_NETRVL_INC	Credit	150

Accounting entries passed on the 2<sup>nd</sup> of August at BOD for the event DRRL are:

Accounting Role	Amount Tag	Debit/Credit Indicator	Amount
NET_RVL_INC (Revaluation Income)	PRV_NETRVL_INC	Debit	150
CONT_FAIR_VAL (Contract Fair Value GL)	PRV_NETRVL_INC	Credit	150

Entries passed on the 1<sup>st</sup> of September for the event DRVL are:

Accounting Role	Amount Tag	Debit/Credit Indicator	Amount
NET_RVL_EXP (Revaluation Expense)	CUR_NETRVL_EXP	Debit	75
CONT_FAIR_VAL (Contract Fair Value GL)	CUR_NETRVL_EXP	Credit	75

If the 2<sup>nd</sup> of August happens to be the first day of a new financial year, the entries passed on that day during BOD are:

**Event DRRL**

Accounting Role	Amount Tag	Debit/Credit Indicator	Amount
Previous Year adjustment GL	PRV_NETRVL_INC_PY	Debit	150
CONT_FAIR_VAL (Contract Fair Value GL)	PRV_NETRVL_INC_PY	Credit	150

This is because the revaluation profit and loss for the previous year (ending 1<sup>st</sup> August) would have been transferred to the Previous Year P&L Adjustment GL.



The revaluation reversal program will be called during termination of the contract and final liquidation to reverse out any previous revaluation gain or loss.

See the chapter on Accounting Entries of this manual.

### 3.4 **Maintaining Counterparty Master Agreement Details**

Through the Derivatives 'Counterparty Master Agreement Maintenance' screen you can enter the details of the master agreement(s) with each counterparty.

You can invoke the 'Counterparty Master Agreement Maintenance' screen by typing 'DVDCPMNT' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The 'Counterparty Master Agreement Maintenance' screen will be displayed.

Code	Description	Agreement Date	Agreement Details	Linkage

If you are maintaining details of a new master agreement, click new icon. The 'Counterparty Master Agreement Maintenance' screen will be displayed without any details.

If you are calling a master agreement record that has already been defined, choose the Summary option under Counterparty. From the 'Summary' screen double click a record of your choice to open it.

#### **Counter Party and Master Agreement code**

Each master agreement that you create can be associated with a counter party. You have to indicate the code assigned to the counterparty for whom the master agreement is being maintained.

After you specify the customer for whom the master agreement is being maintained you have to enter a code to uniquely identify the master agreement. You can follow your own conventions while devising this code.

## **Master Agreement Type**

You can indicate the type of master agreement under which the contract falls. The options available in the option list provided contain a list of standard master agreement types. They are as follows:

- AFB
- BBAIRS
- ISDA
- FRABBA
- DEVR
- FBF
- OTHERS

## **Product Group**

A product is a specific service that you offer your customers. In Oracle FLEXCUBE you are required to group together products according to the common attributes that they share. This kind of grouping of products helps you organize information pertaining to the services that you provide. Besides it also simplifies information retrieval.

Maintenance of product groups is done through the 'Product Group Definition' screen. You can indicate the product group whose contracts can be linked to the master agreement.

## **Version**

You need to indicate the version number of the master agreement for which you are maintaining details.

## **Utilization Currency**

If you have indicated that Limit Tracking is required then you need to specify the utilization currency. The currency that you specify here will be taken as the credit limit utilization currency for the master agreement.

## **Agreement Date**

Specify the date as of which the master agreement was signed.

## **Credit Netting required**

One of the main advantages in maintaining a master agreement is the credit netting provision. While defining the master agreement you can indicate whether the positive and negative contract fair values should be netted for the counterparty.

This concept can be explained with the help of an example:

**Example**

CHASEMANN is a customer of your bank and currently you are managing ten contracts for your customer. You have linked the contracts according to their attributes to different master agreements in the following manner:

<b>MA Code and Description</b>	<b>Contract Reference No.</b>	<b>MTM Value</b>
MA 1 (Master Agreement for CCS)	000DV21992950261	USD 100.
	000DV21992950262	USD 20.
	000DV21992950264	USD 100.
MA 2 (Master Agreement for FRAs)	000DVFR992950002	GBP 100.
	000DV21992950277	GBP 50.
	000DV01992951117	GBP -50.
MA 3 (Master Agreement for IRS)	000DV21992950278	FRF -20.
	000DV21992950279	FRF 100.
	000DV21992950182	FRF 50.
	000DV21992950188	USD -50.

The Utilization Currency that you have indicated for the three Master Agreements is as follows:

- MA 1 - USD.
- MA 2 - GBP.
- MA 3 - FRF.

**Scenario 1**

You have indicated that for all contracts falling under MA 1 credit netting is required both at the MA level and the contract level.

Since you have indicated that credit netting is required the system does the necessary computations and the credit exposure in this case will be USD 180.

**Scenario 2**


For all contracts falling under MA 2, you have indicated that credit netting is not required.

The credit exposure in this case will be 150 GBP.

**Scenario 3**

While processing the contract you have indicated that contract bearing the reference number 000DV21992950188 should be excluded from netting.

Now the credit exposure in this case will be FRF 130.

 In the above example you will notice that the contract currency and the utilization currency are the same. Therefore the system did not have to do any currency conversions. However most often than not, the base currency of the contract will be different from the utilization currency. In such cases the system converts the MTM value of the contract using the rates maintained in the 'Exchange Rates Maintenance' screen and thus arrives at the credit exposure amount.


### **Master Agreement Year**

Every master agreement that you define will invariably refer to the Book of Definitions (ISDA Definition).

You have to indicate the year of definition, which is applicable for the master agreement in this field.

### **Collateral Agreement**

You have to indicate whether collateral agreements are applicable for the master agreement.

 The system checks this box by default. If you do not want the collateral agreements to become a part of the master agreement, leave this box unchecked.

### **Limits Tracking Details**

You have to indicate whether exposure against the master agreement needs to be tracked for the counterparty limits. If you want to track counterparty limits for exposure against the master agreement then you need to specify the default credit line against which the credit limit utilization of contracts under the master agreement will be tracked.

You can specify whether Notional Limits tracking is required for the Customer and also specify the line code against which the notional limit should be tracked.

If you have indicated that Fair Value Limit tracking is required for the master agreement then you are required to specify the default fair value credit line against which the credit limit utilization of contracts under the master agreement will be tracked.

Additionally, you can specify whether Risk Weighted Limits Tracking is required and also select the line code against which the Risk Weighted Limit should be tracked.

The options Notional Limits Tracking, Fair Value Limits Tracking and Risk Weighted Limits Tracking will be enabled only if the Limits tracking option is selected.

Subsequently you also have to indicate the utilization currency. This currency will be taken as the credit limit utilization currency for the master agreement.

### **Agreement Details and Internal remarks**

After specifying the main details about the master agreement you can summarize the entire agreement and store details about it. This information is basically for the internal reference of your bank and will not be reflected on any customer correspondence.



Additionally you can also capture your own internal remarks about the master agreement that you have created. These remarks too will not be reflected in your correspondence with the customer.

### **Sub Agreements**

With every master agreement that you create you can link one or more sub agreements. Subsequent to creating a sub agreement you can either choose to link it to the master agreement or choose to link it at a future point in time.

#### **Code**

Specify a code to identify the sub agreement that you are creating. The code that you specify will have to be a unique code at the counterparty level.

#### **Description**

Enter a brief description that will enable you to identify the sub agreement code being maintained quickly. The description that you specify here is for information purposes only and will not be printed on any customer correspondence.

#### **Date**

Specify the date as of which the sub agreement was signed.

#### **Agreement Details**

You can summarize and capture all the details about the sub agreement. The details that you enter here will not be printed on any customer correspondence.

#### **Linkage**

You can check this box to indicate that the sub agreement for which you are maintaining details should be associated with the master agreement.

## **3.5 Maintaining Clearing Houses**

You can maintain the details of financial centers through the 'Clearing House Maintenance' screen. The reason for maintaining clearing houses or financial centers is that at the time of processing the contract you can indicate that holiday treatment for principal and interest schedules and for rate resets should be according to the holiday calendar of the financial center.

You can invoke the 'Clearing House Maintenance' screen by typing 'STDCLMNT' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The 'Clearing House Maintenance' screen will be displayed.

The screenshot shows a software window titled "Clearing House Maintenance". Inside the window, there are three text input fields. The first is labeled "Clearing House \*" and is empty. The second is labeled "Description" and is empty. The third is labeled "Swift Code \*" and is empty. Below these fields is a section titled "Fields" which contains several labels: "Input By", "Date Time", "Authorized By", "Date Time", "Modification Number", "Authorized", "Open", and an "Exit" button. The "Authorized" and "Open" labels are accompanied by unchecked checkboxes.

If you are maintaining details of a new financial center, select 'New' from the Actions menu in the Application tool bar or click new icon. The 'Clearing House Maintenance' screen will be displayed without any details.

If you are calling a clearing house record maintenance record that has already been defined, choose the Summary option under Clearing House. In the 'Summary' screen double click on a record of your choice.

### **Clearing House**

In Oracle FLEXCUBE you have to assign a unique three-character code to the clearing house that you are maintaining. The code that you assign is used to identify the particular clearing house whenever you link it to a particular contract. You can follow your own convention while devising this code.

### **Description**

In addition to assigning a code you can give it a brief description so that you can identify it easily while retrieving information. The description that you enter is for information purposes only and will not be printed on any customer correspondence.

### **Swift Code**

Specify the SWIFT Code that you wish to maintain for the Clearing House.

## **3.6 Maintaining Messaging Parties Details**

At every stage in the life cycle of a transaction you will need to send various messages to your customer. You need to send these messages to the recipient of the message whom your customer has identified as the receiver of the message.

The 'Messaging Parties Maintenance' screen will enable you to capture details of the recipients of derivative messages that have to be sent to the various counterparties.

You can invoke the 'Messaging Parties Maintenance' screen by typing 'DVDMGMNT' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The 'Messaging Parties Maintenance' screen will be displayed.

The screenshot shows the 'Messaging Parties Maintenance' application window. The window title is 'Messaging Parties Maintenance'. It contains several input fields: 'Receiver Id \*', 'Medium \*', 'Receiver Name', and 'Address'. There is also a 'Language' dropdown menu. Below these fields is a section titled 'Message Party Details' which contains a table with columns 'Message Type \*', 'Customer Id \*', and 'Default'. The table has one row with empty input fields. At the bottom of the window is a 'Fields' section with labels for 'Input By Date Time', 'Authorized By Date Time', 'Modification Number', and checkboxes for 'Authorized' and 'Open'. An 'Exit' button is located in the bottom right corner.

If you are maintaining details of a new receiver on behalf of the counterparty, select 'New' from the Actions menu in the Application tool bar or click new icon. The 'Messaging Parties Maintenance' screen will be displayed.

You can identify the person who is to receive the message on behalf of the counterparty and the medium through which the message should be sent. To do this you have to assign a unique code to the receiver and medium combination. Subsequently you have to capture the name of the receiver.

### Receiver Id

This is the code assigned to the receiver of the message. Specify a unique code to identify the receiver of the message.

### Medium

Choose the medium through which you wish to send the message. This can be any of the following:

- Mail
- Telex

- Fax
- SWIFT

### **Receiver Name**

This is the name of the receiver of the message. Specify the name of the party who will receive the message on behalf of the customer.

### **Address**

While maintaining the messaging party details you are required to indicate the mailing address of the receiver of the message. All the messages addressed to the counterparty will be directed to the receiver address that you specify.

During contract input when you indicate the ID of the receiver, the default address specified for the receiver will be displayed.



If you specify that the message should be sent through SWIFT then you have to indicate the SWIFT address of the receiver in the first line of the address box before you specify the mailing address.

### **Language**

The message can be sent to the receiver in the language of the receiver. This adjoining option list displays a list of language codes. You can choose the appropriate one available in this field.



Remember that to send a message to a receiver in a particular language you should have also maintained a message format for the language in the 'Advice Format Maintenance' screen.

### **Message Party Details**

Specify the following details.

#### **Message Type**

Your customer can identify more than one receiver as the recipient of messages that you need to send the customer as and when required. Additionally your customer can also instruct you to send specific messages to different receivers.

#### **Customer Identification File**

After you select the list of messages that have to be sent to your customer you have to specify the ID assigned to the particular customer for whom you are maintaining recipient details. The adjoining option list displays list of all the CIF ID's you have maintained through the Customer Information Maintenance file.

Thus every time you send a message to the particular customer it will reach the recipient whom the customer has identified as the official receiver of the message.

### **Example**

CHASEBANK is the customer of your bank. CHASEBANK has identified Peter and Yvonne as the recipients of any mail messages that need to be communicated to them. You have also been instructed by CHASEBANK that all cancellation messages should be sent to Peter and all other messages can be sent to Yvonne.

While maintaining Messaging Party Maintenance details you have to enter Peter in the Receiver ID field and Mail as the medium of sending the message. Select DV\_CANC\_CCS in the Party Type field.

Secondly since CHASEBANK has instructed you to send all cancellation messages to Peter you have to select from the list and associate all possible cancellation messages that may have to be sent to CHASEBANK with Peter's ID.

### **Default**

While maintaining receiver details you can identify a particular receiver as the default receiver of messages that need to be sent to the customer. All those messages that have been marked for the particular will be sent to the default receiver.

## 4. Defining Attributes Specific to Derivative Products

### 4.1 Introduction

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

You can create a derivative product in the 'Derivatives Product Maintenance' screen, invoked from the Application Browser. In this screen, you can enter basic information relating to a derivative product such as the Product Code, the Description, etc.

You can invoke the 'Derivatives Product Definition' screen by typing 'DVDPRMNT' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The screenshot shows the 'Derivatives Product Definition' window. The top section contains input fields for: Product Code \*, Product Description \*, Product Type \*, Description, Slogan, Product Group \*, Product Group Description, Start Date, End Date, Remarks, - Exchange Rate Variance( In %), Override Limit, Stop Limit, Rate Code \* (dropdown), and Rate Type Preferred \*. Below these fields is a horizontal array of icons: Accounting Roles, Events, Branch & Currency, Customer, Preferences, Interest, Charges, Tax, MIS, and Fields. The bottom status bar includes: Maker, Checker, Date Time, Date Time, Mod No, Record Status, Authorization Status, and an Exit button.

### 4.2 Maintaining Derivative Products

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 derivative product, in addition to these generic attributes, you can specifically define other attributes. These attributes are discussed in detail in this chapter.

You can define the attributes specific to a derivative product in the 'Derivatives Product Maintenance' screen and the 'Product Preferences' screen. In these screens, you can specify the product type and set the product preferences respectively.

*For further information on the generic attributes that you can define for a product, please refer the following Oracle FLEXCUBE User Manuals:*

- Products

- Interest
- Charges and Fees
- Tax
- User Defined Fields
- Settlements

Specify the following details.

### **Product Code**

You need to identify the derivative product that you are creating with a unique Product Code. This code should be unique across all the modules of Oracle FLEXCUBE.

### **Product Description**

You can briefly describe the product that you are creating in this field. The description that you enter here will help you identify the product all through the module.

### **Product Type**

The product type identifies the basic nature of a product. The derivative types you have maintained through the 'Derivative Type Maintenance' screen will be reflected in the option list available for this field. A derivatives product that you create can belong to any one of the following types:

- Forward Rate Agreements.
- Interest Rate Swaps.
- Cross Currency Swaps.

### **Product Slogan**

You can specify a slogan for the product that you are creating that suitably announces the product to your customers.

### **Product Group**

Grouping products, according to the common features they share, helps you organize information relating to the services you provide. Product Groups also help you retrieve information easily.

You can invoke a list of the product groups that you have maintained in your bank and choose the product group to which the product that you are creating belongs.

### **Start Date**

When you create a product, you must specify a date from which it can be offered. Specify this date in the Start Date field.

## **End Date**

You can choose to specify the date up to which a product is open. Specify this date in this field. You cannot enter a date that is earlier than the current system date.



You cannot offer a product beyond the specified end date. If you do not specify an end date for a product, you can offer it for an indefinite period.

## **Remarks**

You can enter any remarks relating to the product for your reference here.

## **Exchange Rate Variance (in %)**

You can define the exchange rate variance that you would like to allow for a derivatives product. This variance is expressed in terms of a percentage.

For a special customer, or in special cases, you may want to use an exchange rate (a special rate) that is greater than the exchange rate maintained for a currency pair. The variance is referred to as the Exchange Rate Variance.

When creating a product, you can express an Exchange Rate Variance Limit in terms of a percentage. This variance limit would apply to all contracts associated with the derivatives product.

## **Override Limit**

If the variance between the default rate and the rate input varies by a percentage that is between the Override Limit and the Rate Stop Limit, you can save the transaction (involving the product) by providing an override.

## **Stop Limit**

If the variance between the default rate and the rate input varies by a percentage greater than or equal to the Stop Limit, you cannot save the transaction involving the product.

## **Rate Code**

For every Currency Pair and Rate Type combination you are required to maintain Buy, Sell, and Mid Rates.

You need to specify whether the Mid Rate should be used for all Cross Currency transactions or whether the Buy/Sell Rate should be used depending upon the nature of the transaction by selecting the appropriate rate from the option list available.

## **Rate Type Preferred**

Specify the Rate Type that should be used for Cross Currency transactions. The adjoining option list displays all the Rate Types maintained through the 'Rate Type Definition' screen. You can choose the appropriate one.



## 4.2.1 Specifying Preferences for the Product

Preferences are the options that are available to you for defining the attributes of a product. The preferences that you define for a product will be inherited by all derivative contracts that are associated with the product.

Click 'Preferences' button to invoke the 'Derivatives Product Preferences' screen. Through this screen you can define specific preferences for the product you are creating.

The screenshot shows the 'Derivatives Product Preferences' dialog box. At the top, there are input fields for 'Product Code', 'Product Description', 'Product Type', and 'Product Type Description'. Below these are four tabs: 'Main', 'Interest', 'Schedules', and 'Amortization Details'. The 'Main' tab is selected and contains the following options:

- Contract Type:** Radio buttons for 'Trade' (selected) and 'Hedge'.
- Deal Type:** Radio buttons for 'Buy' (selected) and 'Sell'.
- Assuming:**
- Brokerage Allowed:**

Below these are two sections: 'Rekey Fields' and 'Revaluation Details'.

**Rekey Fields:**

- Rekey Required
- In Currency
- In Principal Amount
- Out Currency
- Out Principal Amount
- Maturity Date
- Value Date

**Revaluation Details:**

- Revaluation Required
- Revaluation Netting Required
- Revaluation Method:** [Dropdown menu]
- Revaluation Frequency:** [Dropdown menu]
- Revaluation Start Weekday:** [Dropdown menu]
- Revaluation Start Day:** [Text input field]
- Revaluation Start Month:** [Dropdown menu]
- Revaluation Level:** Radio buttons for 'Contract' (selected) and 'Product'.

At the bottom right, there are 'Ok' and 'Exit' buttons.

The Product Code and Product Type are defaulted from the 'Product Maintenance' screen. In this screen you can specify the following:

## 4.2.2 Main Details tab

Specify the following details.

### **Contract Type**

You have to indicate whether the product for which you are defining preferences for is meant for Trade contracts or Hedge contracts.



You can amend this preference while entering the details of the contract.

## Deal Type

The first preference that you define for a derivative product is the Deal Type. You can indicate the default nature of deals that will be processed under this product. The choices available for this field are:

- Buy
- Sell



The deal type that you specify will be defaulted to contracts under this product. However you are allowed to change this while entering the details of the contract.

## Brokerage Allowed

You can specify whether brokerage should be applied on deals involving this product by checking the box. If brokerage is specified for the product, you can waive it for specific deals, but if you have specified that brokerage is not applicable to the product; you will not be able to levy brokerage on a specific deal involving the product.

## Principal Settlement Method

For contracts associated with the product, you have to indicate the way in which the principal amount (if exchanged) has to be settled. Only automatic settlement is supported in this case.

## Interest Settlement Method

For contracts associated with the product, you have to indicate the way in which the Interest amount has to be settled. Only automatic settlement is supported in this case.

## Rekey Fields

When a derivative contract is invoked for authorization - as a cross-checking mechanism, you can specify that the values of certain fields should be entered before the contract is authorized. This is called the Rekey option.

While defining the product you have to indicate the fields whose values you need to specify before a contract is authorized. Thus it becomes mandatory for you to specify the values of rekey fields for all contracts linked to the product.

You can specify any or all of the following as rekey fields:

- In Currency
- Out Currency
- Maturity Date
- In Prn Amount
- Out Prn Amount
- Value Date

If no rekey fields have been defined, the details of the contract will be displayed immediately when the authorizer calls the product for authorization.

## **Revaluation Details**

You may want to revalue your deal portfolio on a periodic basis to account for the gains and losses due to changes in the market interest rates or the exchange rates.

Oracle FLEXCUBE provides a feature to revalue the worth of derivative contracts linked to the product, based on the Fair Price, the Contract Rate or the Bank Rate.

### **Revaluation Required**

You can revalue the worth of contracts associated with the product at regular intervals.

Check this box to indicate whether revaluation is required for the product you are defining. Else leave this box unchecked.



At the time of processing a contract if you decide that revaluation is not required then you can choose to waive this option (even if at the product level you have specified that revaluation is necessary for contracts involving the product).

However if at the product level you have specified that revaluation is not required, then while processing the contract you will not be allowed to choose the revaluation option.

### **Revaluation Netting Required**

If you have indicated that revaluation is required for the product then you can also indicate whether accounting entries should be passed at the leg level or at the contract level.

Check this box to indicate that revaluation entries should be passed at the contract leg level.


### **Revaluation Level and Method**

In Oracle FLEXCUBE, revaluation entries can be passed either at the product level or at the contract level.

After you indicate the level for revaluation, you can indicate the method to be used for revaluation. The options available are:

- Fair Price
- Contract Rate
- Branch specific Interest Rate

The revaluation level and method that you specify will determine the manner in which the product will be revalued.


 Each of the above methods is explained in detail in the chapter titled Defining Fair Price revaluation methods.

### **Revaluation Frequency**

The frequency with which a product should be revalued has to be specified as a product preference. Once you have indicated the level and the method for revaluation, you can specify the frequency with which a product should be revalued.


The frequency can be one of the following:

- Daily
- Weekly
- Monthly
- Quarterly
- Half yearly
- Yearly

 If the revaluation date falls on a holiday, the revaluation is done as per your holiday handling specifications in the 'Branch Parameters' screen.

### **Revaluation Start Weekday**

In case of weekly revaluation, you should specify the day of the week on which revaluation should be carried out. For instance if you specify that revaluation should be carried out every Friday, then the contract or product (depending on the level specified) will be revalued every Friday of the week.

 The Revaluation Frequency that you specify at the product level cannot be changed while processing the contract.

### **Revaluation Start Day**

In the case of monthly, quarterly, half yearly or yearly revaluation, you should specify the date on which the revaluation should be done during the month. For example, if you specify the date as 30, revaluation will be carried out on that day of the month, depending on the frequency.

If you want to fix the revaluation date for the last working day of the month, you should specify the date as 31 and indicate the frequency. If you indicate the frequency as monthly, the revaluation will be done at the end of every month - that is, on 31st for months with 31 days, on 30th for months with 30 days and on 28th or 29th, as the case may be, for February.

If you specify the frequency as quarterly and fix the revaluation date as 31, the revaluation will be done on the last day of the month at the end of every quarter. It works in a similar fashion for half-yearly and yearly revaluation frequency.

## Revaluation Start Month

If you set the revaluation frequency as quarterly, half yearly or yearly, you have to specify the month in which the first revaluation has to begin, besides the date on which the revaluation should be done.

### Example

You have selected the half-yearly option and specified the start date as 31 and the start month as June.

The system will do the first revaluation on the 30<sup>th</sup> of June for the period from 1<sup>st</sup> January to June 30<sup>th</sup>, and the second one on 31<sup>st</sup> December for the period from 1<sup>st</sup> July to 31<sup>st</sup> December.

## 4.2.3 Interest Accrual Details tab

As part of setting up the product preferences, you have to specify the relevant interest accrual details. The accrual details that you specify will be made applicable to all hedge contracts associated with the product.

You have to indicate whether interest should be accrued at the product or contract level for hedge deals. The interest accrual specifications should be done for both the inward and outward legs of the contract.

You can specify the interest accrual details by clicking on the Interest tab in the 'Product Preferences' screen.

**Derivatives Product Preferences**

Product Code \_\_\_\_\_ Product Description \_\_\_\_\_  
Product Type \_\_\_\_\_ Product Type Description \_\_\_\_\_

Main Interest Schedules Amortization Details

**Interest Main Details**

Interest Accrual Level Interest Accrual Level  Contract  
 Allow External Rate Revision  Product

In Leg Denominator Basis Per Annum Out Leg Denominator Basis Per Annum

**In Leg Interest Accrual Details** **Out Leg Interest Accrual Details**

Accrual Frequency \_\_\_\_\_ Accrual Frequency \_\_\_\_\_  
Accrual Start Weekday \_\_\_\_\_ Amortization Start Month \_\_\_\_\_  
Accrual Start Day \_\_\_\_\_ Amortization Start Day \_\_\_\_\_  
Accrual Start Month \_\_\_\_\_ Amortization Start Weekday \_\_\_\_\_  
Numerator Method \_\_\_\_\_ Numerator Method \_\_\_\_\_  
Denominator Method \_\_\_\_\_ Denominator Method \_\_\_\_\_  
Denominator Basis \_\_\_\_\_ Denominator Basis \_\_\_\_\_  
 Include To Date  Include To Date

**In Leg Interest Liquidation Details** **Out Leg Interest Liquidation Details**

Numerator Method \* Actual Numerator Method \* Actual  
Denominator Method \* Actual Denominator Method \* Actual  
Denominator Basis \* Per Annum Denominator Basis \* Per Annum  
 Include To Date  Include To Date

Ok Exit

## **Interest Main Details**

Specify the following details.

### **Interest Accrual Level**

As a product preference, you can indicate whether interest accrual is required for the contract by checking the box. You can leave the box unchecked to indicate that accrual is not applicable.



If you indicate that interest accrual is required for the contract then you have to specify the accrual related details individually for the In and Out legs.

At the product level if you indicate that interest accrual is required and you choose not to accrue interest for a contract linked to the product you will be allowed to do so. However the opposite will not be allowed.

### **Interest Accrual Level**

Here you can indicate the level at which accrual entries should be passed for the in leg of the contract. The options available are:

- Product
- Contract

At the product level, accruals will be passed for the product and currency combination. Those contracts for which accrual is required will be identified by the system and accrual entries will be passed based on the accounting entry set-up defined.

At the contract level accruals will be passed for individual contracts linked to the particular product.

### **In Leg Denominator Basis**

You need to specify the interest accrual rate for the inward leg of the contract as one of the following:

- Per annum
- Per schedule period

### **Out Leg Denominator Basis**

You need to specify the interest accrual rate for the outward leg of the contract as one of the following:

- Per annum
- Per schedule period

## Allow External Rate Revision

Check the 'Allow External Rate Revision' to indicate that for the contracts linked to this product, you can allow rate revision based on the rates uploaded from an external system.

## In Leg/Out Leg Interest Accrual Details

The details that you maintain here are specific to the interest calculation methods to be applied during accruals. Any of the following combinations are allowed for calculating interest:

<b>Actual / Actual</b>	The Actual number of days in the period/ The Actual number of days in that year.  Click on Actual in Numerator Method field; click on Actual in Denominator Method field.
<b>Actual / 365</b>	The number of actual calendar days for which calculation is done / 365 days in a year.  Click on Actual in Numerator Method field; click on 365 days in Denominator Method field.
<b>Actual – Japanese / Actual</b>	This is similar to the Actual/365 method except that leap days are always ignored in the denominator day count calculation.  Click on Actual in the Denominator Method field; click on Actual Japanese in the Numerator Method field.
<b>365 – ISDA / Actual</b>	Sum of (A) and (B) where:  A = (Interest accrual days falling within the leap year) / 366  B = (Interest accrual Days not falling within the leap year) / 365  The denominator is the actual number of days in a year.  Click on 365 ISDA in Numerator Method field; click on Actual in Denominator Method field.
<b>Actual / 360</b>	The actual number of calendar days for which calculation is done / 360 days.  Click on Actual in Numerator Method field; click on 360 in Denominator Method field.

The General Formula used for the day count method is given below:

Day count fraction =

Number of Interest Accrual Days (Numerator)

Days in the specified period (Per Annum/Per Period) (Denominator)



Setting the Interest Frequency is done in the same manner as setting the Revaluation Frequency.

### **Include To Date**

Check this box, if you would like to take into account the last day in an accrual period, when arriving at the accrual days.

### **In Leg/Out Leg Interest Liquidation Details**

Specify the following details.

#### **Liquidation Method**

The interest accrued over a specific schedule period or per annum can be liquidated either automatically or manually. You have to indicate this preference at the time of product definition.

Indicate whether the in leg interest accruals due for derivatives within a product should be liquidated automatically or manually.

If you select the automatic option, the interest accruals for the in leg will be liquidated automatically on the liquidation date as part of the automatic processes run during beginning of day (BOD) or End of day (EOD).



The method and basis for liquidation are as specified for interest accruals.

## **4.2.4 Schedule Details tab**

After you specify the interest accrual preferences you have to indicate the repayment schedules for the following components:

- Principal (Repayment of principal schedules)
- Interest (Repayment of interest schedules)
- Revision (Revision of interest rates for a contract with periodic interest rates).



The schedule preferences for each of these components have to be defined separately for both the In and Out legs. Click the 'Schedules' tab in the 'Product Preferences' screen.

Component	Leg Type	Schedule Method	Start Reference	Frequency	Unit	Start Weekday

## **Product Schedule Details**

Specify the following details.

### **Component**

Specify the component for which you are defining the schedule.

### **Leg Type**

You need to indicate whether the component that is displayed is an 'In leg' component or an 'Out leg' component.

### **Schedule Type**

You should indicate the schedule type to which the component belongs. The component can belong to any one of the following types:

- Principal (Repayment of principal schedules).
- Interest (Repayment of interest schedules).
- Revision (Revision of interest rates for a contract with periodic interest rates).

### **Start Reference**

The reference date is the date based on which the repayment schedules for the various components (Principal, Interest, Revision) is calculated. You can specify that the schedule start period should either be based on the Value Date of the contract or that it should be based on a Calendar Date.

If you specify that the reference should be the Value Date the dates for schedule repayment dates will be determined by the date of initiation of the contract and the frequency that you specify.

If the Reference is specified as Calendar Date, the dates for schedule repayments will be based on the Start Day, Month and Frequency combination.

## Frequency

The frequency of schedules that you specify along with the Start Reference and the Frequency Unit will determine the actual repayment schedules for the particular component. By default, the frequency will be Bullet, which means that all the repayments will be made as of the maturity date of the contract.

You can change the frequency to any one of the following options:

- Daily
- Weekly
- Monthly
- Quarterly
- Half-yearly
- Yearly



Note that if the Reference is set as the Value Date, the repayment dates will be calculated using the Value Date, the frequency and the Unit of Frequency. If the Reference is set as Calendar Date, the repayment dates will be calculated based on the Frequency, Unit of Frequency, Start Month and Start Day that you specify.

## Frequency Unit

After you specify the frequency you have to indicate the unit of frequency you want to set for the Frequency, the Component (the Principal, Interest or Revision component) and Start Reference combination.

### Example

#### Scenario 1

You have indicated that the schedule liquidation should be based on the Calendar Date in the Start Reference field. Subsequently you indicate that liquidations should happen on every 25<sup>th</sup> of the month.

The Effective Date or the Value Date of the contract is 12<sup>th</sup> March 2000. Regardless of the effective date, the first liquidation will be carried out on the 25<sup>th</sup> of March.

Since you want this process to continue i.e., liquidations should be carried out on the 25<sup>th</sup> of every month till the contract matures. Therefore you need to specify the frequency as Monthly and enter 1 in Unit field.

Schedules will be repaid once in every month on the 25<sup>th</sup> till the contract matures.

#### Scenario 2

You have indicated that liquidation of schedules should be based on the Value Date and specify that the frequency for liquidation as Monthly. Next you specify that the frequency unit should be 2.

The schedules will be liquidated once in every two months, since the frequency unit is 2.

### **Schedule Start Weekday**

When you set the repayment schedule frequency as Weekly you have to indicate the day of the week on which liquidation should be carried out.

For instance if you indicate the weekday preference as Wednesday then liquidation will be carried out on a weekly basis on every Wednesday.

### **Schedule Start Day**

When the Start Reference is set as Calendar Date you have to indicate the date on which the schedule is due to start. For instance if the frequency you have specified is daily, set the date on which the first daily schedule should fall due.

Similarly when the frequency is monthly indicate the day of the month in which the liquidation should fall due. The schedule repayment dates will be computed using the Frequency, the Unit, (Start) Month and the (Start) Day that you specify.

### **Schedule Start Month**

If you have set the Reference as Calendar Date, and the frequency as quarterly, half-yearly or annual, you can indicate the month in which the first schedule falls due. Based on your specification, the subsequent schedule dates will be calculated.

### **Adhere to Month End**

If the schedule frequency is in terms of a month, you can choose to indicate that the schedule days should adhere to Month- Ends. The implication of this option is explained in the following example.

#### **Example**

You are defining preferences for a derivative product. You would like to maintain several derivatives under this product. We shall study the impact of the Adhere to Month End option with reference to a derivative maintained under the Product.

Assume the Effective Date of the contract (with floating interest) is 01 January 2000, and the Maturity Date is 31 December 2000.

You have specified that the principal schedule frequency is quarterly.

If you choose the Adhere to Month End option the schedules for this derivative would be due on the following dates:

- 31 March 2000
- 30 June 2000
- 30 September 2000
- 31 December 2000

If you do not choose the Adhere to Month End option the schedules for this derivative would be due on the following dates:

- 31 March 2000
- 30 June 2000
- 30 September 2000
- 30 December 2000

The schedule dates for all derivatives maintained under the product will be calculated in a similar manner.

#### 4.2.5 **Amortization Details tab**

You can specify your preferences for amortization by clicking the Amortization Details tab in the 'Product Preferences' screen.

The screenshot shows the 'Derivatives Product Preferences' dialog box. At the top, there are input fields for 'Product Code', 'Product Description', 'Product Type', and 'Product Type Description'. Below these is a tabbed interface with 'Main', 'Interest', 'Schedules', and 'Amortization Details' tabs. The 'Amortization Details' tab is selected. It is divided into two columns: 'Amortization Details of Inception' and 'Amortization Details of Termination'. Each column contains a checkbox for 'Amortization of Inception/Termination Gain Required' and 'Amortization of Inception/Termination Loss Required'. Below these are radio buttons for 'Amortization Level' with 'Contract' selected. Further down are dropdown menus for 'Amortization Frequency', 'Amortization Start Weekday', 'Amortization Start Day', and 'Amortization Start Month'. At the bottom right are 'Ok' and 'Exit' buttons.

The Product Code and Product Type are defaulted from the 'Product Maintenance' screen. In this screen you can specify the following:

#### **Amortization of Inception/Termination Gain Required**

You have to indicate whether inception/termination gain needs to be amortized.

Check the respective box to indicate that amortization is required for inception/termination gain. Leave it unchecked if amortization is not required.



If you choose these options, then amortization of inception/termination gain will be made applicable to all contracts associated with the product. You can however change it while entering the details of the contract. But if you indicate that amortization is not required then you will not be allowed to change this preference while processing the contract.

## Amortization of Inception/Termination Loss Required

You have to indicate whether inception/termination loss needs to be amortized.

Check the respective box to indicate that amortization is required for inception/termination loss. Leave it unchecked if amortization is not required.



If you choose these options, then amortization of inception/termination loss will be made applicable all contracts associated with the product. You can however change it while entering the details of the contract.

## Amortization Level

Here you can indicate the level at which the amortization entries for inception/termination gain and/or loss should be passed. The options available are:

- Product
- Contract

At the product level, amortization entries will be passed for the product and currency combination. The system identifies those contracts, which need to be amortized for inception gain and/or loss and passes accounting entries based on the set-up defined for accounting entries.

At the contract level inception gain/loss amortization entries will be passed for individual contracts linked to the particular product.

## Amortization Frequency

After you indicate the amortization level for gain and loss of contract inception and termination, you have to specify the frequency at which amortization should take place.

The frequency can be one of the following:

- Daily
- Weekly
- Monthly
- Quarterly
- Half yearly
- Yearly

## Amortization Start Weekday

In the case of weekly accrual, you should specify the day of the week on which interest accruals should be carried out. For instance if you specify that accruals should be carried out every Friday, then the contract or product (depending on the level specified) will be accrued on every Friday of the week.

### **Amortization Start Day**

In the case of monthly, quarterly, half yearly or yearly amortization, you should specify the date on which the amortization should be done during the month. For example, if you specify the date as 30, amortization will be carried out on that day of the month, depending on the frequency.

If you want to fix the amortization date for the last working day of the month, you should specify the date as 31 and indicate the frequency. If you indicate the frequency as monthly, the amortization will be done at the end of every month - that is, on 31st for months with 31 days, on 30th for months with 30 days and on 28th or 29th, as the case may be, for February.

If you specify the frequency as quarterly and fix the amortization date as 31, amortization will be done on the last day of the month at the end of every quarter. It works in a similar fashion for half-yearly and yearly amortization frequency.

If the amortization date falls on a holiday, the amortization is done as per your holiday handling specifications in the 'Branch Parameters' screen.

### **Amortization Start Month**

If you set the amortization frequency as quarterly, half yearly or yearly, you have to specify the month in which the first amortization has to begin, besides the date on which the amortization should be done.

#### **Example**

You have selected the half-yearly option and specified the start date as 31 and the start month as June.

The system will do the first amortization on the 30 of June for the period from January 1 to 30th June. The second one will be done on the 31st of December for the period from 1st July to 31st December.

## **4.3 Defining the Fair Price Revaluation Methods**

Revaluation is used to revalue all active trade deals based on the revaluation frequency parameters that you specify through the 'Preferences' screen while defining products. Since the market rates are constantly in a state of flux you may wish to revalue the worth of all active trade deals periodically.

In Oracle FLEXCUBE, you can revalue the worth of contracts by using either one of the following methods. They are as follows:

- Maintaining Contract Fair Prices whereby you have to indicate the fair price of individual contracts, which will be used for revaluation.
- Maintaining Branch Interest Rates whereby you can maintain branch level forward interest rates, which will determine the fair price to be used for revaluation.
- Maintaining Contract Interest Rates whereby you maintain contract specific forward interest rates which will determine the fair price to be used for revaluation.

Your preference for revaluing contracts linked to the particular product will be defaulted to all the contracts linked to that product. However you can change this preference at the time processing the contract.

Each of these revaluation methods have been explained in detail in the following sections.

## 4.4 Maintaining Fair Values for Revaluing a Contract

If you have indicated that a particular contract should be revalued based on the contract fair price the system automatically inserts a record in the 'Revaluation Contract Fair Price Maintenance' screen for that contract. This is done during the Beginning of Day batch process based on the revaluation frequency specified at the product level.

This concept can be explained with the help of an example:

### Example

You have set the revaluation frequency of the contract bearing the reference number 000DV21992950177 to monthly. The first revaluation was done on 1<sup>st</sup> January 2000. The next is due on the 1<sup>st</sup> of February 2000. On the 1<sup>st</sup> of February 2000 the system automatically inserts another record in the 'Contract Fair Price Maintenance' screen for the contract 000DV21992950177. You have to unlock the record, enter the in/out leg values and the net fair value of the contract.

You can invoke the 'Derivatives Revaluation Contract Fair Value' screen by typing 'DVDCNVAL' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The screenshot shows the 'Derivatives Revaluation Contract Fair Values' window with the following fields and controls:

- Contract Reference \***: Input field with a search icon.
- Revaluation Date \***: Input field with a calendar icon.
- User Reference**: Input field.
- Transaction Date**: Input field.
- In Leg**: Section containing:
  - In Leg Revaluation Currency**: Input field.
  - In Leg Fair Value**: Input field.
- Out Leg**: Section containing:
  - Out Revaluation Currency**: Input field.
  - Out Fair Value**: Input field.
- Automatic**: Section with radio buttons for **Auto** and **Manual** (selected).
- Net**: Section containing:
  - Net Revaluation Currency**: Input field.
  - Net Fair Value**: Input field.
- Confirm**: Section containing:
  - Confirmation Date**: Input field.
  - Confirmed**:  checkbox.
- Fields**: A tab at the bottom left.
- Input By**: Input field.
- Authorized By**: Input field.
- Modification Number**: Input field.
- Authorized**:  checkbox.
- Open**:  checkbox.
- Exit**: Button in the bottom right corner.

When you want to change the revaluation frequency of a specific contract, select 'New' from the Actions Menu in the Application tool bar or click new icon. The 'Revaluation Contract Fair Value' screen will be displayed without any details. Select the reference number of contract whose revaluation frequency is to be changed. Enter the revaluation date, the new in and out leg values and the net fair value.

If you are calling an existing contract price maintenance record choose the Summary option under Contract Price. From the 'Summary' screen, double click a record of your choice to open it.

To modify the in and out leg values click the unlock icon or select 'Unlock' from the menu. Enter the in and out leg values, and compute the new net fair value and save the record.

During bulk upload of these fair values for multiple contracts, Oracle FLEXCUBE expects the following information to be present in the upload message:

- Contract Reference No
- Effective Date
- InLeg Value
- OutLeg Value

If any of these values is missing for any record, the system will terminate the upload process and raise an error:

**Net Fair value will be defaulted from Inleg and Outleg fairvalues.**

The single record and bulk record uploads requests are handled in bulk requests itself for the following:

- DV Fairvalue
- DV Rate Revision

The system will also raise an error if:

- Contract Reference Number is not valid
- Duplicate record exists for the Contract Reference Number and Effective date combination
- Revaluation date is greater than the application date

You can run the fair value upload process any time before the DV batch is processed during the day. During the DV batch, contract revaluation will be done based on the fair value uploaded.

### **Net Fair Value**

You have to indicate the net fair value of the contract as of the revaluation date. The value that you enter includes the effect of the in leg and out leg of the contract.

When the currencies of both the in and out leg of the contract are the same you have to calculate the net fair value of the contract by deducting the out leg amount from the in leg amount.

#### **Example**

The Fair Value in the In Leg field amounts to USD 1,000,000.00.

The Fair Value in the Out Leg field amounts to USD 500,000.000



Since both the values are in the same currency, USD 500,000.000 deducted from USD 1,000,000.00 amounts to USD 500,000.000. Thus you can enter USD 500,000.000 as the Net Fair Value.

Supposing the currencies of both the legs of the contract are different then the Base Currency specified at the time of Contract Input will be the accepted as the default currency for the Net Fair Value. You have to compute the Net Fair value using the existing exchange rates.



After indicating the respective values you must indicate your confirmation of the same. Only confirmed records will be picked up and processed for revaluation by the End of Day batch process.

#### **4.4.1 Operations on the Contract Fair Price Maintenance record**

Apart from maintaining a new fair price for a particular contract you can perform any of the following operations (if any function under the Actions menu is disabled, it means that the function is not allowed for the record) on an existing record.

- Amend the details of a record.
- Authorize a record.

*Refer to the Oracle FLEXCUBE User Manual on Common Procedures for details of these operations.*

### **4.5 Maintaining Branch-wise Forward Interest Rates**

Branch level maintenance of forward interest rates is necessary for revaluing those contracts for which you have indicated that revaluation should be according to the Branch Rates.

Oracle FLEXCUBE identifies those contracts, which are to be revalued according to the forward interest rates maintained at the branch level and creates records in the 'Revaluation Branch Interest Rates' screen based on the revaluation date. You have to unlock each record and indicate appropriate interest rates for specific interest periods.

You can invoke the 'Derivatives Revaluation Branch Interest Rates' screen by typing 'DVDBRRAT' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The advantage in maintaining branch-wise interest rates is that when there are multiple contracts which require the same rate(s) for processing revaluation (the tenor and currency combination should be the same) the BOD function identifies all the required rates and inserts a single record into this screen.

If you are maintaining details of a new interest rate for your branch, select 'New' from the Actions menu in the Application tool bar or click new icon. The 'Branch Interest Rates Maintenance' screen will be displayed without any details.

If you are calling a branch interest rate record that has already been defined, choose the Summary option under Branch Rates. From the 'Summary' screen double click a record of your choice to open it.

To modify or update existing interest rates, click the unlock icon or select 'Unlock' from the menu. After indicating the new interest rate, the currency of the interest rate and the period for which the new rate is valid, save the record.

### Rate Code and Rate Source

If you are maintaining the details of a new interest rate for your branch you have to indicate the rate code that is to be associated with the interest rate. You can identify a valid code from the list of rate codes available. Subsequently you also have to indicate the source to which the rate code belongs.

When you indicate the codes linked to the rate code and source the description assigned to them will be defaulted in the adjacent fields.

### **Revaluation Date**

All those contracts, which should be revalued as per the interest rates maintained at the branch level, will be revalued as of the revaluation date. While maintaining details of a new interest rate you have to indicate the date based on which contracts should be revalued.

### **Interest Revision**

The system revises interest rates automatically when the daily batch for derivatives is run using the Branch specific Interest rate revaluation method.

### **Confirmation**

Check this box to confirm that the interest rate entered is correct. Once you check this box the current system date will be displayed in the Date field.



If you leave this box unchecked then this record will not be taken up for revaluation processing.

### **Rate Details**

Since the system identifies the currency and tenor of forward rates required for each revaluation date, on the Revaluation Date only those contracts with the particular Rate Code, Rate Source and Currency combination will be considered for revaluation.

### **Currency Code**

Choose the currency in which you want to maintain the Interest Rate. Once you select the Currency Code the description assigned to it will be displayed in the adjacent field.

### **Period Start and End Date**

Specify the start and end dates for the interest rate you are defining.

### **Interest Rate**

Enter the interest rate for the particular rate code. The interest rate that you specify here is meant for your branch and will be used to determine the Fair Value of all those contracts for which you have indicated that branch level interest rates are to be used for revaluation.

Moreover, revaluation will be done for only those contracts with the particular Rate Code, Rate Source and Currency combination for the particular Revaluation Date.

To define a new forward interest rate for a specific interest period, click the add button and enter the relevant details. To delete an existing rate, highlight the rate and click on the delete button.

## 4.5.1 Operations on the Branch wise Forward Interest Rate Maintenance record

Apart from maintaining a new forward interest rate, you can perform any of the following operations (if any function under the Actions menu is disabled, it means that the function is not allowed for the record) on an existing record.

- Amend the details of a record.
- Authorize a record.

Refer to the Oracle FLEXCUBE User Manual on Common Procedures for details of these operations.

## 4.6 Maintaining Contract specific Forward Interest Rates for Revaluation

You need to maintain contract specific forward interest rates to revalue those contracts whose fair price is to be determined based on the forward interest rates maintained for the particular contract.

The system creates and stores records in the 'Contract Interest Rates Maintenance' screen for those contracts whose fair price is to be determined based on the forward interest rates maintained for the contract. You can invoke the 'Derivatives Revaluation Contract Interest Rates' screen by typing 'DVDCNRAT' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

Currency Code	Currency Code Description	Interest Period Start Date	Interest Period End Date	Interest Rate

To indicate the forward interest rates of individual contracts you have to invoke the 'Contract Summary' screen by selecting the Summary option under Contract Rates. From the 'Summary' screen double click the record of your choice to open it. Select 'Unlock' from the Actions menu in the Application tool bar or click unlock icon. Enter the interest rate(s) required for each contract and confirm it.

For an ad hoc revaluation of a particular contract, select 'New' from the Actions menu in the Application tool bar or click new icon. The 'Contract Interest Rates Maintenance' screen will be displayed without any details. Select the reference number of the contract which is to be revalued after you indicate the new revaluation date of the contract you can specify the new interest rate for the interest period.



The interest rate(s) that you enter here will be used to determine the Fair Value for revaluing that particular contract.

#### **4.6.1 Operations on the Contract Specific Forward Interest Rate Maintenance record**

Apart from maintaining a new contract specific forward interest rate, you can perform any of the following operations (if any function under the Actions menu is disabled, it means that the function is not allowed for the record) on an existing record.

- Amend the details of a record.
- Authorize a record.

*Refer to the Oracle FLEXCUBE User Manual on Common Procedures for details of these operations.*

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## 5. Processing a Derivatives Contract

### 5.1 Introduction

You can capture the details of the contract through the 'Contract Input Details' screen. Before we proceed to discuss the details of the 'Derivatives Contract Input' screen, we shall briefly recall the workflow in the Derivatives module.

First of all you need to maintain the basic information that is necessary for the successful functioning of the module. This information includes the maintenance of:

- Derivative Types
- Bank and Branch Parameter details
- Revaluation details
- Messaging party details
- Counterparty details
- Interest, Tax and Charge class details

The next step in the process is the creation of products for the derivatives module. Products help you group together or categorize contracts, which share broad similarities. You have to associate a derivative type with each of the products that you create. Thus the product inherits all the attributes of the type. Subsequently you associate the various interest, charge and tax classes with the product.

Under each product that you define, you can enter specific contracts for this module. By default, a contract inherits the attributes of the product to which it is associated. This means that you do not have to define the attributes that default from the product every time you input a contract involving the product. However you can change some of the attributes to suit the product you are defining.

#### 5.1.1 Maintaining the Derivative Contract Input Screen

You can invoke the 'Contract Input' screen by typing 'DVDTRONL' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

To specify the details of a new contract, select 'New' from the Actions Menu in the Application tool bar or click new icon. If you are calling a contract that has already been created, choose the 'Contract Input Summary' option. The details of all the contracts that you entered earlier will be displayed in a tabular form. From the 'Summary' screen, you can open an existing deal by double clicking it.

The 'Contract On-line' screen contains a header, footer, and a body of fields that capture information specific to the contract that you are maintaining. You need to capture these details in addition to the attributes that the contract acquires as a result of being linked to the product.

The body of fields, in this screen, is divided into two tabs. Firstly you need to capture the main details of the derivative contract such as the Contract Type, Counterparty and the In and Out Leg interest and principal details. You can specify the Contract Principal Schedules for both the in and out legs separately by clicking 'Principal' button. Click 'Interest' button to indicate the interest details for both the legs of the contract.

Next you can start capturing additional information relating to the derivative such as the Revaluation details, Inception and Termination details and so on by moving to the Detail tab.

Besides the existing fields in the 'Derivative Contract On-line' screen, you will also notice a vertical array of icons. Clicking on an icon launches a screen that captures details specific to an attribute, Settlement Message details, for example.

These buttons are briefly described below:

<b>Brokerage</b>	Click this icon to indicate brokerage details applicable to the contract.
<b>Advice</b>	Click on this button to enter the leg advices. You can view suppress and prioritize the advices that are to be generated for each leg of the transaction.
<b>Event</b>	Click this icon to view details of the events and accounting entries that the contract involves. The screen also displays the overrides that were encountered for the contract.
<b>Fields</b>	Click this icon to invoke the 'User Defined Fields' screen. You can indicate the user-defined fields for which information needs to be captured.
<b>Charges</b>	This button invokes the Charge service of Oracle FLEXCUBE. On invoking this function you will be presented with a screen where the charge rate, amount, and the waive charge parameters can be specified.
<b>MIS</b>	Click on this button to enter the transaction MIS details.
<b>Settlements</b>	Click this icon to invoke the 'Settlement' screens. Based on the details that you enter in the 'Settlement' screens, the contract will be settled.  The details of these screens have been discussed in the Settlements manual.
<b>Tax</b>	This icon invokes the Tax services. The application of tax on a deal is discussed under the head Levying tax on a contract.
<b>Interest</b>	
<b>Principal</b>	
<b>Sub Agreement</b>	

Through the 'Derivatives Contract Input' screen, you can process all types of derivative contracts.

You can enter the details of a contract using a derivative product. Based on the type of contract you are entering, you can select a product from the option list available at the Product field.

Once you link a product with a contract, the attributes defined for the product and consequently the derivative type associated with the product will be inherited by the contract automatically. You are allowed to change a few of these details such as revaluation details, the in and out leg interest details, before saving the contract.



## Reference Number

In Oracle FLEXCUBE, reference numbers are generated automatically and sequentially by the system. This number tag is used to identify the contract you are entering, it is also used in all the accounting entries and transactions related to this contract. Hence the system generates a unique number for each contract.

The contract reference number is a combination of a three-digit branch code, a four-character product code, a five-digit Julian Date and a four-digit serial number. The Julian Date has the following format:

“YYDDD”

Here, YY stands for the last two digits of the year and DDD for the number of day (s) that has/have elapsed in the year.

### Example

January 31, 2000 translates into the Julian date: 00031. Similarly, February 5, 2000 becomes 00036 in the Julian format. Here, 036 is arrived at by adding the number of days elapsed in January with those elapsed in February ( $31+5 = 36$ ).

## User Reference

You can enter a reference number for the contract. A contract will be identified by this number in addition to the Contract Reference No. generated by the system. This number should be unique and cannot be used to identify any other contract. By default, the Contract Reference Number generated by the system will be taken as the User Reference No.

## External Reference

If the transaction is being uploaded from an external source, you can specify the identification for the transaction in the external source, as the external reference number.

## Reversed Reference

The reference number of the contract that is being reversed and rebooked will be displayed here.

## Source Code

You have to indicate the source from which contracts have to be uploaded.

## Swaption Reference

Specify the swaption reference number to associate this contract with an options contract. The option list displays all valid option contract reference numbers maintained in the system. Choose the appropriate one.

You can use 'P' button to have the details populated by the system. The system will default the following details based on the product code or the swaption reference number.

- Product Code

- Product Type
- Counter Party
- Value Date
- Maturity Date
- In Leg currency
- In Leg Principal Amount
- Settlement Account Branch
- Settlement Account

The system triggers DBOK event when you save the contract. In this case, the system updates the status of the new contract as 'Yet to be initiated'. On authorization, the system links this contract to the corresponding swaption deal. On 'Options Contract Input' screen, you can view the contract reference number of the linked DV contract under 'Interest Rate Options' tab.

The system allows reversal of the swaption contract only after reversing the IRS contract linked to it.

During manual/auto exercise of OT contract, the system will initiate the corresponding DV contract. The system will trigger DOPT event as part of this process.

While performing auto exercise during EOD operations, if an OT swaption contract is not linked to any DV contract, the system will move that particular OT contract to process exception. However, the EOD process will not fail for process exceptions. For such contracts, the contract status will continue to be active even after the maturity date of the swaption deal. You can manually control it by reversing or terminating the swaption contract.

#### **5.1.1.1 Main Details tab**

Specify the following details.

##### **Counterparty**

When you are entering the details of a derivative contract you should specify the customer with whom the derivative contract is being entered into. Specify the code of an authorized customer who falls into a category allowed for the product linked to the contract.

##### **Settl. Account Branch**

You might want to settle these components in an account existing at a branch other than the one where the contract was initiated. Therefore you have to indicate the branch code of the branch where the account resides. Subsequently indicate the account number of the settlement account.

If Settlement Instructions have been defined for the customer, the settlement accounts will be picked up from those instructions. While entering the details of the contract, you can change the Settlement Instructions for the derivative contract.



Note the following:

- If a settlement account has been specified in the settlement instructions for the customer, and a different account has been specified for the derivative contract, the account specified for the contract will take precedence.
- If you have specified Debit or Credit settlement accounts that use an account class that is restricted for the product, an override is sought.

### **Account**

You have to specify the settlement account if Settlement Instructions have not been defined for the customer. The settlement account that you specify is the account through which the various components linked to the contract get settled.

### **Contract Type**

All derivative contracts must be designated at inception either as Trade or as Hedge contracts. At the time of product definition you would have indicated whether the product being defined is meant for trade deals or hedge deals. When you associate a contract with a product the specification you made for the product will be defaulted to the contract. You can however change this specification.

The specification you make for the Contract Type will determine the accounting entries that will be passed for processing the particular contract. The system will identify all trade contracts and revalue them according to the revaluation preferences you have specified. For hedge type of contracts interest accruals will be carried out at periodic intervals.

In addition you also have to indicate whether the contract is a Buy type or Sell type of contract.

### **In/Out Leg**

As part of maintaining the In and Out leg details of the contract, you are required to indicate the currency, amount, rate code, rate source, the principal schedules and interest details for both the in as well as the out legs of the contract.

### **Currency and Amount**

You are required to indicate the currency in which interest amount should be calculated for both the inward as well as the outward legs of the contract. You can select the currency code from the option list available.

In addition you are also required to indicate the principal amount (Actual/ Notional) for both the legs of the contract. The amount that you specify will be taken in the currency indicated for the particular leg of the contract.

### **Booking Date**

The date on which the deal details were entered will be displayed here. This defaults to the system date (today's date). This date is for information purposes only. The accounting entries are passed as of the Value Date of the deal (initiation date of the deal).

## Value Date

If you are entering the details of interest/cross currency swap you have to indicate the date on which the swap takes effect. In the case of an FRA, the value date would typically be the date on which the deal settles.

The accounting entries for the initiation of the deal will be passed as of the value date. The tenor of the deal will begin from this date and all calculations for interest and all the other components based on tenor will be made from this date onwards.

The system defaults to today's date. You can also enter the Value Date of your choice here, and it can be any one of the following:

- Today's date
- A date in the past
- A date in the future

The Value Date should not be earlier than the Start Date or later than the End Date of the product involved in the deal.

If the liquidation date for any of the deal components falls before today's date, the liquidation entries (as defined by you for the product) will be passed if you have specified the same for the product.

## Maturity Date

While maintaining the details of a swap you have to indicate the date on which the swap matures. If you are maintaining details of an FRA the maturity date would typically be the last date for the computation period.

## Buy or Sell

You need to indicate whether the contract is a Buy type or Sell type of contract.

## Liquidate Past Schedules

You can choose to liquidate past schedules of back dated contracts. If you specify that back dated schedules should be liquidated the system will liquidate these schedules irrespective of the availability of funds.

### Example

A derivative contract can be initiated as of today, a date in the future, or as a date in the past.

Today's date is October 15, 2000. Suppose you initiate hedge swap today, of 15,000 USD with the Value Date (date on which the swap comes into effect) as September 15, 2000, the system will pass accounting entries for initiation as of September 15.

But if there had been an interest payment schedule for September 30, 2000, for 500 USD, then if you specify that back valued schedules should be liquidated, you can make the system pass accounting entries to liquidate this schedule also when the loan is initiated.

If you specify that back dated schedules are not to be liquidated, only accrual entries will be passed till today.



Note that the entries associated with each event (initiation and liquidation in this case) will be passed only if they have been defined for the product. Further, the accounts used will be the ones defined for each entry.

### **Broker**

If you are processing a deal that involves brokerage, indicate the ID of the broker through whom the deal was brokered. The adjoining option list displays a list of valid brokers with whom you can enter deals. You can choose the appropriate one.

You will be allowed to enter details of a broker only if brokerage is allowed for the product to which the deal is associated.

### **Dealer**

Select the name of the dealer involved in the transaction.

### **Exchange Rate**

While maintaining details of Cross Currency Swaps you are required to indicate the Exchange Rate for exchange of principal. The rate that you indicate will be used for determining the Out leg amount for the initial exchange in principal, given the In Leg amount.



The exchange rate that you indicate will be validated against the exchange rate variance limits (Override Limit, Stop Limit) that you have specified at the time of defining the product. If the exchange rate variance exceeds the Override Limit the system will display an appropriate override message. If the rate variance exceeds the Stop Limit then you will not be allowed to save the contract until you change the rate.

### **Remarks**

Free format information pertaining to the details of the contract can be captured in this field. The remarks that you enter here will not be reflected in any of the advices sent to the customer.

You can capture the relevant information in the window that gets displayed. Once you capture the necessary information click the OK button.

### **Default Details**

At the time of input of a contract in different currencies, after you have specified the currency and amount of the first leg and the currency of the second leg, you must click the 'Default' button. The system then displays the equivalent amount for the second leg in the currency specified for that leg.

In case of contracts with both legs in the same currency, you can use the Default button or manually input the amount and currency for both legs.



If you wish to specify the Principal and Interest details for a contract, you must use the 'Default' button irrespective of whether both legs of a contract are in the same currency or in different currencies. The system displays an error if you try to access the 'Principal' and 'Interest' screens without having visited the 'Default' button.

## **Rate Type**

The interest paid on both the legs of the contract can either be a fixed amount or an interest rate that changes periodically. For special cases you are also allowed to maintain a flat amount.

If you specify that the interest rate for either of the legs is Fixed then you have to indicate the rate of interest for the particular leg of the contract. When the rate type is floating you have to indicate the rate code based on which the interest rate should be calculated. Similarly when the rate type is special you have to indicate the flat amount that is to be used to calculate interest.

## **Rate Code**

If the contract involves a product defined with floating interest, this is the Rate Code that links the contract to the Floating Rate table. As is the case with the Rate Type so also the Rate Code linked to the product will be displayed in this field. You can choose to change it.

## **Rate Source**

For all contracts with a floating interest rate leg, apart from specifying the Rate Code you are also required to indicate the Rate Source. The rate source that you indicate here (such as Telerate, Reuters) will be used to pick up the floating rate for the outward/inward leg of the contract.

## **Tenor Code**

The tenor code refers to the tenor of the floating rate code and currency combination that is to be associated with this leg of the contract.

Once you select the Rate Code, the code assigned to the tenor linked to the particular Rate Code will be displayed in this field. You can choose to change it by selecting another code from the available option list.

## **Spread (on a floating interest rate)**

When the Rate Type of the particular leg of a contract is floating you can choose to specify a spread that is to be applied over the rate maintained in the 'Floating Rate' screen.

The Spread that you enter should be greater than or equal to the Minimum Spread and less than or equal to the Maximum Spread defined for the product that the contract involves.

If the spread you apply happens to be greater than the Maximum Spread, then the Maximum Spread will be applied on the rate. On the other hand, if it is less than the Minimum Spread defined for the product, the Minimum Spread will be picked up.

## **Rate**

If you specify that the interest rate for this leg of the contract is 'Fixed', then you have to enter the actual rate of interest.

## Flat Amount

If you have indicated the Rate Type is Special for this leg of the contract then you need to specify the Flat Amount

### 5.1.2 Details tab

Once you enter the essential details of the derivative contract you have to enter the additional details that are required to process the contract. Click on the tab that corresponds to Detail.

The screenshot shows the 'Derivatives Contract Input' window with the 'Detail' tab selected. The window is divided into several sections:

- Product Information:** Product, Product Description, Swaption Reference, Reference Number, User Reference, External Reference, Reversed Reference, Version Number, and Of.
- Customer Information:** Customer, Description, and an 'Assuming' checkbox.
- Base Currency:** Base Currency and Description.
- Inception Details:** Inception Value, Amortize Inception Gain, and Amortize Inception Loss checkboxes.
- Revaluation Details:** Revaluation Method, Rate Code, Rate Source, Revaluation Required, and Netting Required checkboxes.
- Maturity Date Details:** Holiday Treatment, Holiday CCY, Financial Centre, Move Across Month checkbox, and Forward/Backward radio buttons.

At the bottom, there is a navigation bar with tabs for Event, Brokerage, Settlements, Advice, Charges, Tax, MIS, Fields, Principal, Interest, and Sub Agreement. Below the navigation bar, there are fields for Input By, Authorized By, Status, Date Time, and Authorization Status, along with an Exit button.

Specify the following details.

### Assuming

If the contract you are processing has been assumed from another counterparty you are required to indicate so before you begin to specify the other details. Uncheck the box if you are processing a fresh contract. Currently this functionality not supported. But the check box is available in the screen. The functionality will be supported in future release.

### Customer

If the counterparty from whom you are assuming the contract is a customer of your bank, indicate the name of the customer. When the counterparty is not in any way connected to your bank you need not specify the name.

### Base Currency

Since you can maintain different currencies for both the in and out legs of the contract, you have to identify one single currency as the Base Currency of the contract. The base currency you specify will be used to compute the contract fair value to be used for revaluation purposes.

## **Revision Schedules**

Revaluation is typically applicable to trade deals. The revaluation preferences that you made at the product level will be defaulted to the contract. You may change these preferences while processing the contracts.

If indeed revaluation is required for the contract being processed, it will be done according to revaluation method that you choose.



Each of the revaluation methods have been thoroughly explained in the chapter on Defining the Fair Price revaluation methods.

## **Netting Required**

This field indicates whether contracts with positive and negative MTM values can be netted for computing credit limit utilization.

After you specify the MA Code the other details linked to the code such as Limits Tracking Required, Netting Required and so on get defaulted to the contract.



At the MA level if you have indicated that Netting is required and while entering the details of the contract you decide that netting is not required for that particular contract, then you will be allowed to uncheck this box.

However at the MA level if you have specified that netting is not required, then you will not be allowed to change this default at the time of entering the contract details.

Similarly, the way in which revaluation entries should be passed, whether at the leg level or at the contract level will also be defaulted from the 'Product Preference' screen.

At the product level if you have specified that revaluation netting is not required then you will not be allowed to change this at the contract level. However at the product level if you have indicated that revaluation netting is required, then you can change this to 'Not Required' at the contract level.

## **Rate Code**

If you indicate that the revaluation should be based either on the Contract Specific Rate or on the Branch Specific Rate, then you have to indicate the Rate Code which should be used for the same purpose.

## **Rate Source**

This is the Rate Source to which the Rate Code belongs. Select from the adjoining option list and indicate the Rate Source to which the Rate Code is to be linked.

## **Maturity Date Details**

Specify the following details.



## **Holiday Treatment**

As part of specifying the maturity date details you have to select the holiday handling treatment if the Maturity Date were to fall due on a holiday. You can specify that the holiday should be treated according to one of the following:

- Ignore the holiday
- Branch Holiday
- Currency Holiday
- Financial Center

## **Holiday Movement**

You can also choose to move the maturity date falling due on a holiday either forward or backward to the next or the previous working day respectively. If not, the maturity date will be kept in the same month, on the last or first working day of the month, depending on whether the maturity date is over the month-end or the beginning of the month.

## **Holiday CCY**

If you have specified that the Holiday Treatment should be as per your specifications in the Currency Holiday Calendar then you have to indicate the currency for which the holiday table should be checked.

## **Financial Centre**


If you have indicated that the Holiday Treatment should be governed by the holiday calendar of the Financial Center then you have to indicate the code assigned to the Financial Center.

## **Inception Details**

Specify the following details.

### **Inception Value**

The inception value refers to the value of the contract at inception. This is applicable only in the of trade deals. You can either choose to amortize the gain/loss at inception or you can choose to ignore the same.

 Your preference at the product level regarding the amortization of inception gain and/or loss will be made applicable to the contract as well. However if you do not want to allow amortization for inception gain/loss for this particular contract you will be allowed to do so.

### 5.1.3 Additional Tab

You can capture the additional details of the contract by clicking the 'Additional' button.

The screenshot shows the 'Derivatives Contract Input' window with the 'Additional' tab selected. The form includes fields for Product, Reference Number, Version Number, Product Description, User Reference, External Reference, Reversed Reference, Swaption Reference, Source Code, Type, and Type Description. The 'Limits' section contains checkboxes for 'Governed By Master Agreement', 'Limits Tracking Required', 'Netting Required', and 'Fair Value Limits Tracking'. The 'Notional & Risk Weighted Limits' section contains checkboxes for 'Notional Limit Tracking' and 'Risk Weighted Limit Tracking'. There are also input fields for 'MA Code', 'Current Value', 'Interest Exposure', 'FX Exposure', 'Fair Value Line Code', 'Notional Line Code', 'Risk Weighted Line Code', and 'Risk Weighted Amount'. A 'MA Details' button is located next to the 'FX Exposure' field. The bottom of the window features a navigation bar with tabs for 'Event', 'Brokerage', 'Settlements', 'Advice', 'Charges', 'Tax', 'MIS', 'Fields', 'Principal', 'Interest', and 'Sub Agreement'. Below the navigation bar, there are input fields for 'Input By', 'Authorized By', 'Status', 'Date Time', and 'Authorization Status', along with an 'Exit' button.

Specify the following details:

#### Limits

##### **Governed By Master Agreement**

Check this box to indicate that the contract for which you are capturing details comes under the purview of a master agreement that exists between your bank and the counterparty.

##### **MA Code**

If you have specified that the contract is governed by a master agreement then you have to indicate the code assigned to the Master Agreement in the 'Master Agreement Maintenance' screen.

After you choose the MA Code, the other details linked to the MA code, such as Limits Tracking Required, Netting Required and so on will get defaulted to the contract.



If you input the MA Code, click 'MA Details' button. The system displays the related details for the MA code specified.

##### **Limits Tracking Required**

At the MA level if you have indicated that limit tracking is required and while entering the details of the contract you decide that tracking is not required then you will be allowed to uncheck this box.

However at the MA level if you have specified that limit tracking is not required then you will not be allowed to change this default at the time of entering the contract details.

### **Fair Value Limits Tracking**

Check this option for fair value limit tracking is required.

### **Fair Value Line Code**

This field is the Line Code for the Fair Value Limits tracking and will be defaulted from the master agreement maintenance once the master agreement is chosen.

This field is mandatory if the Fair Value Limits Tracking option is checked.

### **Current Value**

The Current Value represents the current Mark-to-Market value of the contract. This value will change as and when the contract is revalued.

When you are entering a contract you may enter the inception value in this field. This will be taken as the current value of the contract.

### **Interest and FX Exposure**

The likely increase in value in a contract during the contract tenor may be attributed to two factors:

- Interest Exposure - Exposure to fluctuation in interest rates.
- FX Exposure - Exposure to fluctuations in exchange rates only when foreign currency is involved.

Specify the interest and FX Exposure amounts.

### **Netting Required**

Indicate whether contracts with positive and negative MTM values can be netted for computing credit limit utilization.

### **Notional & Risk Weighted Limits**

You can specify whether Limit Tracking is required for the particular contract. The fields Fair Value Limit Tracking, Notional Limits Tracking and Risk Weighted Limits Tracking will be enabled only if Limit Tracking option is enabled. If the contract is governed by a Master agreement then if any of the three fields (Fair Value Limit Tracking, Notional Limits Tracking and Risk Weighted Limits Tracking) are checked in the Master Agreement, the Limit Tracking Required option will be checked at contract level.

The fields Notional Limits Tracking, Notional Line Code, Risk Weighted Limits Tracking and Risk Weighted Line Code are defaulted from the Master agreement maintenance if the contract comes under the preview of a Master agreement.

The Notional Line Code and Risk Weighted Line Code are mandatory if the Notional Limits Tracking and Risk Weighted Limits Tracking options are enabled, respectively.

For the line code, all valid lines for the counterparty and the product will be displayed in the option list.

On saving the contract, all the three lines selected will be validated for any restrictions based on product and currency. Oracle FLEXCUBE will also ensure that all line codes selected are distinct from each other.

Risk % and Risk Weighted amount will be calculated and shown in the screen as soon as the Risk Weighted Limits Tracking option is selected. These fields will be recalculated if the value date or the maturity date is amended.

Risk Weighted Amount will be calculated as follows:

Risk percent will be computed by comparing the tenor (Maturity date – Value date) of the contract with the tenor slabs in risk percent maintenance. Risk category used for comparison will be the risk category defined in customer maintenance for the counterparty of the derivatives and options contract. Product used for comparison will be the product for the contract. If there is no risk maintenance for the particular category and product, product will be replaced by 'ALL' and risk percent for contract tenor, customer category and product 'ALL' will be arrived at. Module used for find out the risk percent will be 'DV' for derivatives.

Various combinations possible for find out risk percentage in order of preference are:

DV + Customer Category + Product

DV + Customer Category + ALL

An error message will be raised if Risk Weighted Limit Tracking is checked and risk percentage cannot be arrived at.

Risk percent, once arrived at, will be stored and the contract level and will be used to compute the risk weighted amount for limit tracking. Any future amendment of risk percentage in risk percentage maintenance will not affect the risk weighted amount of the contract and it will remain the same throughout the life cycle of the contract.

Limits Utilization for the Notional Amount and the Risk Weighted amount will be done against the in leg currency for FRA, IRS and CCS.

### 5.1.3.1 Termination Details tab

You can capture the termination details of the contract by clicking the 'Termination Details' button.

Specifying the following details:

#### Termination Type

When you are terminating a particular contract you have to indicate whether it is a normal termination or whether the contract is going to be assigned to another counterparty. In the latter case, you have to indicate the counterparty to whom the contract is to be assigned.



This would not be applicable when you are entering a new contract.

#### Counterparty

If the contract is to be assigned to another counterparty then you can indicate the ID of the counterparty to whom the contract is to be assigned.

#### Termination Value and Currency

If there has been any gain or loss due to termination you have to indicate the gain or loss in value by specifying a positive or negative amount and the currency in which the termination gain or loss should be settled.

You can either choose to amortize the termination gain/loss or you can choose to ignore the same.

#### Termination Date

You must specify the Termination Date. Termination can either be back-valued, current dated or future-valued. The date that you specify should adhere to the following conditions:

- For FRA contracts, the termination date should be between the Booking Date (inclusive) and the Value Date (exclusive). For IRS/CCS contracts the termination date can be anywhere between the Booking Date (inclusive) and Maturity Date (exclusive). Any deviation from these conditions will result in an error message.
- If you are specifying a back-dated termination for an IRS/CCS contract, ensure that the termination date is not greater than the most recent schedule settlement date that has been executed.
- The termination date is defaulted as the System date. You can modify this date. Ensure that you do not leave this field blank.
- When you save the contract after specifying the Termination Date, DTRB event is triggered. No accounting entries are passed for this event. The contract status remains active after DTRB and a new version is created.
- For FRA contracts, if Settlement Message generation (SGEN) for liquidation has been triggered before Termination Booking (DTRB), an override is displayed while saving the contract after entering the Termination Date.
- If the DTRB event has been triggered for a contract, you cannot terminate the contact again.
- For a back-valued termination, or termination on application date, the Termination event (DTER) is triggered along with the event DTRB when you save the contract. The SGEN for Termination is fired on authorization.
- For future-dated termination, the termination event (DTER) is triggered during EOD/BOD on the respective date.
- Settlement Message generation (SGEN) is triggered for the termination event (DTER). Therefore you must maintain the Payment Message for settlement message generation at DTER. If the settlement message generation batch has not been executed, then SGEN will trigger along with DTER.



Your specification in the 'Product Preferences' screen about the amortization of termination gain/loss will be defaulted on to the contract. At the product level if you have set this preference as No then you will not be allowed to change this to Yes at the contract level. However, if you have set the preference as Yes then you can change this to No at the contract level.

#### 5.1.4 **Limits Processing**

Limit tracking for Notional Contract amount will be carried out on the in leg principal. For risk weighted limit tracking, notional amount will be multiplied with the risk percent for finding out the risk weighted amount and limit tracking will be done on this amount.

If credit netting is checked during contract input and the contract is governed by a master agreement, then the limit tracking will be done against a single reference number. This reference number will be the master agreement code of the master agreement for the counterparty of the contract.

### 5.1.4.1 Maintaining the Principal Schedule Details Screen

You have to maintain the principal schedule details for the in and out legs of the contract only if you have specified so for the derivative type linked to the contract.

While defining the details of a particular leg (either in leg or out leg) click 'Principal' button. The 'Contract Principal Schedule' screen will be displayed.

Base Start Date	Frequency	Unit	Schedules	Adhere To Month End	Adjustment Type	Amount

In this screen you can specify the holiday treatment, the holiday movement and the frequency of the principal schedules.

#### Holiday Treatment

In Oracle FLEXCUBE, a schedule date falling due on a holiday can be treated in any of the following ways:

- Ignore the holiday - In which case the holiday will be ignored and the schedule date will be retained on that day.
- Choose to follow the Local holiday - The holiday will be treated as per your specifications in the 'Branch Holiday Maintenance' screen.
- Choose to follow the Currency holiday - The movement of schedules will be based on the holiday calendars maintained for all the currencies that you have specified for the contract in the 'Holiday Currency' screen (explained in detail in the subsequent section).
- Indicate that the holiday treatment should be governed by the Financial Center – In such a case, the movement of schedules will be based on the holidays maintained for the financial institutions involved in the contract (multiple financial institutions are also maintained in the 'Holiday Currency' screen).

## **Holiday Currency and Financial Centre**

If you choose to follow either the currency holiday or the holiday calendar maintained for the financial center, you need to specify the currencies/ financial institutions that are involved in the contract. In the event, a schedule date of a component falls due on a holiday, the system computes the next schedule date based on the combination of holiday calendars maintained for all the currencies/ financial institutions that you have specified for the contract (whether principal, interest or revision). Therefore, in effect, the next schedule date for a component will be a working day in all the calendars involved in the contract.

## **Auto Settlement**

The principal exchange schedules can either be settled automatically or manually. In this case only automatic settlement is supported.

## **Holiday Movement**

### **Move Backward/Forward**

Occasionally the preferred holiday treatment, the branch holiday, the currency holiday or the holiday governed by the financial center may, in turn, fall on a holiday. In such a situation you have to indicate the movement of the schedule date. Whether it is to be moved forward to the next working day or whether it should be moved backward to the previous working day.

This concept can be easily explained with the help of an example:

### **Example**

For a CCS Trade Contract, you have defined monthly schedules falling due on the following dates:

- March 31
- April 30
- May 31

April 30 is a holiday. You have the following options in fixing the date for that schedule:

- You can move the schedule date forward to the next working day, which happens to be May 1. In this case, the schedule will be liquidated during BOD processes on this date, as it is a working day.
- You can move the schedule date backward. In such a case, the schedule date will be April 29, the last working day before the holiday. The schedule will be liquidated during BOD processes on this date as it is a working day.

### **Moving Across Months**

If you have chosen to move a principal schedule falling due on a holiday either forward or backward, such that it falls due on a working day, and it crosses over into another month, the schedule date will be moved into the next month only if you so indicate. If not, the schedule date will be kept in the same month.



### **Example**

#### **Scenario 1:**

You have defined a principal schedule that falls due on April 30. This happens to be a holiday. You have indicated that in case of a holiday, the schedule date is to be moved forward to the next working day.

If you have indicated that the schedule can be moved across months, then the schedule will be automatically moved to May 1, that is, the next working day in the next month.

If you have not allowed movement across the month but have indicated forward movement for the same schedule under discussion, the schedule date will be automatically moved (backward in this case), to the last working day of the same month, that is, to April 29 despite your having indicated a forward movement into the next working day.

#### **Scenario 2:**

You have defined a repayment schedule that falls due on May 1. This happens to be a holiday. You have indicated that in case of a holiday, the schedule date is to be moved backward to the previous working day.

If you have indicated that the schedule can be moved across months, then the schedule will be automatically moved to April 30, that is, the previous working day.

If you have not allowed movement across months but have indicated backward movement for this schedule, the schedule date will be automatically moved (forward in this case), to the next working day of the same month, that is, to May 2, despite your having indicated a backward movement into the previous working day.

### **Cascade Schedules**

The question of cascading schedules arises only if:

- You have specified that a schedule falling due on a holiday has to be moved forward or backward; and,
- The schedule has been defined with a definite frequency.

If you have indicated that schedules should be cascaded, the schedule date for the next payable schedule will depend on how the schedule date was moved for a holiday. The following example illustrates how this concept of cascading schedules functions:

### **Example**

A monthly schedule has been defined with backward movement and a schedule date falling due on April 30 was moved to April 29, April 30 being a holiday.

The schedule date for May depends on whether you have chosen to cascade schedules. If you have, the schedule date for May will be set as May 29, as the frequency has been specified as monthly. For the subsequent schedules also, May 29 will be considered the last schedule date.

If you have not specified that schedules have to be cascaded, the date originally specified will be the date for drawing up the schedules. Even if the April month end schedule has been moved to April 29, the next schedule will remain on May 30.

### **Principal Schedules**

Specify the following details.

## **Start Date**

Enter the date on which the particular principal schedule should start.

## **Frequency**

In addition to indicating the holiday treatment you also need to specify the periodicity or the frequency of the schedules for each principal component. You can indicate that the frequency of schedules can either be Periodic or Bullet.

If you choose to have bullet schedules for a particular component, liquidation for the component will be done only as of the Maturity Date. In the case of periodic schedules you have to specify whether the frequency should be daily, weekly, monthly, quarterly, half-yearly or yearly.

## **Frequency Unit**

In addition to specifying the frequency of schedules you are also required to indicate the number of units of the frequency. The number of units that you indicate will determine the actual schedule frequency.

For instance for a particular schedule you want to have a bi-weekly frequency. The list of choices available for the Frequency field does not have this option. In the Frequency field indicate the option Daily. Enter 2 as the Frequency Unit, the particular schedule will be due once in every two weeks.

## **Number of Schedules**

For a particular Frequency and Frequency Unit combination you can choose to have a number of schedules depending on how many you want to define for the particular component.

For instance, for a particular schedule you have indicated that the Frequency should be Weekly and the Frequency Unit as 2. Subsequently you indicate that the Number of Schedules as 12. This particular schedule will be run once in every two weeks, twelve times.

## **Adhere to the Month End**

When the principal exchange frequency is in terms of a month you can choose to indicate whether the schedules should be liquidated as of the last working day of the month or whether it should strictly follow the defined schedule.

### **Example**

The start date of a particular schedule is 1<sup>st</sup> February 2000. The frequency you have specified is Monthly and you indicate that the Frequency Unit is 1.

If you indicate that schedules have to adhere to month ends this particular schedule will be liquidated on the 29<sup>th</sup> of February 2000. However if you do enable this option the schedule will be liquidated on the 1<sup>st</sup> of March 2000.

## **Adjustment Type**

Periodic schedule repayment of the principal amount will always bring about a readjustment in the principal amount. It either increases or decreases the amount that is to be repaid to the counterparty.

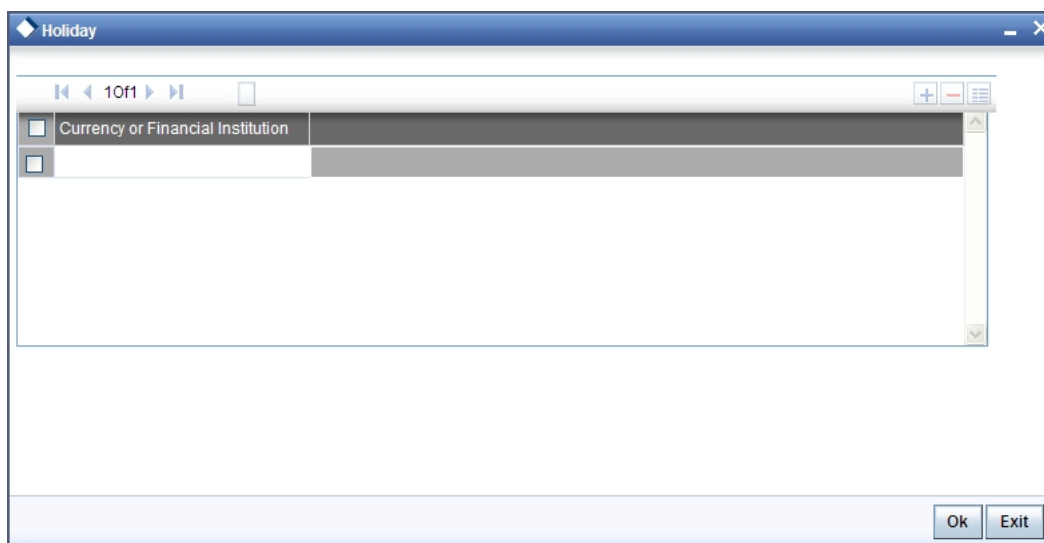
Therefore while defining principal schedules you have to indicate whether liquidation of the particular schedule results in the Increase or Decrease of the actual amount.

### **Amount**

Since the periodic schedule repayment of the principal amount either increases or decreases the amount to be repaid to the counterparty, you have to indicate the amount by which the principal is being changed.

#### **5.1.4.2 Multiple Currencies/Financial Institutions**

Click 'Holidays' button to invoke the 'Holiday Currency' screen to indicate the currencies or the financial institutions (depending on your selection of the holiday treatment) involved in the contract. This option is enabled only if you have selected the 'Combined' option for the Derivative Type involved in the contract.



Click add icon to select a currency /financial institution from the option list. If you wish to delete a currency/financial institution, click delete icon.

The following example illustrates the procedure for combined holiday processing as handled by Oracle FLEXCUBE:

#### **Example**

Your bank enters into a CCS trade contract involving USD and GBP on 1<sup>st</sup> March 2001. You have defined multiple schedules falling due on the following dates:

- March 31
- April 30
- May 31

The other holiday handling specifications are as follows:

- Move Forward – Yes

- Move Across Months – Yes

The following is a section of the holiday calendar maintained for the two currencies for the year 2001:

	30th March	31st March	1st April	2nd April	3rd April
USD	Working	Working	Holiday	Holiday	Working
GBP	Working	Holiday	Working	Holiday	Working

The first schedule falls due on March 31st. As per the calendar for USD, 31st March is a working day. But GBP is closed on 31<sup>st</sup>, hence the schedule will not be liquidated on this day. The next schedule date is computed, such that it is a working day for both USD and GBP. The system, therefore, moves forward (as the Move Forward option is selected) to check the specification for the next day. As per the calendars, 1<sup>st</sup> April is a holiday for USD and 2<sup>nd</sup> April is a holiday for both USD and GBP. Therefore, liquidation is not possible on either of these days. 3<sup>rd</sup> April is the next working day for USD, which is also marked as a working day for GBP. Therefore, 3<sup>rd</sup> April 2001 is the next valid schedule date (for the schedule due on 31<sup>st</sup> March) since it is marked as a working day in both the calendars.

The net result due to the combination of both the calendars is as follows:

	30th March	31st March	1st April	2nd April	3rd April
Combined result	Working	Holiday	Holiday	Holiday	Working

In this example, if you choose the Move Backward option, the system checks the status of the previous day to arrive at the next schedule date. In this case, 30<sup>th</sup> March is a working day for both the currencies. Hence, 30<sup>th</sup> March 2001 will be the next schedule date for the contract.

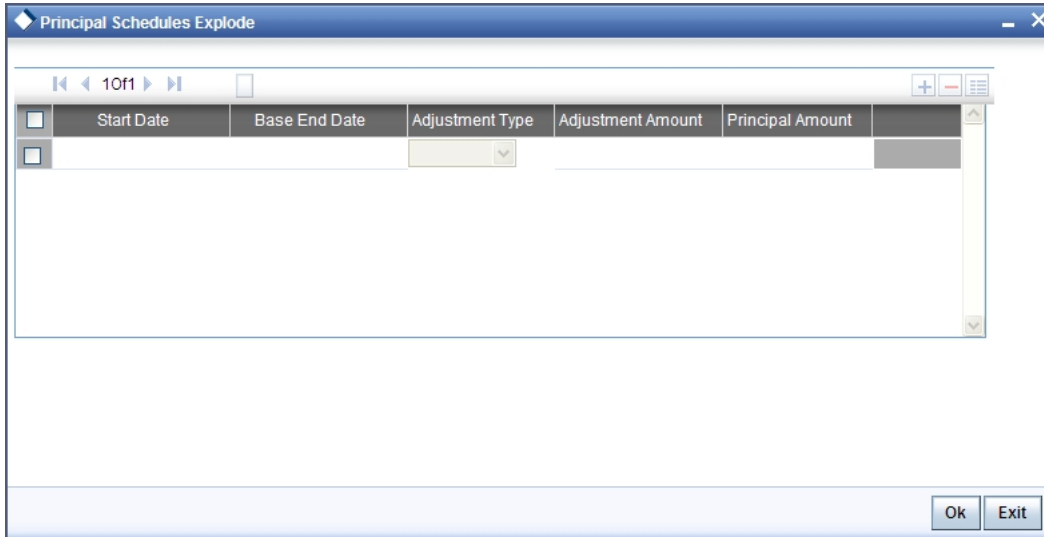
The relevant contract confirmations (both SWIFT and MAIL) will also reflect the fact that the holiday treatment is based on multiple holiday calendars.



The holiday treatment for the interest and revision schedules (if allowed for the derivative type involved in the contract) is also handled in a similar manner.

### 5.1.4.3 Viewing Schedule Details

Click 'Explode' button to view the details of all the schedules for the contract.



 You can change the details of existing schedules by clicking 'Amend' button.

## 5.1.5 Specifying Interest Details

Just as you maintain principal schedule details for the in and out legs of the contract so also you are required to indicate the interest schedule, interest revision schedule and accrual related details for every contract that you process.

Click 'Interest' button while maintaining details of either the in leg or the out leg. The 'Contract Interest Schedules' screen will be displayed.

The screenshot shows the 'Derivatives Contract Interest Details' window. It features a 'Contract Reference' field and a '10f1' button. Below are 'Leg Type' and 'Component' fields. A tabbed interface includes 'Main', 'Schedule', and 'Revision' tabs. The 'Main' tab is active, showing 'Accrual Details' and 'Liquidation Details' sections. 'Accrual Details' includes an 'Accrual Required' checkbox, 'Numerator Method' (30-US), 'Denominator Method', 'Denominator Basis', and an 'Include To Date' checkbox. 'Liquidation Details' includes an 'Auto Settlement' checkbox, 'Numerator Method' (Actual), 'Denominator Method', 'Denominator Basis', and an 'Include To Date' checkbox. The 'Payment Details' section includes 'Rate Denominator Basis', 'Payment Method', 'Discount Rate Basis', 'Discount Rate', 'Discount Rate Source', 'Discount Rate Code', 'Discount Tenor Code', 'Discount Rate Spread', 'Discount Auto Pickup', and 'Floating Component'. The 'Interest Rate Details' section includes 'Main Component' checkbox, 'Rate Type', 'Interest Rate', 'Waiver' checkbox, 'Rate Code', 'Rate Source', 'Flat Amount', 'Tenor Code', and 'Interest Spread'. At the bottom, there are 'View Interest' and 'View Revision' buttons, and 'Ok' and 'Exit' buttons.

As a result of linking a product to a contract all the product specific preferences defined at the product level will be inherited by the contract. These preferences include the interest accrual preferences, liquidation preferences and the schedules for the various interest and revision interest components.



Except for the interest accrual frequency, which you have defined at the product level you will be allowed to modify all the other preferences (accrual as well as liquidation) to suit the contract you are processing.

### 5.1.5.1 Main Details Tab

#### Accrual and Liquidation Details

Specify the following details:

##### **Accrual Required**

You can choose not to accrue interest for a particular contract although you have indicated this preference at the product level.

For instance when you are processing a trade deal interest accrual details are not required since trade deals are always revalued. In the 'Interest Details' screen you can indicate that interest accrual is not required for the specific contract by disabling the option.

However if indeed interest accrual is required for the contract you are processing and you merely want to change the accrual related details such as the interest calculation method, the basis on which interest is to be calculated for the accrual period, you will be allowed to do so.

The accrual function when run as part of the batch process run at EOD, calculates the accrual amount and passes accrual accounting entries for the accruable interest components of a derivative contract. The function will pick up derivative contracts for processing on the following criterion:

- Active and authorized contracts which are yet to be liquidated.
- Contracts whose accrual date falls on the current processing date or contracts whose accrual date falls between the current processing date and the next working date.

The date on which accrual is due for a contract is calculated based on the accrual date and accrual frequency defined for the product associated with the contract. .

If the accrual date of a bill falls on a holiday, the accruals are done as per your holiday handling specifications for automatic processes.

### **Denominator Method**

Indicate the denominator type to be used.

### **Denominator Basis**

You need to indicate the basis on which the denominator has to be computed. The options available are:

- Per annum
- Per period

### **Auto Settlement**

When setting up a product you specify the whether the mode of liquidation should be automatic or manual for the different components of contracts linked to that product. In this case only automatic settlement is supported.

### **Include To Date**

While calculating interest for the accrual period you have to indicate whether you would like to take into account the last day in an accrual period, for arriving at the accrual days both for the in and out legs of the contract.

Similarly you have to indicate whether the last day in a liquidation period should be considered for liquidation.

Refer the Chapter 'Defining Attributes specific to Derivative Products' for details on Numerator and Denominator Methods

## **Payment Details**

Specify the following details.

### **Rate Denominator Basis**

You need to indicate the basis on which rate denominator has to be computed. The options available are:

- Per annum
- Per period



If you are specifying in leg details then indicate the in leg rate denominator basis. While defining out leg details indicate the out leg rate denominator basis.

### **Payment Method**

You can indicate the method in which interest components for both the in as well as the out legs of the contract should be paid. You can indicate one of the following:

- Arrears - interest is liquidated at the end of each interest period.
- Advance - interest is paid at the start of each interest period.

### **Discount Rate Basis**

When you decide to pay interest in Advance, you have to indicate the basis on which the interest rate should be picked up to compute the discounted amount. You can select any one of the following options:

- Direct Input
- Contract Floating Component
- Other Floating Component

If you select the first option then you have to manually enter the rate at which interest is to be discounted. When the discount rate basis is the Floating Component you have to specify the Floating Component based on which interest is to be discounted

If your choice to discount the rate basis is the Other Floating Component, you have to indicate the rate source linked to the rate, the tenor associated with the rate, as well as the spread that is to be applied over the rate maintained in the 'Floating Rates' screen. Based on these parameters the discount rate will be calculated.

### **Discount Rate**

Specify the rate at which interest is to be discounted, if the discount rate basis is Direct Input.



## **Floating Component**

Indicate the Floating Component based on which interest is to be discounted, if you have indicated that the discount rate basis is Contract Floating Component.

## **Discount Auto Pickup**

Check this box to indicate whether the discount rate should be automatically picked up by the system from the 'Floating Rates' screen depending on the other parameters you have specified such as the discount rate source, rate code, tenor code and the rate spread.

## **Discount Rate Source**

If your choice for the discount rate basis is the Other Floating Component, then you have to indicate the Rate Source linked to the Rate Code based on which the discount rate is to be calculated.

## **Discount Rate Code**

Specify the discount rate code. You can also select the rate code from the adjoining option list. The list displays all the valid codes maintained in the system.

## **Discount Tenor Code**

If your choice for the discount rate basis is the Other Floating Component, then you have to indicate the tenor code associated with the rate Code based on which the discount rate is to be calculated.

## **Discount Rate Spread**

For the floating component you can specify the Spread that you want to apply over the rate maintained in the 'Floating Rates' screen.



The Spread you apply should always be greater than or equal to the Minimum Spread and less than or equal to the Maximum Spread defined for the product involved in the contract. If the spread happens to be greater than the Maximum Spread, then the Maximum Spread will be applied on the rate. On the other hand, if it is less than the Minimum Spread defined for the product, the Minimum Spread will be picked up.

For a floating rate, the spread will be applied over the market rate applicable for the day.

## **Interest Rate Details**

Specify the following details.

### **Rate Type**

The interest rate type paid on derivative settlements can be any one of the following types:

- Fixed
- Floating

- Special

### **Interest Rate**

When you maintain a fixed interest rate for a particular component of the interest leg of a contract it is necessary that you specify the rate.

### **Flat Amount**

When the interest rate is special you have to indicate the Flat Amount. Moreover if the derivative you are processing happens to be a commodity type of derivative instrument you have to indicate whether the flat amount specified is per unit of the derivative.

### **Waiver**

Check this box if you would like to waive this component. Else leave this box unchecked.

### **Rate Source**

Indicate the Source from which the Rate Code is to be taken. The Rate Code option list is populated depending on your selection of the rate source.

### **Rate Code**

If the Rate Type you have specified is 'Floating', then indicate the Rate Code that is to be associated (from the 'Floating Rates' screen) with the interest leg of the contract.

### **Tenor Code**

Once you specify the Rate Code, you have to indicate the Tenor Code that is to be linked to the particular Rate Code.

### **Interest Spread**

You can choose to apply a spread over and above the rate maintained in the 'Floating Rates' screen.

This Spread should be greater than or equal to the Minimum Spread and less than or equal to the Maximum Spread defined for the product that the contract involves.

If the spread you apply happens to be greater than the Maximum Spread, then the Maximum Spread will be applied on the rate. On the other hand, if it is less than the Minimum Spread defined for the product, the Minimum Spread will be picked up.

### **Main Component**

In Oracle FLEXCUBE you can define any number of tenor based interest components for every contract that you process. Therefore it is essential that you identify one interest component as the Main Component. This component will be used for amortization purposes.

**STOP** For the main component the Rate Type will be defaulted from the 'Contract Input Maintenance' screen. For all the other components the Rate type that you indicate will determine whether the particular in or out leg interest component (depending on which leg details you are specifying) is fixed, floating or special.

### 5.1.5.2 Schedule Details tab

The schedule preferences that you specify at the time of creating the product like the frequency of schedules, the unit of frequency and so on, will be defaulted to the contract. You will be allowed to change these preferences for the contract you are processing.

Interest liquidation process will pass netted entries for in leg and out leg schedules only if the in leg interest liquidation date matches with the out leg liquidation date. To facilitate netting for asynchronous schedules netting amount tags should be separately maintained at the product level.

*Please refer to the Annexure A – Accounting Entries and Advices manual for details on maintaining the netting amount tags.*

**STOP** Netting for Asynchronous schedules is possible only for Interest Rate Swaps (IRAs) and not FRAs and CCS.

### Schedule Holiday Treatment

You have to specify the holiday treatment that has to be followed when schedules fall due on a holiday. The holiday treatment method has been explained at length in the earlier section on Indicating Principal Schedule Details.

## **Interest Schedules**

Specify the following details.

### **Start Date**

Enter the date on which the particular interest schedule should start.

### **Frequency**

If you want to define periodic interest schedules, you should indicate the frequency of the schedules for a particular interest component. From the option list provided, you can select one of the following by clicking on the option:

- Daily
- Weekly
- Monthly
- Quarterly
- Half-yearly
- Yearly
- Bullet



You can choose to have a bullet schedule for a particular interest component in which case liquidation for the component will happen only as of the Maturity Date.

### **Frequency Units**

You can specify the number of units of the frequency in this field. The number that you specify here will determine the actual schedule frequency.

For instance for a particular schedule you want to have a bi-weekly frequency. The option list available for Frequency does not have this option. In the Frequency field, indicate the option 'Weekly' and in the Frequency Unit field if you enter 2, the particular schedule will be due every once in two weeks.

### **Number Of Schedules**

For a particular Frequency and Frequency Unit combination you can choose to have a number of schedules depending on how many you want to define for the particular interest component.

For instance, for a particular schedule you have indicated that the Frequency should be Weekly and the Frequency Unit as 2. Subsequently you indicate that the Number of Schedules as 12. This particular schedule will be run once in two weeks twelve times.

### **Adhere To Month End**

If the interest liquidation schedule is in terms of a month, you can choose to indicate whether the schedule days should adhere to Month-Ends.

Check this box to indicate that interest schedules should adhere to month ends.

### Amount

If the interest schedules you are defining are for a special type of interest component then you have to indicate the interest amount for the particular special component.

### Compounding Indicator

Check this box to indicate that the interest amount should not be repaid but should be added on to the principal amount at the end of the contract period.

Leave it unchecked to indicate that the interest repayment should be liquidated on the schedule end date.

### 5.1.5.3 Revision Details tab

The revision schedules are maintained in the 'REVISION' tab of the screen.

The screenshot shows the 'Derivatives Contract Interest Details' window with the 'Revision' tab selected. The window contains several sections for configuring revision details:

- Contract Reference:** A text field with a navigation arrow and the value '1011'.
- Leg Type / Component:** Two text fields.
- Revision Holiday Treatment:** Includes a 'Holiday Treatment' dropdown, 'Currency' and 'Financial Centre' text fields, and a 'Revision Holiday' button. Radio buttons for 'Forward' and 'Backward' are present, along with checkboxes for 'Move Across Month' and 'Cascade Schedules', and 'Amend' and 'Revision Explode' buttons.
- Reset Date Details:** Includes a 'Reset Date Basis' dropdown, 'Reset Days' text field, and a 'Reset Holiday' button. Radio buttons for 'Forward' and 'Backward' are present, along with a checkbox for 'Allow External Rate Revision' and 'Holiday Treatment', 'Currency', and 'Financial Centre' text fields.
- Revision Schedules:** A table with columns: Start Date, Frequency, Unit, Schedules, Adhere To Month End. The table is currently empty.
- View Interest / View Revision:** Two buttons at the bottom left.
- OK / Exit:** Two buttons at the bottom right.

### Revision Holiday Treatment

You have to specify the holiday treatment that has to be followed when schedules fall due on a holiday. The holiday treatment method has been explained at length in the earlier section on Indicating Principal Schedule Details Holiday Treatment

## **Reset Date Details**

Specify the following details.

### **Reset Date Basis**

Since the floating interest rates are entirely dependent on the market conditions you can periodically reset the floating rate for each interest component over the tenor of the contract.

For this purpose you need to specify the date basis on which interest rates should be reset. The following options are available:

- Start Date - the rate will be refreshed as of the start date of the schedule depending in the reset movement and the reset days.
- End Date.- the rate will be refreshed as of the start date of the schedule depending in the reset movement and the reset days indicated.
- Other - you can also specify any other date basis as the reset date basis.

### **Reset Date Movement**

After you specify the basis on which rate should be reset you have to indicate whether the reset movement should be backward or forward from the schedule Start/ End Date or any other date.

### **Allow External Rate Revision**

Checking this option indicates that for a contract, you can allow rate revision based on the rates uploaded from an external system. If the option is checked but no rate is uploaded for the contract, the rate would be picked up from the maintenance.

### **Reset Days**

For the reset basis and reset date movement specified you have to indicate the number of days before or after the start/end or any other date that should be used to determine the rate reset date.

#### **Example**

##### **Scenario 1:**

The Start Date of a revision schedule is 01 Jan 2000. The other specifications you make are as follows:

<b>Reset Date Movement</b>	:	Forward.
<b>Reset Days</b>	:	2.

As per your specifications the floating rate will be reset two day after the start date of the schedule, This will be on the 3<sup>rd</sup> of January 2000.

##### **Scenario 2:**

The End Date of a revision schedule is 31 Jan 2000. The other specifications you make are as follows:

<b>Reset Date Movement</b>	:	Backward.
<b>Reset Days</b>	:	5.

As per your specifications the floating rate will be reset five days before the start date of the schedule, This will be on the 26<sup>th</sup> of January 2000.

**Scenario 3:**

The revision schedule for a particular component is from 1<sup>st</sup> January 2000 to 1<sup>st</sup> February 2000. The other specifications you make are as follows:

<b>Reset Date</b>	:	16 <sup>th</sup> Jan 2000.
<b>Reset Date Movement</b>	:	Backward.
<b>Reset Days</b>	:	1.

The floating rate will be reset on the 15<sup>th</sup> of January 2000.



If a particular reset date falls on a holiday then you are required to indicate the way in which the holiday should be treated.

**Revision Schedules**

Specify the following details.

**Start Date**

Specify the date on which the particular interest revision schedule should start

**Frequency**

If you want to define periodic interest revision schedules, you should indicate the frequency of the revision schedules for a particular interest component. The options are:

- Daily
- Weekly
- Monthly
- Quarterly
- Half-yearly
- Yearly
- Bullet



If you prefer to keep the revision schedules as bullet then the particular interest component will be liquidated only as of the Maturity Date.

## Frequency Units

You can specify the number of units of the frequency in this field. The number that you specify here will determine the actual schedule frequency.

For instance for a particular schedule you want to have a bi-weekly frequency. The option list available for Frequency does not have this option. In the Frequency field indicate the option Weekly and in the Frequency Unit field if you enter 2, the particular schedule will be due every once in two weeks.

## Number Of Schedules

For a particular Frequency and Frequency Unit combination you can choose to have a number of schedules depending on how many you want to define for the particular revision component.

For instance, for a particular schedule you have indicated that the Frequency should be Weekly and the Frequency Unit as 2. Subsequently you indicate that the Number of Schedules as 12. This particular schedule will be run every two weeks twelve times.

## Adhere To Month End

If the interest revision schedule is in terms of a month, you can choose to indicate whether the schedule days should adhere to Month-Ends by checking this option.

### 5.1.6 Contract Rate Revision

During rate revision, the system picks up the floating rate applicable on the contract. If the 'Related Component' (spread) is not zero, the interest rate of the related component is also picked up as part of rate revision. This floating rate along with the spread is then compared with Cap or Floor rate depending on the Interest Type specified for the contract, to arrive at the final rate.

The manner in which the system determines the final rate for each of the four interest types is given below:

- For Interest Type 'Cap', if the total floating rate arrived at by the system plus interest rate of related component is greater than Cap Rate, the final rate is taken as the Cap Rate minus interest rate of related component, if the same is specified. If related component is not selected, the final rate will be Cap Rate minus the spread part. Rate of related component cannot be more than the Cap Rate.
- For Interest Type 'Floor', if the total floating rate is less than the Floor Rate and if Related Component is specified, the final rate will be taken as Floor Rate minus interest rate of the Related Component. If Related Component is not maintained, final rate will be the Floor Rate minus the spread component.
- If Interest Type is 'Corridor' then, final rate will lie between the Floor Rate and Cap Rate. If the final rate is above Cap Rate, then final rate is decided as in the case explained for Cap interest type (where spread is zero). Similarly, if the final rate is below Floor Rate, final rate is decided as explained for the Floor interest type above.
- If the interest type is 'Normal', both final rate as well as the spread will be taken as it is. Also, Related Component will not be applicable in this case.



## 5.1.7 Processing Brokerage on a Contract

When capturing the details of a contract that involves brokerage, you will have to specify the brokerage details applicable to the contract. To recall, you have already specified the name of the broker through whom the contract was brokered in the 'Derivatives Contract Input' screen. The details specified for the broker including the brokerage rule linked to the broker, is defaulted. However, you can change some details, like - whether brokerage should be booked in advance, in arrears or whether it should be waived altogether.

Click 'Brokerage' button to define the brokerage details that are applicable to the contract leg you are processing. You will be allowed to enter details of a broker only if brokerage was allowed for the product to which the contract is associated.

The screenshot shows a 'Brokerage' dialog box with the following fields and options:

- Contract Reference: \_\_\_\_\_
- Broker \*: \_\_\_\_\_
- Broker Name: \_\_\_\_\_
- Rule: \_\_\_\_\_
- Payable: Currency \* \_\_\_\_\_, Amount \_\_\_\_\_
- Brokerage: Currency \* \_\_\_\_\_, Amount \_\_\_\_\_
- Liquidation: Status: [Dropdown], Reference Number: \_\_\_\_\_
- Booking:  No Booking,  Advance,  Arrears,  Consider For Discount

The code assigned to the broker through whom the deal was brokered is displayed along with the broker's name.

### Payable/Brokerage

#### Currency

If the brokerage payable currency is the same as the brokerage paid currency, then the same amounts (brokerage paid and brokerage payable) are displayed against the currencies. You have the option to change these currencies.

#### Amount

While you cannot input the brokerage payable amount, the brokerage paid amount can be changed.

The following brokerage details are displayed:

- The brokerage liquidation status. If it has been liquidated, the liquidation reference number is also displayed.

- The rule code and description that has been linked to the broker.

## **Booking**

You can indicate preferences as to when the brokerage applicable to the contract should be linked. The options available are:

- No Booking
- Advance
- Arrears

## **Consider for Discount**

Check this option if the brokerage charges are considered for discount.

The preference specified for the broker will be displayed. You can change it in this screen, say, from advance to arrears or vice-versa.

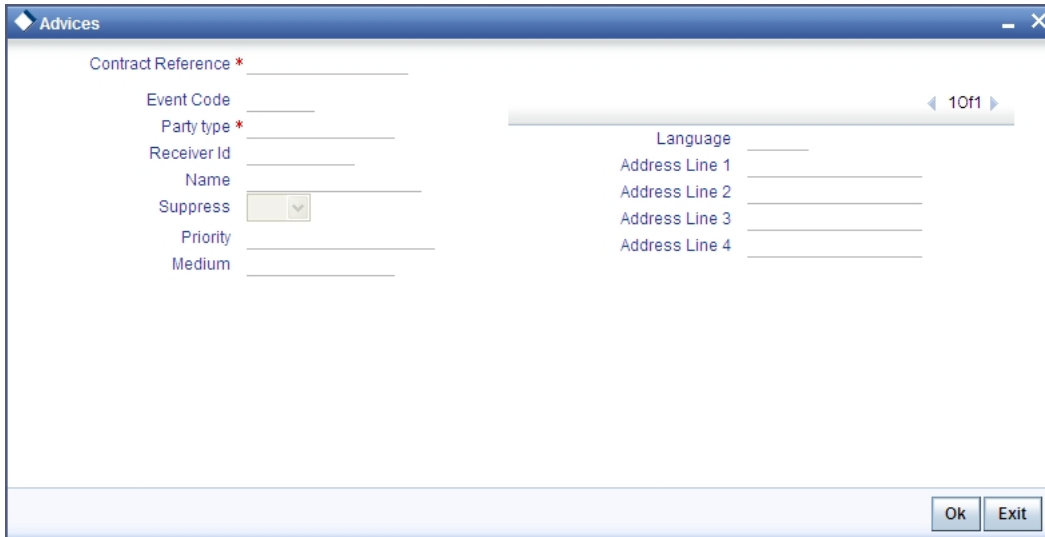
You have a third option. That is, of waiving brokerage. If you opt for no booking, no accounting entries will be passed for brokerage for this deal.



If you invoke the 'Contract Brokerage Details' screen for operations like delete, change, authorize, liquidate and detailed view, this screen will only display brokerage details. You can change brokerage details for a deal only if you have clicked the Modify option from the Actions Menu.

## 5.1.8 Specifying Advices for the Contract

Click 'Advice' button from the 'Contract Input Details' screen. The 'Advices' screen will be displayed. To recall, the advices that can be generated for the events that occur during the life-cycle of a contract are defined for the product to which the contract is associated.



The details of the advices applicable for an event are displayed in the 'Advices' screen.

### **Party Type**

The party type to whom a specific advice should be sent is picked up automatically based on the type of contract you are entering and the parties specified in the contract.

The address of the party who is the recipient of the message will be picked up by default, based on the media and address maintenance for the party. You can change either of them.

For a payment message by SWIFT, you also have the option to change the priority of the message.

### **Receiver ID**

Specify the Customer to whom the Advice is being dispatched.

### **Suppress**

By default, all the advices defined for a product will be generated for contracts involving it. If any of the advices are not applicable to contract you are processing, you can suppress its generation.

### **Priority**

For a payment message by SWIFT, you also have the option to change the priority with which the message should be generated. By default, the priority of all advices is marked as Normal.

You have the option to prioritize a payment message to one of the following options:

- Normal
- Medium
- High

### Medium

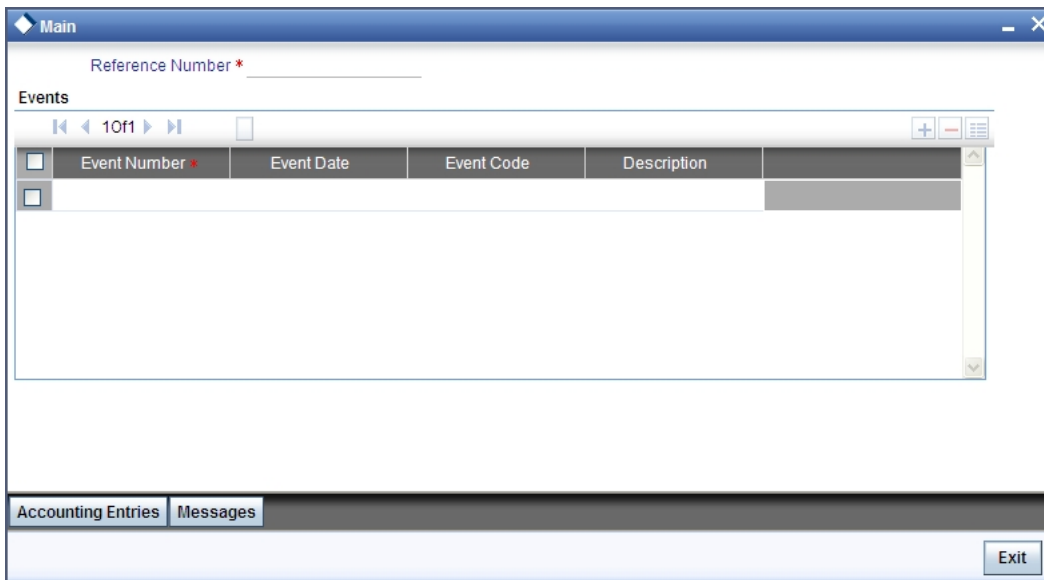
The medium through which an advice is transmitted and the corresponding address will be picked up based on the address and media maintained for the customer who is the recipient of the message.

You can, however, change either of these while processing the contract. Typically, if changed, both of them will be changed.

## 5.1.9 Viewing Event Details

Click 'Event' button from the 'Contract Input Details' screen, to view details of events involved in the transaction.

The details of events that have already taken place for the transaction leg will be displayed, along with the date on which the event took place.



You can view the accounting entries details for a specific event by choosing the event and clicking 'Accounting Entries' button.

View Details

Reference Number \*  Event

Accounting Entries

<input type="checkbox"/>	Branch	Account	Dr/Cr	Amount Tag	Currency	Foreign Currency Amount	Rate
<input type="checkbox"/>							

See Position Entries

Overrides

<input type="checkbox"/>	Overrides	Authorization Status	Authorized By	Auth Date Stamp
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Exit

### 5.1.10 Selecting the User Defined Fields

The user-defined fields that have been linked to the product will be defaulted to the contract. You need to capture the relevant information pertaining to these fields. Click 'Fields' button in the 'Contract Input' screen. The 'User Defined Fields' screen will display fields for which information needs to be captured.

Fields

Fields

10f1

<input type="checkbox"/>	Field Name *	Value
<input type="checkbox"/>		

Ok Exit

*For more details on how to create user Defined fields, refer chapter 'Creating custom fields in Oracle FLEXCUBE' in the User Defined Fields User Manual under Modularity.*

### **5.1.11 Levying Charges for a Transaction**

For each leg of the transaction you can specify the charges that you levy. Charges are applicable only the for customer legs of a transaction.

The characteristic feature of a charge is that it is always booked in advance and is not accrued, as a charge is collected only when it is due.

To recall, you have defined the attributes of a charge by defining a Charge Rule in the 'ICCF Rule Definition' screen. A rule identifies the basic nature of the charge. You have further defined a Charge class in the 'Charge Class Maintenance' screen where you have enriched the attributes of a rule. We shall refer to these classes as components.

Each charge component in turn is linked to a product. All the charge components linked to a product are defaulted to the contracts associated with it. Thus each time you enter a contract, you need not specify when and how charges should be collected.

However, while capturing the details of a transaction, you can choose to associate a component to the transaction. Further, you can modify some of the attributes defined for the applicable component.

From the 'Contract Input Detail' screen, click 'Charges' button. The 'Charge Detail' screen will be displayed.

The screenshot shows a window titled "Charge Details" with a "Contract Reference" field at the top. Below it are three sections, each with a table of data:

- Charge Association:** A table with columns: Creation ESN, Component, Rule, Description, and Consider as Discount. The first row is empty.
- Charge Application:** A table with columns: Creation ESN, Component, Tag Currency, Tag Amount, Charge Currency, and Charge Amount. The first row is empty.
- Charge Liquidation:** A table with columns: ESN, Component, Charge Currency, Charge Amount, and Liquidated. The first row has a checkmark in the "Liquidated" column.

At the bottom right of the window are "Ok" and "Exit" buttons.

The reference number of the transaction leg for which you are defining charge details will be displayed. The screen will contain a list of all the charge components applicable to the transaction leg.

### **Charge Association**

All the charge components applicable to the transaction leg you are processing will be displayed together with the rule that is linked to the component.

In this section of the screen you can:

- Change the charge rule linked to the component
- Disassociate a charge component from the transaction leg

## **Changing the charge rule linked to a component**

The rule that is linked to a charge component will be displayed next to the component. Select a new rule to link to the component from the adjoining option list. A list of all the charge rules maintained will be displayed. Choose the appropriate one. The new rule will be made applicable to the charge component.

## **Disassociating a charge component from the transaction leg**

You can disassociate a charge component from the transaction leg. In the Association section of the 'Contract Charge Details' screen, click against the waive option positioned next to the component.

In this case, the charge component is attached to the transaction leg but is not calculated.

## **Charge Application**

In the application section of the screen, you can indicate the charge components that should be applied to the transaction leg. The list of components that is displayed depends on the charge components that you have associated to the transaction leg. The following details of the component are also displayed:

- The basis component on which the charge is levied
- The currency of the basis amount
- The basis amount
- The charge amount
- The currency in which the charge amount is defined

You can change the charge amount that is calculated using the class applicable to the component.

## **Waiving a charge on a transaction leg**

You also have the option to waive the component for the transaction leg that you are processing. If, for some reason you want to waive the charge on the transaction you are processing, you can do so by checking against the waiver option in the application section of the screen. The charge will be calculated but not applied.



Note that you can waive a charge only if it is yet to be liquidated.

## **Charge Liquidation**

When a charge component that is applied to a transaction is liquidated, the relevant accounting entries are passed. The 'Contract Charge Details' screen will be displayed:

- The charge components that have already been liquidated.
- The amount that was liquidated.



- The currency in which it was liquidated.

### 5.1.12 Maintaining Settlement Instruction Details

In order to capture the details of a contract successfully you have to capture the following details as well.

- The accounts to be debited for charges, if there are any.
- The accounts to be debited for interest that the contract involves.
- The method in which the contract is to be settled - whether it is an instrument or a Message (as in a SWIFT or TELEX message).
- Details about the route through which the money settlement should take place.

The information that is related to the settlement method and route applicable for a transfer is referred to as Settlement Instructions.

The Settlement Instructions are captured through four different screens. Click 'Settlements' button in the 'Contract Input Details' screen to invoke the 'Settlement Instructions' screen. Through the four screens you can capture the following information:

- Account details (details about the accounts involved in the contract that have to be either debited or credited in your branch)
- Message details
- Party details (details about the various parties involved in the contract)

The screenshot shows a software window titled "Settlement Details". At the top, there are input fields for "Contract Reference \*" and "Component". Below these are several tabs: "Account Details", "Message Details", "Parties", "Parties", "Clearing Details", and "Local Clearing". The main content area is titled "Settlement Details" and features a table with the following columns: "Component", "Currency", "Branch", "Account", "Description", "Account Currency", and "D". The table is currently empty. At the bottom of the window, there is a "Signature Verification" button and "Ok" and "Exit" buttons.

### 5.1.12.1 **Account Details tab**

For the various components involved in a transaction like charges etc you have to specify the account details in this screen. These details include the component, the currency in which it is paid, the payment account and its currency, the branch of your bank to which the account belongs, the exchange rate (in the case of the component currency being different from the account currency).

Depending on the component, the system will also display whether the account involved in an entry has to be debited or credited:

- P indicates you credit (Pay to) the account involved.
- R indicates you debit (Receive from) the account involved.

### 5.1.12.2 **Message Details tab**

A transaction can be settled either in the form of an instrument (a Demand Draft, a Manager's Check or a Check) or a Message (a S.W.I.F.T, TELEX or Mail message to be sent to the receiver). The details regarding the instrument or message have to be specified in the 'Message Details' screen.

The message details that you specify here are applicable only for S.W.I.F.T. The type of S.W.I.F.T. message that is generated depends on the parties involved in the contract.

Depending on the method in which you want to settle the transaction, you should input either Instrument or Message details.

#### **Specifying Instrument Details**

For a transaction that is being settled through an instrument, you should specify the type of instrument being used. It could be Manager's Check, Check or a Demand Draft. You should also specify the number that will identify the instrument. This number will be printed on the instrument.

If the settlement is through an instrument, you cannot specify party details for the transaction.

#### **Specifying Message Details**

For a SWIFT message, you have to specify:

- Whether a Cover has to be sent to the Reimbursement Bank, along with the payment message to the receiver.
- Bank to bank payment details, (these can be in the form of instructions or additional information to any of the parties involved in the transaction).
- Information from the sender to the receiver.

### 5.1.12.3 **Party Details tab**

To effect a transaction, you may have to pass on funds through a series of banks before it actually reaches the ultimate beneficiary. Through the two 'Parties' screens you can capture details of all the parties that will be involved in settlement of the transaction.

These screens contain fields that explore the possible routes in which the transaction components can be transferred.

### **Intermediary Reimbursement Institution**

An Intermediary Reimbursement Institution is the financial institution between the Sender's Correspondent and the Receiver's Correspondent, through which the reimbursement of the transaction will take place.

### **Intermediary**

The Intermediary in a transaction refers to the financial institution, between the Receiver and the Account With Institution, through which the transaction component must pass.

The Intermediary may be a branch or affiliate of the Receiver or the account with Institution, or an entirely different financial institution. This field corresponds to field 56a of S.W.I.F.T.

Here you can enter either the:

- ISO Bank Identifier Code of the bank or the
- Name and address of the Bank.

### **Receiver's Correspondent**

The Receiver's Correspondent is the branch of the Receiver or another financial institution at which the funds will be made available to the Receiver. This field corresponds to field 54a of S.W.I.F.T. You can enter one of the following:

- ISO Bank Identifier Code of the bank
- The branch of the Receiver's Correspondent
- Name and address of the Receiver's Correspondent

### **Account With Institution**

An Account With Institution refers to the financial institution, at which the ordering party requests the Beneficiary to be paid. The Account With Institution may be a branch or affiliate of the Receiver, or of the Intermediary, or of the Beneficiary Institution, or an entirely different financial institution.

This field corresponds to field 57a of S.W.I.F.T. You can enter one of the following:

- ISO Bank Identifier Code of the bank
- The branch of the Receiver's Correspondent
- Name and address of the Receiver's Correspondent
- Other identification codes (for example, account number)

### **Ordering Institution**

The Ordering Institution is the financial institution, which is acting on behalf of itself, or a customer, to initiate the transaction. This field corresponds to 52a of S.W.I.F.T.

In this field you can enter one of the following:

- The ISO Bank Identifier Code of the Ordering Institution.
- The branch or city of the Ordering Institution.
- The Name and address of the Bank.

### **Ordering Customer**

The Ordering Customer refers to the ordering customer of the transaction. Here you can enter the name and address or the account number of the Customer, ordering the transaction. This field corresponds to field 50 of S.W.I.F.T. You will be allowed to enter details in this field only if you have initiated a customer transfer (MT 100 and MT 202).

### **Beneficiary Institution**

Here, you can enter details of the institution in favor of which the payment is made. It is in reality the bank that services the account of the Ultimate Beneficiary. This field corresponds to field 58a of S.W.I.F.T.

You will be allowed to make entries into this field only for Bank Transfers (when the remitter and beneficiary of the transfer are financial institutions - MT 100 or MT 202). Here you can enter either:

- The ISO Bank Identifier Code of the Beneficiary Institution; or
- The Name and Address of the Beneficiary Institution.

### **Ultimate Beneficiary**

The Ultimate Beneficiary refers to the Customer to whom the transaction amount is to be paid. This field refers to field 59 of S.W.I.F.T. You can make entries into this field only for a customer transfer (MT 100 and MT 202).

The number of banks involved in the transfer would depend on the:

- Relationships and arrangements between the sending and receiving banks
- Customer instructions
- Location of parties
- The banking regulations of a country

*Refer to the Settlements User Manual of Oracle FLEXCUBE for more details.*

### 5.1.13 Levying Tax on a Contract

The tax details specified for the product to which the contract is associated will be automatically applied to the contract. However, while processing a contract, you can waive the application of tax on the contract.

You can invoke the contract 'Tax Details' screen by clicking 'Tax' button from the 'Contract On-line' screen.

Component *	Creation ESN	Rule	Waiver
<input checked="" type="checkbox"/>			<input type="checkbox"/>

Component *	Creation ESN *	Currency	Tag Amount	Currency	Tax Amt
<input checked="" type="checkbox"/>					

Component *	Currency	Tax Amount
<input checked="" type="checkbox"/>		

*Refer to the Tax User Manual of Oracle FLEXCUBE for more details.*

### 5.1.14 Saving the Details of a Contract

Enter valid inputs into all the mandatory fields; or you will not be able to save the contract. After you have made the mandatory entries, save the contract by either selecting 'Save' from the Actions menu in the Application tool bar or by clicking save icon.

On saving the contract, 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 deal will be displayed in the Date/ Time field.

A contract that you have entered should be authorized by a user bearing a different login ID, before the EOD is run. Once the contract is authorized, the ID of the user who authorized the contract will be displayed in the Auth By field. The date and time at which the deal is authorized will be displayed in the Date/ Time field positioned next to the Auth By field.

The current status of the contract is also displayed in the field Deal Status. The field will display one of the following: active, closed, expired, reversed, cancelled, and on hold.

### **5.1.15 Generating Payment Messages on Authorization**

During the authorization of the contract, the system generates payment messages by applying the floating interest rate at that point of time.

The system handles the payment messages in two different ways:

- In case maturity/ liquidation date falls before the settlement days of the currency, the messages are generated after authorization
- In case maturity/ liquidation date is after the settlement days, the messages are generated on the settlement day (Maximum of both Legs of the transaction)

The payment messages are generated for the principal exchange and interest liquidation as of the system date. However, the system will not reset the floating rate of the interest schedules for which settlement messages are already generated.

The system will trigger the event DRVN (Rate Reset) once you save the DV contract with interest schedules. Subsequently, SGEN event will be triggered on authorization.

### **5.1.16 Viewing different versions of a Contract**

When you enter a contract in Oracle FLEXCUBE, it is assigned a version number of 1. From then on, each amendment of the contract results in its next version. When you come to the 'Derivatives Contract Input Detailed' screen, the latest version of the contract will be displayed.

To navigate between the versions of a deal, use the buttons provided for the same,

- Click back arrow icon to view the previous version.
- Click forward arrow icon to view the next version.

## **5.2 Uploading Contracts for Amendment**

From an external system, you can upload contracts that require amendment in Oracle FLEXCUBE. The system will distinguish between the new and the contracts that require amendment based on the action code of the uploaded record. For a contract requiring amendment, the action code will be 'AMND'. If the action code is 'AMND', Oracle FLEXCUBE will first check whether the contract exists in the system or not. If the contract does not exist in the system, an error message will be displayed to notify that the contract cannot be amended.

The Reference Number provided by the external system has to same if it is a new contract or if it is an amendment to an existing contract.

When you upload a new contract, the Reference Number will be displayed in the User Reference Number field for that contract. The User Reference Number will be the basis for checking whether the contract exists or not.

The upload for contract amendment will trigger the 'DAMN' event. The same event is triggered even when you make the amendment in the 'Derivatives Contract Input' screen.

The fields that can be amended for the Derivatives module are as follows:

- Remarks
- Rate Type (IN LEG)
- Rate (IN LEG)
- Rate Type (OUT LEG)
- Rate (OUT LEG)
- Reval Required
- Reval Netting Required
- Reval Method
- Holiday Treatment
- Holiday Currency
- Finance Centre
- Holiday Movement
- Move Across Months
- Inception Value

### **5.2.1 Operations on a Derivatives Contract Record**

You can perform the following operations on a derivative contract:

- Copy
- Authorize
- Delete
- Amend
- Reverse
- Liquidate

Refer to the *Common Procedures User Manual of Oracle FLEXCUBE* for details on these operations.

## **5.2.2 Uploading Derivative Rates**

Oracle FLEXCUBE allows uploading of derivative rates. During the upload, Oracle FLEXCUBE expects the following information to be present in the upload message:

- Rate Code
- Rate Source
- Tenor Code
- Currency

If any of these values are missing for any record, then the system will raise an error.

### **Validations**

- If the effective date is Null, then the current application date is defaulted.
- All the validations are performed for the received fields.

Based on the data, it identifies whether the request is creation or amendment. For new records, new maintenance is created else, the details of the existing record are updated.

During the upload, even if one record fails to process, entire upload will get rejected.

## **5.2.3 A Note on DV Contract Amendment Upload**

If any one of the fields mentioned below is sent by the external system, Oracle FLEXCUBE considers the upload as a non financial amendment upload:

- Internal Remarks
- Rate Type (In & Out)
- Rate Code (In & Out)
- Rate Source (In & Out)
- Tenor Code
- Spread
- Interest Rate
- Remarks
- Interest Details
  - Accrual Allowed Flag
  - Numerator & Denominator Method
  - Denominator Basis
- Liquidation Details



- Auto Settlement flag
- Numerator & Denominator Method
- Denominator Basis
- Payment Details
  - Rate Denominator Basis
  - Payment Method
  - Discount Rate basis
  - Discount Rate
  - Floating Component
  - Discount Rate Source
  - Discount Rate Code
  - Discount Tenor Code
  - Discount Rate Spread
- Schedules
  - Holiday Treatment
  - Currency / Financial Centre
  - Holiday Movement
  - Cascade Schedules flag
  - Move across month flag
  - Schedule Details
- Revision
  - Reset Date Basis
  - Revision Details

A financial amendment is allowed only through External system (Gateway). If any one of the fields sent by the external system is not the mentioned in the list above, it is considered as a financial amendment upload.

The following points are noteworthy:

- In such a case, the original contract is reversed and a new contract is booked.
- However, financial amendment upload is not allowed if SGEN message is already generated for the underlying contract. In case of a financial amendment, the system doesn't generate any confirmation message for the reversed deal. It generates an amendment confirmation message as part of the DBOK event of the new deal. This applies to only mail messages and not for SWIFT messages.
- In case of a SWIFT message, the system sends a cancellation message and a booking message.
- Any amendment of a contract is not allowed if the contract is cancelled / liquidated / reversed (for a contract status L, V or D).

## 5.3 Confirmation of Interest and Principal Schedules

The interest and principal schedules (for FRAs/ Single / Cross currency swaps) defined for a derivative contract would typically be confirmed by the counterparty involved in the contract. In Oracle FLEXCUBE you can capture the details of each such confirmation received.

### Schedule Confirmation

The details that need to be confirmed have to be entered in the 'Confirmation' screen, available under the Derivatives Menu in the Application Browser.

The schedule details pertaining to the contract are automatically populated in the 'Confirmation' screen upon authorization of the contract.

Schedule Date	Component	Amount	Currency	Pay/Receive	Media#	Receiver	C	Autho

The following details are displayed in the screen:

<b>Schedule Date</b>	The date on which a particular component falls due.
<b>Component</b>	<p>The various principal and interest components for which the confirmation is being processed.</p> <p>The components displayed depend on the rate type associated with them.</p> <p>All the components for which the rate type is fixed are displayed.</p> <p>In the case of a floating rate type, only those components that have undergone a rate revision will be displayed.</p>
<b>Amount</b>	<p>The amount due towards each schedule.</p> <p>If you have opted for netting at the contract level, the amount displayed will be netted provided the components due for settlement are in the same currency and have the same schedule date. The components are always netted against the main component specified for the 'In Leg' of the contract. The netted amount will be displayed against the main component.</p>
<b>Currency</b>	The amount due towards each schedule will be settled in the currency displayed here.
<b>Pay/Receive</b>	<p>Indicates whether the components are payables or receivables. The value displayed may be:</p> <p>O (Outgoing/Payable), or</p> <p>I (Incoming/Receivable)</p>

In addition to the above fields, you are allowed to enter the following details in the screen. You need to unlock the record before proceeding to enter these details.

For each schedule you can indicate the media (MAIL, SWIFT, etc) through which the confirmation was received. You can select the appropriate media from the option list provided. You are also allowed to enter a media type that is not available in the option list.

You can specify the name of the receiver (for instance the name of the Derivatives back-office user in your bank) who received the confirmation. No validation is done for this field.


If it is desired, you can enter additional information for each schedule in the 'Remarks' column. The system does not validate the contents of this field.

### Confirming a schedule

You can mark the schedules for which a confirmation is required from the counterparty. Select the Confirmation option (by checking the 'C' option) for each schedule.

At the time of saving the record, the system triggers the Derivative Schedule Confirmation (DCON) event for the selected schedules on the relevant Derivatives contract. You can view this event at the contract level by invoking the 'Contract Input' screen and clicking on the events button.

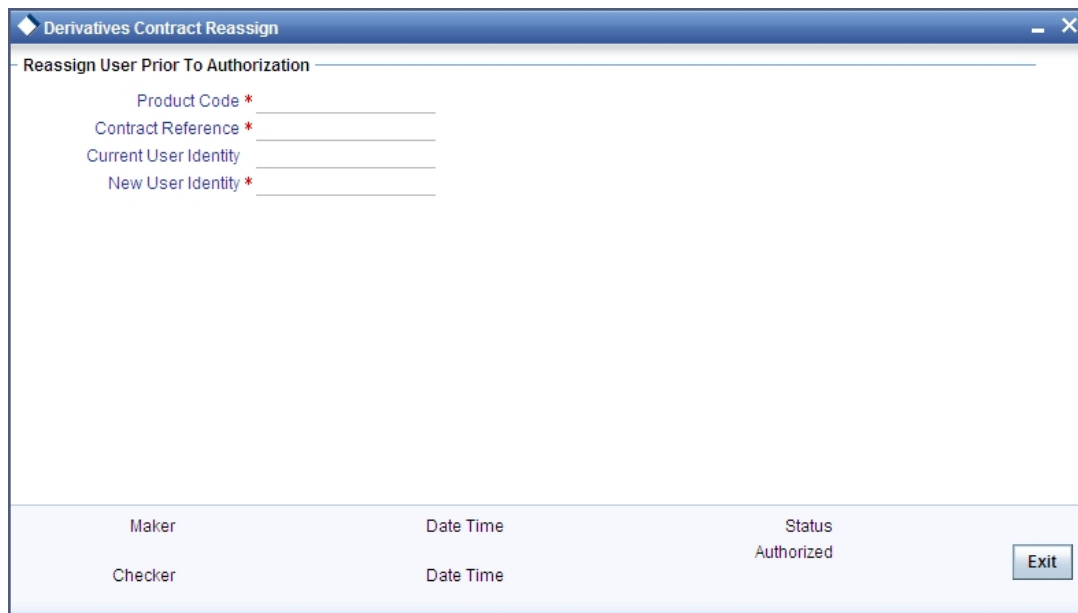
After the confirmation is saved, the contract status becomes unauthorized. On authorization of the confirmation, through the 'Confirmation' screen, the contract status is also updated to 'Authorized'.

 After you authorize the record (the 'A' option appears checked), you are not allowed to make any modifications in the 'Schedule Confirmation' screen pertaining to a confirmed schedule. If the counter-party confirms another schedule, later on, the above process must be repeated for the relevant schedule.

## 5.4 Reassigning a Contract to another User

A contract can be deleted only by the user who entered it. If a contract has to be deleted and the user who input the same is not available to do it, you can reassign the contract to another user so that the other user can delete it. Typically, this situation may arise during EOD operations, when a contract that is not authorized has to be deleted and the user who input it has left office for the day.

You can invoke the 'Derivatives Contract Reassign' screen by typing 'DVRTREAS' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.



Maker	Date Time	Status	Authorized
Checker	Date Time		

To reassign a contract to another user, the following steps are required:

**Product Code**

Indicate the product associated with the contract. You can select a product code from the option list, which contains a list of the authorized products that you have created.

**Contract Reference**

Indicate the contract reference number of the derivative you wish to reassign, to another user. You can select a reference number from the option list, which contains a list of all the active derivative contracts.

**New User Identity**

Select the User ID of the user to whom you are assigning the contract.



This user to whom you reassign a contract should have access rights to enter derivative contracts.

Your User ID will be defaulted from the login screen. Select 'Save' from the Actions menu in the Application toolbar or click save icon to save the specifications you have made. Click 'Exit' or 'Cancel' button if you do not want to save the details that you entered.

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## 6. Batch Processing

### 6.1 Introduction

The End of Cycle process constitutes a set of programs that mark the logical beginning or end of a cycle of events. You are required to execute many routine functions everyday as part of the End of Cycle process. These functions can be classified as:

- Beginning of Day (BOD) programs; and
- End of Day programs (EOD)

The various BOD and EOD functions that are processed by the system are documented in this chapter.

### 6.2 Processing Daily Events

As part of the batch processes the following are the events that will be selected and processed:

- Settlements
- Accruals/Amortization
- Revaluation population
- Revaluation processing

The batch function identifies the previous process till date (the date till which the previous batch was run) and the current process till date (the date till which the current batch is being run) for the current batch run. It then considers the type of batch being run. This can be either Beginning of Day (BOD) batch run or End of Day (EOD) batch run.

Based on the parameters you have specified at the time of maintenance, the function selects the various events in the following order:

- Events that have to be processed only once in a batch run and are applicable for the type of batch being run whether BOD or EOD.
- Events that have to be run for all holidays falling between the previous process till date and the current process till date.
- Events that have to be run on every processing date and are applicable for the current type of batch being run for all the working days of the batch

## 6.2.1 Invoking the Automatic Daily Program

To run the Derivatives Daily Events program, it is necessary that you first maintain it as a Mandatory Program. For example, you need to maintain the function 'DVBAUDLY' as a mandatory program to execute the End of Day batch. You can invoke the screen by typing 'EIDMANPR' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

The screenshot shows the 'Mandatory Batch Program Maintenance' window. It features a top toolbar with an application icon and an arrow button. The main area contains the following fields and options:

- Branch \* (text field)
- Module \* (text field)
- Function Id \* (text field)
- Sequence Number (text field)
- Description (text field)
- End Of Cycle Group:  Txn Input,  End of Txn Input,  End of Fin Input,  End of Day,  Beginning of Day
- Frequency: Daily (dropdown)
- Holiday Rule: Do Not Execute (dropdown)
- Execution Layer:  Database,  Application
- Sub Stage: 1 (dropdown)
- Error Handling:  Stop Automatic End Of Day and Run Emergency Program,  Continue with Automatic End Of Day
- Number Of Days (text field)
- Run Date (calendar icon)
- Job Code (text field)
- Description (text field)

Below the main form is a 'Predecessors' section with a list box containing one entry: 'Predecessors \*'. At the bottom, the 'Fields' section includes:

- Input By (text field)
- Authorized By (text field)
- Modification Number (text field)
- Authorized
- Open
- Exit button

Refer the Automated End of Day User Manual for further details about running an EOD batch.

## 6.3 Triggering the Year-end Batch process for collecting Contract-wise Data

The year-end batch process can be triggered to collect data pertaining to the unrealized income booked for each contract during the year. You will be allowed to trigger this process only if you have enabled the Track PY PnL Adjustment option for your branch through the Preferences section of the 'Branch Parameters' screen.

During liquidation the information that is collected using the batch process is used to post adjustment entries to the previous year adjustment GL.

You must ensure that you execute this batch process prior to executing the Year-end P and L balance transfer batch. The balances pertaining to the unrealized income booked for each contract during the year will be stored at the Contract, Component and Currency level.

For unrealized accruals the batch process stores data for the in leg and out leg interest components and for the unrealized accrual of termination gain/loss. For advance contracts, unrealized accrual signifies accruals for those schedules which have liquidated but for which accruals have not been completed. For arrears contracts, unrealized accrual is indicative of the amount accrued until date for those interest schedules which are yet to be liquidated. For termination gain or loss, unrealized accrual is the amount accrued for a terminated contract, which has not yet reached maturity.

### 6.3.1 Upload of DV Contracts

Oracle FLEXCUBE provides the facility of holiday treatment for principal schedules, interest and interest revision schedules of a DV online contract based on Multiple-currency and Multiple-financial center if the following conditions are satisfied.

- The derivative type for the product allows combined holiday treatment.
- The holiday treatment at the contract level (for principal, interest or revision schedules) is specified as Currency or Financial Center.

You can specify the details of currencies or financial centers for combined holiday treatment for uploaded DV contracts in the table shown below:

Column Name	Data Type	Length	Description
BRANCH_CODE	Character	3	Branch Code
SOURCE_CODE	Character	20	Source Code of the external system
EXTERNAL_REF_NO	Character	16	Unique Reference Number of the contract being uploaded
COMPONENT	Character	10	INLEG_PRN => Principal of the in leg OUTLEG_PRN => Principal of the out leg DV_IN_INT => => Interest of the in leg DV_OUT_INT => Interest of the out leg
CCY_FIN_CENTER	Character	3	Currency code or Clearing house
CCY_OR_FINCENTER	Character	1	C => Currency F => Financial Center



Column Name	Data Type	Length	Description
SCHEDULE_TYPE	Character	1	P => Principal I => Interest R => Revision

If the value of CCY\_OR\_FINCENTER is C, then the value provided in CCY\_FIN\_CENTER must be an authorized and open currency.

If the value of CCY\_OR\_FINCENTER is F, then the value provided in CCY\_FIN\_CENTER must be an authorized and open clearing house.

You must provide details of the list of currencies or financial centers from the above table if the derivatives type for the uploaded product supports combined holiday treatment and the holiday treatment for a specific component and schedule type is set as currency or financial center.

When holiday treatment has been set as combined but schedule holiday treatment has been set as 'ignore' or 'Local' at the specific component level then the data provided in the combined holiday treatment table will not be considered by Uploaded schedules.

In case of synchronous schedules for principal or interest supported by the derivative type, the OUT leg holiday preference will be defaulted from the IN leg and the already provided OUT leg will be ignored. While in case of synchronous revision for IN or OUT legs for interest revision supported by derivative type, IN/ OUT revision holiday preference will be defaulted from IN/ OUT interest holiday preference.

In case of asynchronous schedules if you have to specify the holiday treatment in the existing upload tables as Currency/ Financial center for IN and OUT legs and the holiday treatment in type maintenance is defined as combined, then you must provide for combined holiday treatment details for IN and OUT leg separately else an error is displayed. If the holiday treatment has been specified as Ignore/ Local for the component in the existing table, then the new upload table for combined holiday treatment will be ignored for that component and schedule type.

## 7. Error Messages for Derivatives

### 7.1 Error Codes and Messages

Function ID	Error Code	Message
DV-RVN-001	DVRESET0	Unhandled Exception while processing rate revision.
DV-ADV-001	DVADVSRV	Unhandled exception while processing messages to be generated.
DV-AML-001	DVAMLSRV	Unhandled exception during message generation for FRA confirmation.
DV-AML-002	DVAMLSRV	This message cannot be sent for this contract.
DV-AML-003	DVAMLSRV	This message cannot be sent for this contract.
DV-AML-004	DVAMLSRV	Unhandled exception while generating message for Rate Swap confirmation.
DV-AML-005	DVAMLSRV	Unhandled exception while generating message for contract assignment.
DV-AML-006	DVAMLSRV	Unhandled exception while getting in leg details.
DV-AML-007	DVAMLSRV	Unhandled exception while getting out leg details.
DV-AML-008	DVAMLSRV	Unhandled exception while getting in leg details.
DV-AML-009	DVAMLSRV	Unhandled exception while getting out leg details.
DV-AML-010	DVAMLSRV	Unhandled exception while getting the general terms of the contract.
DV-AML-011	DVAMLSRV	Unhandled exception while getting sender and receiver addresses.
DV-AML-012	DVAMLSRV	Unhandled exception while getting broker details.
DV-AML-013	DVAMLSRV	Unhandled exception while getting agreement details.
DV-AML-	DVAMLSRV	Unhandled exception while getting payment dates.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
014		
DV-AML-015	DVAMLSRV	Unhandled exception while getting payment dates.
DV-AML-016	DVAMLSRV	Unhandled exception while getting reset dates.
DV-AML-017	DVAMLSRV	Unhandled exception while getting compounding dates.
DV-AML-018	DVAMLSRV	Unhandled exception while getting settlement details.
DV-AML-019	DVAMLSRV	Unhandled exception while getting account details.
DV-AML-020	DVAMLSRV	Unhandled exception while processing a tag.
DV-AMR-002	DVAMORT0	Product is not Open.
DV-AMR-003	DVAMORT0	Product is not Authorized.
DV-AMR-004	DVAMORT0	Product is not Open.
DV-AMR-005	DVAMORT0	Product is not Authorized.
DV-AMR-011	DVAMORT0	Unhandled exception while obtaining the periodic amort date.
DV-AMR-021	DVAMORT0	Unhandled exception while processing periodic inception amort.
DV-AMR-031	DVAMORT0	Unhandled exception while processing periodic termination amort.
DV-AMR-101	DVAMORT1	Unhandled exception while processing for a contract.
DV-AMR-102	DVAMORT1	Failed to round the amount.
DV-AMR-103	DVAMORT1	Failed to round the amount.
DV-AMR-	DVAMORT1	Unhandled exception while populating product amort.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
121		
DV-AMR-131	DVAMORT1	Unhandled exception while populating period amort.
DV-AMR-132	DVAMORT1	No data found for periodic amortization details.
DV-AMR-141	DVAMORT1	Unhandled exception while populating amort master.
DV-AMR-151	DVAMORT1	Unhandled exception while populating product entry.
DV-AMR-161	DVAMORT1	Unhandled exception while building accounting entry.
DV-AMR-171	DVAMORT1	Unhandled exception while processing for amount tag.
DV-AUT-001	DVCCOATH	Unhandled exception while authorizing the Contract.
DV-AUT-002	DVCCOATH	Maker Cannot Authorize the Contract.
DV-AUT-003	DVCCOATH	Rekey Field In Leg Currency is incorrect.
DV-AUT-004	DVCCOATH	Rekey Field Out Leg Currency is incorrect.
DV-AUT-005	DVCCOATH	Rekey Field In Leg Principal Amount is incorrect.
DV-AUT-006	DVCCOATH	Rekey Field Out Leg Principal Amount is incorrect.
DV-AUT-007	DVCCOATH	Rekey Field Value Date is Incorrect.
DV-AUT-008	DVCCOATH	Rekey Field Maturity Date is Incorrect.
DV-AUT-009	DVCCOATH	Override(s) are not confirmed.
DV-AUT-010	DVCCOATH	Do You Want to Continue Authorization.
DV-AUT-	DVCCOATH	Failed to authorize the contract.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
012		
DV-BCH-001	DVBCHSRV	Unhandled exception while preparing for batch.
DV-BCH-002	DVBCHSRV	Batch is configured as Mandatory Function in invalid End of Cycle Group.
DV-BCH-005	DVBCHSRV	Unhandled exception while obtaining the process till date.
DV-BCH-011	DVBCHSRV	Unhandled exception while checking program status.
DV-BCH-012	DVBCHSRV	Batch already processed.
DV-BCH-013	DVBCHSRV	Predecessor Functions to Batch are pending.
DV-BCH-021	DVBATCH	Unhandled Exception while calculating the process till date.
DV-BCH-022	DVBCHSRV	Branch Parameters not maintained for Derivatives.
DV-BCH-031	DVBCHSRV	Unhandled exception while obtaining the Period End Date.
DV-BCH-032	DVBCHSRV	Failed to obtain the Period End date for the Branch.
DV-BCH-041	DVBCHSRV	Unhandled exception while preparing for batch.
DV-BCH-051	DVBCHSRV	Unhandled exception while preparing for batch.
DV-BCH-061	DVBCHSRV	Unhandled exception while preparing for batch.
DV-BCH-071	DVBCHSRV	Unhandled exception while processing batch.
DV-BCH-081	DVBCHSRV	Unhandled exception while processing batch.
DV-BCH-091	DVBCHSRV	Unhandled exception while processing batch.
DV-BCH-	DVBCHSRV	Unhandled exception while unmarking End of Transaction Input.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
101		
DV-BCH-111	DVBATCH	Unhandled Exception while processing Batch.
DV-CEV-001	DVCNTEV0	Unhandled Exception While Processing The Booking Event.
DV-CEV-011	DVCNTEV0	Unhandled Exception While Processing the revision Event.
DV-CEV-021	DVCNTEV0	Unhandled Exception While Processing the Initiation Event.
DV-CEV-031	DVCNTEV0	Unhandled Exception While Amortizing Inception Value.
DV-CEV-041	DVCNTEV0	Unhandled Exception While Processing the Liquidation Event.
DV-CEV-051	DVCNTEV0	Unhandled Exception While Accruing Interest.
DV-CEV-061	DVCNTEV0	Unhandled Exception While Processing Termination Event.
DV-CEV-071	DVCNTEV0	Unhandled Exception While building tags for Booking Event.
DV-CEV-081	DVCNTEV0	Unhandled Exception While building tags for Initiation Event.
DV-CEV-091	DVCNTEV0	Unhandled Exception While building tags for Termination Event.
DV-CSR-001	DVCNSRV0	Unhandled Exception While registering a event.
DV-CSR-002	DVCNSRV0	Inconsistent Database. No record found for the contract in contract table.
DV-CSR-011	DVCNSRV0	Unhandled Exception While Locking the Record.
DV-CSR-021	DVCNSRV0	Unhandled Exception While authorizing the Contract.
DV-CSR-022	DVCNSRV0	Unable to obtain Contract Lock.
DV-CSR-	DVCNSRV1	Unhandled Exception While Saving the contract.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
101		
DV-CSR-102	DVCNSRV1	The Value Date \$1 should be within the Product Start Date \$2 and the Product End Date \$3.
DV-CSR-103	DVCNSRV1	The Maturity Date \$1 should be within the Product Start Date \$2 and the Product End Date \$3.
DV-CSR-104	DVCNSRV1	The Exchange Rate exceeds the allowed Maximum Variance \$1 %.
DV-CSR-105	DVCNSRV1	The Exchange Rate exceeds the allowed Normal Variance \$1 %.
DV-CSR-106	DVCNSRV1	In Leg Principal Details are Defaulted.
DV-CSR-107	DVCNSRV1	Out Leg Principal Details are Defaulted.
DV-CSR-108	DVCNSRV1	In Leg Interest Details are Defaulted.
DV-CSR-109	DVCNSRV1	Out Leg Interest Details are Defaulted.
DV-CSR-110	DVCNSRV1	Brokerage Details Defaulted.
DV-CSR-112	DVCNSRV1	Advice Details Defaulted.
DV-CSR-113	DVCNSRV1	User Defined Fields Defaulted.
DV-CSR-114	DVCNSRV1	Charges Defaulted.
DV-CSR-115	DVCNSRV1	MIS Details Defaulted.
DV-CSR-116	DVCNSRV1	Settlement Details Defaulted.
DV-CSR-117	DVCNSRV1	Tax Details Defaulted.
DV-CSR-118	DVDMGMNT	For event \$1 no receiver id given for message type \$2.
DV-CSR-	DVCNSRV1	Unhandled Exception while defaulting interest details.

Function ID	Error Code	Message
121		
DV-CSR-122	DVCNSRV1	For the component \$1 the spread \$2 is less than the allowed minimum spread \$3.
DV-CSR-123	DVCNSRV1	For the Component \$1 the spread \$2 is more than the allowed spread \$3.
DV-CSR-124	DVCNSRV1	For the component \$1 the Interest rate Cannot be NULL.
DV-CSR-125	DVCNSRV1	For the component \$1 the Interest rate \$2 is less than the allowed minimum rate \$3.
DV-CSR-126	DVCNSRV1	For the component \$1 the Interest Rate \$2 is more than the allowed maximum rate \$3.
DV-CSR-127	DVCNSRV1	For this Counterparty \$1 the Line Code \$2 is not allowed.
DV-CSR-128	DVCNSRV1	For this Product \$1 the Line Code \$2 is not allowed.
DV-CSR-129	DVCNSRV1	For this Branch \$1 the Line Code \$2 is not allowed.
DV-CSR-130	DVCNSRV1	For this Base Currency \$1 the Line Code \$2 is not allowed.
DV-CSR-201	DVCNSRV2	Unhandled Exception while deleting the contract.
DV-CSR-202	DVCNSRV2	Error While Deleting the MIS details.
DV-CSR-211	DVCNSRV2	Unhandled Exception while amending the contract.
DV-CSR-221	DVCNSRV2	Unhandled Exception while copying the Contract.
DV-CSR-222	DVCNSRV2	Product is not Valid.
DV-CSR-223	DVCNSRV2	No Primary Interest component defined for the In Leg.
DV-CSR-224	DVCNSRV2	No Primary Interest component defined for the Out leg.
DV-CSR-	DVCNSRV2	Error While copying the MIS details.



<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
225		
DV-CSR-231	DVCNSRV2	Unhandled Exception while reversing the contract.
DV-CSR-232	DVCNSRV2	Unable to obtain Contract Lock.
DV-CSR-241	DVCNSRV2	Unhandled Exception while reversing the Accounting Entries.
DV-CSR-251	DVCNSRV2	Unhandled Exception while populating the handoff table.
DV-CSR-261	DVCNSRV2	Unhandled Exception on handoff of accounting Entries.
DV-IAC-001	DVACCR	Unhandled Exception while building the queue array.
DV-IAC-011	DVACCR	Unhandled Exception while calculating the periodic accrual date.
DV-IAC-021	DVACCR	Unhandled Exception while processing periodic interest accrual.
DV-IAC-101	DVACCR	Unhandled Exception while accruing for a contract.
DV-IAC-121	DVACCR	Unhandled Exception while calculating the accrual amount.
DV-IAC-122	DVACCR	Reset not done for interest rates.
DV-IAC-123	DVACCR	No discount rate obtained for the interest component.
DV-IAC-124	DVACCR	For Component \$1 liquidation for the past period is pending.
DV-IAC-131	DVACCR	Unhandled exception while processing product level accrual.
DV-IAC-141	DVACCR	Unhandled Exception when processing interest accrual.
DV-IAC-142	DVACCR	No data found for the current product code.
DV-IAC-	DVACCR	Unhandled exception while processing interest accrual.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
151		
DV-IAC-161	DVACCR	Unhandled exception while processing interest accrual.
DV-IAC-171	DVACCR	Unhandled exception while processing interest accrual.
DV-IAC-172	DVACCR	No data found for the current contract ref no.
DV-IAC-191	DVACCR	Unhandled exception while processing the amount tags.
DV-ICA-001	DVINTCAL	Unhandled exception while computing Interest Amount.
DV-ICA-002	DVINTCAL	Failed to round the Interest Amount.
DV-ICA-011	DVINTCAL	Unhandled exception while computing Discount Amount.
DV-ICA-012	DVINTCAL	Failed to round the Discount Amount.
DV-ICA-021	DVINTCAL	Unhandled exception while computing Discount Amount.
DV-ICA-022	DVINTCAL	Failed to round the Discount Amount.
DV-ICA-031	DVINTCAL	Unhandled Exception while calculating the interest amount.
DV-ICA-041	DVINTCAL	Unhandled Exception while calculating the interest amount.
DV-ICA-051	DVINTCAL	Unhandled Exception while calculating the interest amount.
DV-ICA-061	DVINTCAL	Unhandled Exception while calculating the interest amount.
DV-INT-001	DVDINDET	Unhandled exception while validating the Start Date.
DV-INT-002	DVDINDET	Start Date Cannot be before the application Date.
DV-INT-	DVDINDET	Start Date Cannot be before the Value Date.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
003		
DV-INT-004	DVDINDET	Start Date Cannot be after the Maturity Date.
DV-INT-005	DVDINDET	Schedule Date is not Unique.
DV-INT-011	DVDINDET	Unhandled exception while validating the Schedule.
DV-INT-012	DVDINDET	Mandatory field Start Date is NULL.
DV-INT-013	DVDINDET	Mandatory field Frequency is NULL.
DV-INT-014	DVDINDET	Mandatory field Frequency Unit is NULL.
DV-INT-015	DVDINDET	Mandatory field No of Schedules is NULL.
DV-INT-016	DVDINDET	Mandatory field Amount is NULL.
DV-INT-021	DVDINDET	Unhandled exception while amending the Schedules.
DV-INT-031	DVDINDET	Unhandled exception while defaulting the Schedules.
DV-INT-041	DVDINDET	Unhandled exception while Canceling the changes.
DV-INT-051	DVDINDET	Unhandled exception while exploding the Schedules.
DV-INT-061	DVDINDET	Unhandled exception while exploding the Schedules.
DV-INT-071	DVDINDET	Unhandled exception while validating the Schedules.
DV-INT-072	DVDINDET	Mandatory field Discount Rate is NULL.
DV-INT-073	DVDINDET	Mandatory field Discount Floating Component is NULL.
DV-INT-	DVDINDET	Mandatory field Discount Rate Code is NULL.

Function ID	Error Code	Message
074		
DV-INT-075	DVDINDET	Mandatory field Discount Rate Source is NULL.
DV-INT-076	DVDINDET	Mandatory field Discount Tenor Code is NULL.
DV-INT-077	DVDINDET	Mandatory field Discount Rate Spread is NULL.
DV-INT-078	DVDINDET	Mandatory field Interest Rate is NULL.
DV-INT-079	DVDINDET	Mandatory field Interest Rate Code is NULL.
DV-INT-080	DVDINDET	Mandatory field Interest Rate Source is NULL.
DV-INT-082	DVDINDET	Mandatory field Interest Tenor Code is NULL.
DV-INT-083	DVDINDET	Mandatory field Interest Rate Spread is NULL.
DV-INT-084	DVDINDET	Mandatory field Flat Amount is NULL.
DV-INT-091	DVDINDET	Unhandled exception while validating the Schedules.
DV-INT-092	DVDINDET	Mandatory field Schedule Holiday Currency is NULL.
DV-INT-093	DVDINDET	Mandatory field Schedule Financial Center is NULL.
DV-INT-101	DVDINDET	Unhandled exception while validating revision schedules
DV-INT-102	DVDINDET	Mandatory field Revision Holiday Currency is NULL.
DV-INT-103	DVDINDET	Mandatory field Revision Financial Center is NULL.
DV-INT-104	DVDINDET	Mandatory field Reset Date movement Days is NULL.
DV-INT-	DVDINDET	Mandatory field Reset Date Holiday Currency is NULL.

Function ID	Error Code	Message
105		
DV-INT-106	DVDINDET	Mandatory field Reset Date Financial Center is NULL.
DV-INT-111	DVDINDET	Unhandled exception while defaulting the schedules.
DV-INT-121	DVDINDET	Unhandled exception while defaulting the schedules.
DV-ISR-001	DVINTSRV	Unhandled Exception while defaulting for a event.
DV-ISR-011	DVINTSRV	Unhandled Exception While picking up currency rates.
DV-ISR-021	DVINTSRV	Unhandled Exception While referring Contract Associations.
DV-ISR-031	DVINTSRV	Unhandled Exception While fetching floating Rates.
DV-ISR-032	DVINTSRV	Rate Code Selection is not Valid.
DV-ISR-033	DVINTSRV	Rate Code maintenance is Unauthorized.
DV-ISR-034	DVINTSRV	The Selected Rate Code is Closed.
DV-ISR-035	DVINTSRV	No Rate Details are found. Inconsistent Database.
DV-LM-00001	DVLIMITS	The Issuer Limits details are incomplete. Complete/Delete the Issuer Limits details.
DV-LM-00002	DVLIMITS	The Line Code is not a Limits Template.
DV-LM-00003	DVLIMITS	The Line Code is not entered.
DV-LM-00004	DVLIMITS	The Liability is not entered.
DV-LM-00005	DVLIMITS	The Line Start Date cannot be later than the Line Expiry Date.
DV-LM-	DVLIMITS	The Last Available Date cannot be later than the Line Expiry

Function ID	Error Code	Message
00006		Date.
DV-LM-00007	DVLIMITS	The Line Currency is not entered.
DV-LM-00008	DVLIMITS	This Tenor has been maintained for the Limit.
DV-LM-00009	DVLIMITS	The Tenor details are incomplete. Complete/Delete the Tenor details.
DV-LM-00010	DVLIMITS	The Products Allowed details are incomplete. Complete/Delete the Products Allowed details.
DV-LM-00011	DVLIMITS	The Branches Allowed details are incomplete. Complete/Delete the Branches Allowed details.
DV-LM-00012	DVLIMITS	The Last Available Date cannot be less than the Line Start Date.
DV-LM-00013	DVLIMITS	The Customers Allowed details are incomplete. Complete/Delete the Customers Allowed details.
DV-LM-00014	DVLIMITS	The Tenor Limit Amount exceeds the Line Limit Amount.
DV-LM-00015	DVLIMITS	The Sub Line Tenor Limit Amount cannot be greater than the next higher Main Line Tenor Limit Amount. \$1 - \$2.
DV-LM-00016	DVLIMITS	The Sub Line Tenor cannot be greater than Maximum Main Line Tenor. \$1 Days.
DV-LM-00017	DVLIMITS	There are no Tenors specified for the Main Line.
DV-LM-00018	DVLIMITS	The Line Code is Limits Template. Details will be copied from template. Continue?
DV-LM-00019	DVLIMITS	The Sub Line Limit cannot exceed the Main Line Limit. \$1-\$2.
DV-LM-00020	DVLIMITS	The Main Line Limit cannot be less than any of its Sub Line Limit. \$1 - \$2.
DV-LM-00021	DVLIMITS	The Main Line Tenor cannot be Less than the Minimum Tenor of any Sub Lines reporting to it. - \$1 Days.
DV-LM-00022	DVLIMITS	The Main Line Tenor Limit Amount cannot be less than the next lower Sub Line Tenor Limit Amount. \$1 - \$2.
DV-LM-	DVLIMITS	The Limits Copy could not be completed.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
00023		
DV-LM-00024	DVLIMITS	Blank spaces cannot be a part of this field.
DV-LM-00025	DVLIMITS	The Line Code should have nine characters.
DV-LM-00026	DVLIMITS	The Tenor Mnemonic is not entered.
DV-LM-00027	DVLIMITS	The Limit is not entered
DV-LM-00028	DVLIMITS	The Collateral Start Date cannot be later than the Collateral Expiry Date.
DV-LM-00029	DVLIMITS	The Margin computed is not between 0 and 100.
DV-LM-00030	DVLIMITS	The Collateral Currency is not entered.
DV-LM-00031	DVLIMITS	The Collateral Type is not entered.
DV-LM-00032	DVLIMITS	The Collateral Review Date cannot be later than the Collateral Expiry Date.
DV-LM-00033	DVLIMITS	The Collateral Review Date cannot be earlier than Collateral Start Date.
DV-LM-00034	DVLIMITS	The Expiry Date cannot be earlier than Start Date.
DV-LM-00035	DVLIMITS	The Security Code is not entered.
DV-LM-00036	DVLIMITS	The Security Type is not entered.
DV-LM-00037	DVLIMITS	The Currency is not entered.
DV-LM-00038	DVLIMITS	The Market Price Details are incomplete. Complete / Delete the Market Price Details.
DV-LM-00039	DVLIMITS	The Line Code is not entered.
DV-LM-	DVLIMITS	The computed exposure is not between 1 and 100.

Function ID	Error Code	Message
00040		
DV-LM-00041	DVLIMITS	There are Active Sub Lines reporting to this Main Line. Main Line cannot be closed.
DV-LM-00042	DVLIMITS	The Last Price Change Date cannot be greater than Branch Date.
DV-LM-00043	DVLIMITS	The Security Code is not entered for the MVBC.
DV-LM-00044	DVLIMITS	The Price Code is not entered for the MVBC.
DV-LM-00045	DVLIMITS	The Number Of Units is not entered for the MVBC.
DV-LM-00046	DVLIMITS	The Collateral Ccy is not entered for the Collateral.
DV-LM-00047	DVLIMITS	Security Code has not been entered.
DV-LM-00048	DVLIMITS	The Issuer Exposure Details are incomplete. Complete/ Delete the Issuer Exposure Details.
DV-LM-00049	DVLIMITS	The Start Date cannot be greater than the Branch Date.
DV-LM-00050	DVLIMITS	The Last Price Change Date cannot be earlier than Start Date.
DV-LM-00051	DVLIMITS	The Expiry Date cannot be earlier than Branch Date.
DV-LM-00052	DVLIMITS	The Last Price Change Date cannot later than Expiry Date.
DV-LM-00053	DVLIMITS	The Description is not entered.
DV-LM-00054	DVLIMITS	The Face Value is not entered.
DV-LM-00055	DVLIMITS	The Limit Contribution cannot be greater than the Cap Amount.
DV-LM-00056	DVLIMITS	Report date should be greater than the date today.
DV-LM-	DVLIMITS	The Total Issuer Exposure should be greater than 100 %.



Function ID	Error Code	Message
00057		
DV-LM-00058	DVLIMITS	Collaterals exist with the Issuer Code. Record cannot be closed.
DV-LM-00059	DVLIMITS	Securities exist with the Issuer Code. Record cannot be closed.
DV-LM-00060	DVLIMITS	There are Collaterals linked to this Limit. Record cannot be closed.
DV-LM-00061	DVLIMITS	There are Collaterals linked to this Security. Record cannot be closed.
DV-LM-00062	DVLIMITS	There are Collaterals linked to this Price Code. Record cannot be closed.
DV-LM-00063	DVLIMITS	There are Collaterals linked to this Collateral Type. Record cannot be deleted.
DV-LM-00064	DVLIMITS	This Facility is not available at this Branch.
DV-LM-00065	DVLIMITS	No Details exist for the Reference Number.
DV-LM-00066	DVLIMITS	Customer Clean Risk Limit cannot be greater than Liability Clean Risk Limit.
DV-LM-00067	DVLIMITS	Customer Clean Risk Limit cannot be greater than Overall Limit.
DV-LM-00068	DVLIMITS	Liability Clean Risk Limit cannot be greater than Overall Limit.
DV-LM-00069	DVLIMITS	Limit Currency is not Entered.
DV-LM-00070	DVLIMITS	Overall Limit is not Entered.
DV-LM-00071	DVLIMITS	Liability Clean Risk Limit is not Entered.
DV-LM-00100	DVLIMITS	Line Not Authorized.
DV-LM-00101	DVLIMITS	Line Closed.
DV-LM-	DVLIMITS	Line Not Found.

Function ID	Error Code	Message
00102		
DV-LM-00103	DVLIMITS	Invalid Customer ID.
DV-LM-00104	DVLIMITS	Liability ID. Not Specified.
DV-LM-00105	DVLIMITS	Account ID. Not specified.
DV-LM-00106	DVLIMITS	Reference Id not specified.
DV-LM-00107	DVLIMITS	Amount tag not specified.
DV-LM-00108	DVLIMITS	Amount not specified.
DV-LM-00109	DVLIMITS	Currency not specified.
DV-LM-00110	DVLIMITS	Branch not specified.
DV-LM-00111	DVLIMITS	Line \$1 - Amount exceeds Limit for specified tenor by \$2.
DV-LM-00112	DVLIMITS	Line \$1 - Amount exceeds all available tenor limits by \$2 \$3 \$3.
DV-LM-00113	DVLIMITS	Line \$1 - Amount exceeds line limit. Limit = \$3 \$2. Utilization = \$4 \$2. Overdraft = \$5 \$2 %Overdraft = \$6.
DV-LM-00114	DVLIMITS	Main Line \$1 - Amount exceeds Main line limit amount. Limit = \$3 \$2. Utilization = \$4 \$2. Overdraft = \$5 \$2 %Overdraft = \$6.
DV-LM-00115	DVLIMITS	Line has matured.
DV-LM-00116	DVLIMITS	Line not available.
DV-LM-00117	DVLIMITS	Amount exceeds limit for liability \$1. Limit = \$3 \$2 Utilization = \$4 \$2 Overdraft = \$5 \$2 %Overdraft = \$6.
DV-LM-00200	DVLIMITS	Clean risk limit exceeded for Customer \$1 On \$2. Limit = \$4 \$3.
DV-LM-	DVLIMITS	Clean risk limit exceeded for Liability \$1 On \$2. Limit = \$4 \$3.

Function ID	Error Code	Message
00201		
DV-LM-00202	DVLIMITS	Date input is a holiday. Do you want to continue?
DV-LM-99998	DVLIMITS	Limits: Node \$1 Unavailable. Utilization's will be updated later.
DV-LM-99999	DVLIMITS	Limits Service - Unexpected Error - \$1.
DV-MNT-001	DVMNT	Failed to create a new record.
DV-MNT-002	DVMNT	Failed to create a new record.
DV-MNT-003	DVMNT	Do you want to delete the record?
DV-MNT-004	DVMNT	Record successfully deleted.
DV-MNT-005	DVMNT	Failed to delete the record.
DV-MNT-006	DVMNT	Failed to delete the record.
DV-MNT-007	DVMNT	Do you want to close the record?
DV-MNT-008	DVMNT	Unauthorized records can not be closed.
DV-MNT-009	DVMNT	Record successfully closed.
DV-MNT-010	DVMNT	Failed to close the record.
DV-MNT-011	DVMNT	Failed to close the record.
DV-MNT-012	DVMNT	Failed to unlock the record.
DV-MNT-013	DVMNT	Failed to unlock the record.
DV-MNT-	DVMNT	Do you want to reopen the record?

Function ID	Error Code	Message
014		
DV-MNT-015	DVMNT	Record successfully reopened.
DV-MNT-016	DVMNT	Failed to reopen the record.
DV-MNT-017	DVMNT	Failed to reopen the record.
DV-MNT-018	DVMNT	Failed to save the record.
DV-MNT-019	DVMNT	Failed to save the record.
DV-MNT-020	DVMNT	Unhandled exception while saving the record.
DV-MNT-021	DVMNT	Record successfully saved.
DV-MNT-022	DVMNT	Failed to authorize the record.
DV-MNT-023	DVMNT	Failed to authorize the record.
DV-MNT-024	DVMNT	Failed to copy the record.
DV-MNT-025	DVMNT	Failed to copy the record.
DV-MNT-026	DVMNT	Do you want undo changes made to the record?
DV-MNT-101	DVDDTMNT	Mandatory Field Derivative Type is NULL.
DV-MNT-102	DVDDTMNT	Mandatory Field Type Description is NULL.
DV-MNT-103	DVDTMNT	Derivative Type is not Unique.
DV-MNT-104	CFDRTSRC	Mandatory Field Rate Source is NULL.
DV-MNT-	CFDRTSRC	Rate Source is not Unique.

Function ID	Error Code	Message
105		
DV-MNT-106	CFDRTSRC	Mandatory field Description is NULL.
DV-MNT-107	STDCLMNT	Mandatory Field Clearing House is NULL.
DV-MNT-108	STDCLMNT	Clearing house is not Unique.
DV-MNT-109	STDCLMNT	Mandatory Field Description is NULL.
DV-MNT-116	DVDLMVAL	Mandatory fields cannot be null.
DV-MNT-201	DVDCNVAL	Mandatory field Contract Ref No is NULL.
DV-MNT-202	DVDCNVAL	Mandatory field Reval Date is NULL.
DV-MNT-203	DVDCNVAL	Mandatory field In Fair Value is NULL.
DV-MNT-204	DVDCNVAL	Mandatory field Out Fair Value is NULL.
DV-MNT-205	DVDCNVAL	Mandatory field Net Fair Value is NULL.
DV-MNT-206	DVDCNVAL	In and Out fair values are not synchronous with Net Fair Value.
DV-MNT-207	DVDCNVAL	No Data found for the Contract Ref No.
DV-MNT-208	DVDCNVAL	Reval Date should be before Next Working Date \$1.
DV-MNT-209	DVDCNVAL	Reval Date should be after the previous reval date \$1.
DV-MNT-210	DVDCNVAL	Reval Date already exists.
DV-MNT-215	DVDCNRAT	Mandatory field Contract ref no is NULL.
DV-MNT-	DVDCNRAT	Mandatory field Reval Date is NULL.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
216		
DV-MNT-217	DVDCNRAT	Mandatory field Interest rate is NULL.
DV-MNT-218	DVDCNRAT	Reval Date cannot be greater than the next working day.
DV-MNT-219	DVDCNRAT	Reval date cannot be less than the previous reval date.
DV-MNT-220	DVDCNRAT	Reval Date already exists for this contract.
DV-MNT-230	DVDBRRAT	Mandatory field Rate Code is NULL.
DV-MNT-231	DVDBRRAT	Mandatory field Rate Source is NULL.
DV-MNT-232	DVDBRRAT	Mandatory field Reval Date is NULL.
DV-MNT-233	DVDBRRAT	Reval Date already exists.
DV-MNT-234	DVDBRRAT	Reval Date should be before Next Working Date \$1.
DV-MNT-235	DVDBRRAT	Mandatory field Currency code is NULL.
DV-MNT-236	DVDBRRAT	Mandatory field Period start date is NULL.
DV-MNT-237	DVDBRRAT	Mandatory field Period end date is NULL.
DV-MNT-238	DVDBRRAT	Mandatory field Interest Rate is NULL.
DV-MNT-239	DVDBRRAT	Record for this period already exists.
DV-MNT-240	DVDBRRAT	Period Start Date can not be before Reval Date \$1.
DV-MNT-241	DVDBRRAT	Period End Date should be after Period Start Date.
DV-MNT-	DVDCPMNT	Master Agreement Code is not Unique.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
252		
DV-MNT-253	DVDCPMNT	Mandatory Field Master Agreement Code is NULL.
DV-MNT-254	DVDCPMNT	Mandatory Fields are NULL.
DV-MNT-255	DVDCPMNT	Active Contracts are existing for current Record.
DV-MNT-256	DVDMGMNT	Mandatory Field Receiver ID / Medium is NULL.
DV-MNT-257	DVDMGMNT	Receiver ID and Medium is not Unique.
DV-MNT-258	DVDMGMNT	Message Type and CIF Id combination is not Unique.
DV-MNT-259	DVDMGMNT	Message Type-CIF Id Combination is already defaulted.
DV-MNT-260	DVDMGMNT	ALL-CIF Id Combination is already defaulted.
DV-MNT-301	DVDPRMNT	Interest Not yet defined for product. Schedules will be incomplete. Continue?.
DV-MNT-302	DVDPRMNT	Mandatory field Frequency Unit is NULL.
DV-MNT-303	DVDPRMNT	Mandatory field Weekday is NULL.
DV-MNT-304	DVDPRMNT	Mandatory field Start day is NULL.
DV-MNT-305	DVDPRMNT	Mandatory field Start Month is NULL
DV-MNT-306	DVMNT	Revaluation method cannot be NULL.
DV-MNT-307	DVMNT	Mandatory field Denomination basis is NULL.
DV-MNT-308	DVDPRMNT	Mandatory field Numerator method is NULL.
DV-MNT-	DVDPRMNT	Mandatory field Denominator method is NULL.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
309		
DV-MNT-310	DVDPRMNT	For this derivative type only one IN interest component is allowed.
DV-MNT-311	DVDPRMNT	For this derivative type only one OUT interest component is allowed.
DV-MNT-312	DVDPRMNT	There should be one primary component for this derivative type
DV-MNT-313	DVDPRMNT	Stop association not allowed for primary component.
DV-MNT-315	DVDPRMNT	Not more than one component can be defined as primary component for IN leg.
DV-MNT-316	DVDPRMNT	Mandatory field Leg type is NULL.
DV-MNT-317	DVDPRMNT	Not more than one component can be defined as primary component for OUT leg.
DV-MNT-318	DVDPRMNT	Interest components not defined.
DV-MNT-319	DVDPRMNT	Schedules for some components not defined.
DV-MNT-320	DVDPRMNT	No primary In leg interest components defined.
DV-MNT-321	DVDPRMNT	No primary out leg interest components defined.
DV-MNT-322	DVDPRMNT	Asynchronous Principal schedules not allowed for this derivative type.
DV-MNT-323	DVDPRMNT	Asynchronous IN interest schedules not allowed for this derivative type.
DV-MNT-324	DVDPRMNT	Asynchronous OUT interest schedules not allowed for this derivative type.
DV-MNT-325	DVDPRMNT	Asynchronous IN revision schedules not allowed for this derivative type.
DV-MNT-326	DVDPRMNT	Asynchronous OUT revision schedules not allowed for this derivative type.
DV-MNT-	DVDPRMNT	Mandatory field Rate Source is NULL.



Function ID	Error Code	Message
328		
DV-MNT-330	DVDPRMNT	Mandatory field Frequency is NULL.
DV-MNT-331	DVDPRMNT	Mandatory field Start reference is NULL.
DV-MNT-403	DVBAUDLY	Batch Processing completed successfully.
DV-MNT-411	DVBAUDLY	Unhandled exception while processing the batch.
DV-ONL-001	DVDCNONL	Unhandled exception while creating a new contract.
DV-ONL-011	DVDCNONL	Unhandled exception while copying the contract.
DV-ONL-012	DVDCNONL	Failed to the copy the Contract.
DV-ONL-021	DVDCNONL	Unhandled exception while deleting the contract.
DV-ONL-022	DVDCNONL	Template cannot be Deleted.
DV-ONL-023	DVDCNONL	Only the maker of the contract can delete the contract.
DV-ONL-024	DVDCNONL	Do you want to delete the contract completely?
DV-ONL-025	DVDCNONL	Do you want to undo all the changes made?
DV-ONL-026	DVDCNONL	Contract Deleted Successfully.
DV-ONL-027	DVDCNONL	Failed to delete the contract.
DV-ONL-031	DVDCNONL	Unhandled exception while unlocking the contract.
DV-ONL-032	DVDCNONL	Template can not be amended.
DV-ONL-	DVDCNONL	The Version of the contract is not the latest version. Cannot be

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
033		amended.
DV-ONL-034	DVDCNONL	Contract is pending Authorization. Cannot be amended.
DV-ONL-035	DVDCNONL	Contract is matured, Cannot be amended.
DV-ONL-036	DVDCNONL	Only the maker of the contract can amend the contract.
DV-ONL-037	DVDCNONL	Contract is Reversed or Terminated, Cannot Amend.
DV-ONL-038	DVDCNONL	Failed to Amend the contract.
DV-ONL-041	DVDCNONL	Unhandled exception while saving the contract.
DV-ONL-042	DVDCNONL	Unhandled exception.
DV-ONL-043	DVDCNONL	Unhandled exception.
DV-ONL-044	DVDCNONL	Failed to obtain contract amounts.
DV-ONL-045	DVDCNONL	Contract Saved Successfully.
DV-ONL-046	DVDCNONL	Failed to save the contract.
DV-ONL-051	DVDCNONL	Unhandled exception while authorizing the contract.
DV-ONL-052	DVDCNONL	Cannot Create the Parameter List.
DV-ONL-061	DVDCNONL	Unhandled exception while keeping the contract on Hold.
DV-ONL-062	DVDCNONL	Contract Ref No Is Null.
DV-ONL-063	DVDCNONL	Unhandled exception.
DV-ONL-	DVDCNONL	Unhandled exception while saving the Template.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
071		
DV-ONL-072	DVDCNONL	Contract is already saved as a Template.
DV-ONL-073	DVDCNONL	Do you want to save the contract as a template.
DV-ONL-082	DVDCNONL	Product Code is NULL.
DV-ONL-092	DVDCNONL	Maturity Date Cannot be Less than Value Date.
DV-ONL-093	DVDCNONL	Maturity Date Cannot be less than the application Date.
DV-ONL-094	DVDCNONL	Maturity Date \$1 is a Holiday Will be Changed to \$2.
DV-ONL-101	DVDCNONL	Unhandled exception while saving the Template.
DV-ONL-102	DVDCNONL	Template ID is NULL.
DV-ONL-103	DVDCNONL	Template Description is NULL.
DV-ONL-104	DVDCNONL	Template Id is not Unique.
DV-ONL-111	DVDCNONL	Unhandled exception while defaulting Principal Schedules.
DV-ONL-121	DVDCNONL	Unhandled exception while retrieving the contract amounts.
DV-ONL-132	DVDCNONL	Not a valid product.
DV-ONL-141	DVDCNONL	Unhandled exception while validating the Contract.
DV-ONL-142	DVDCNONL	Mandatory field Counterparty is NULL.
DV-ONL-143	DVDCNONL	Mandatory field Valued Date is NULL.
DV-ONL-	DVDCNONL	Mandatory field Maturity Date is NULL.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
144		
DV-ONL-145	DVDCNONL	Mandatory field In Leg Currency is NULL.
DV-ONL-146	DVDCNONL	Mandatory field In Leg Principal Amount is NULL.
DV-ONL-147	DVDCNONL	Mandatory field In Leg interest Rate Type is NULL.
DV-ONL-148	DVDCNONL	Mandatory field In Leg interest Rate Code is NULL.
DV-ONL-149	DVDCNONL	Mandatory field In Leg interest Rate Source is NULL.
DV-ONL-150	DVDCNONL	Mandatory field In Leg interest Tenor Code is NULL.
DV-ONL-152	DVDCNONL	Mandatory field In Leg interest Rate Spread is NULL.
DV-ONL-153	DVDCNONL	Mandatory field In Leg interest rate is NULL.
DV-ONL-154	DVDCNONL	Mandatory field In Leg interest Flat amount is NULL.
DV-ONL-155	DVDCNONL	Mandatory field Out Leg Currency Cannot is NULL.
DV-ONL-156	DVDCNONL	Mandatory field Out Leg principal Amount is NULL.
DV-ONL-157	DVDCNONL	Mandatory field Out Leg interest Rate Type is NULL.
DV-ONL-158	DVDCNONL	Mandatory field Out Leg interest Rate Code is NULL.
DV-ONL-159	DVDCNONL	Mandatory field Out Leg interest Rate Source is NULL.
DV-ONL-160	DVDCNONL	Mandatory field Out Leg interest Tenor Code is NULL.
DV-ONL-162	DVDCNONL	Mandatory field Out Leg interest Rate Spread is NULL.
DV-ONL-	DVDCNONL	Mandatory field Out Leg interest rate is NULL.

Function ID	Error Code	Message
163		
DV-ONL-164	DVDCNONL	Mandatory field Out Leg interest Flat amount is NULL.
DV-ONL-165	DVDCNONL	Mandatory field Settlement Account is NULL.
DV-ONL-171	DVDCNONL	Unhandled exception while validating the Contract.
DV-ONL-172	DVDCNONL	Mandatory field Base Currency is NULL.
DV-ONL-173	DVDCNONL	Mandatory field Reval Method is NULL.
DV-ONL-174	DVDCNONL	Mandatory field Reval Rate Code is NULL.
DV-ONL-175	DVDCNONL	Mandatory field Reval Rate Source is NULL.
DV-ONL-176	DVDCNONL	Mandatory field Master Agreement Code is NULL.
DV-ONL-177	DVDCNONL	Mandatory field Line Code is NULL.
DV-ONL-178	DVDCNONL	Mandatory field Maturity Holiday Treatment is NULL.
DV-ONL-179	DVDCNONL	Mandatory field Maturity Holiday Currency is NULL.
DV-ONL-180	DVDCNONL	Mandatory field Maturity Financial Center is NULL.
DV-ONL-191	DVDCNONL	Unhandled Exception While Terminating the contract.
DV-ONL-192	DVDCNONL	The Contract is already terminated cannot terminate again.
DV-ONL-193	DVDCNONL	Contract is pending Authorization. Cannot be terminated.
DV-ONL-194	DVDCNONL	Do You want to terminate the contract?
DV-ONL-	DVDCNONL	Mandatory Field Termination type is NULL.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
195		
DV-ONL-196	DVDCNONL	Mandatory Field Termination Currency is NULL.
DV-ONL-197	DVDCNONL	Mandatory Field Termination Value is NULL.
DV-ONL-198	DVDCNONL	Failed to terminate the contract.
DV-ONL-201	DVDCNONL	Unhandled Exception while reversing the contract.
DV-ONL-202	DVDCNONL	Contract pending Authorization Cannot Reverse.
DV-ONL-203	DVDCNONL	Do you want to reverse the contract completely?
DV-ONL-204	DVDCNONL	Contract Reversed Successfully.
DV-ONL-205	DVDCNONL	Failed to reverse the contract.
DV-ONL-206	DVDCNONL	User Reference no should be Unique.
DV-PRN-001	DVCPRDET	Unhandled exception while validating the schedules.
DV-PRN-002	DVCPRDET	Mandatory field Start Date is NULL
DV-PRN-003	DVCPRDET	Mandatory field Frequency is NULL.
DV-PRN-004	DVCPRDET	Mandatory field Frequency Unit is NULL.
DV-PRN-005	DVCPRDET	Mandatory field No Of Schedules is NULL.
DV-PRN-006	DVCPRDET	Mandatory field Adjustment Type is NULL.
DV-PRN-007	DVCPRDET	Mandatory field Amount is NULL.
DV-PRN-	DVCPRDET	Unhandled exception while validating the Start Date.

Function ID	Error Code	Message
011		
DV-PRN-012	DVCPRDET	Start Date Cannot be before the application Date.
DV-PRN-013	DVCPRDET	Start Date Cannot be before the Value Date.
DV-PRN-014	DVCPRDET	Start Date Cannot be after the Maturity Date.
DV-PRN-015	DVCPRDET	Schedule Date is not Unique.
DV-PRN-021	DVCPRDET	Unhandled exception while validating the Holiday Treatment Details.
DV-PRN-022	DVCPRDET	Mandatory field Schedule Holiday Currency is NULL.
DV-PRN-023	DVCPRDET	Mandatory field Schedule Financial Center is NULL.
DV-RET001	LDRPCSSM	To Date Should be greater than From Date.
DV-RVL-001	DVREVAL	Unhandled exception while building the queue array.
DV-RVL-002	DVREVAL	Failed to obtain the next working day.
DV-RVL-003	DVREVAL	Product is closed.
DV-RVL-004	DVREVAL	Product is not authorized.
DV-RVL-005	DVREVAL	Failed to obtain the next working day.
DV-RVL-006	DVREVAL	Product is closed.
DV-RVL-007	DVREVAL	Product is not authorized.
DV-RVL-011	DVREVAL	Unhandled exception while calculating the periodic reval date.
DV-RVL-	DVREVAL	Unhandled exception while processing periodic revaluation.

Function ID	Error Code	Message
021		
DV-RVL-031	DVREVAL	Unhandled exception while populating reval records.
DV-RVL-101	DVREVAL	Unhandled exception while revaluing a contract.
DV-RVL-111	DVREVAL	Unhandled exception while processing product level revaluation.
DV-RVL-121	DVREVAL	Unhandled exception while processing revaluation.
DV-RVL-122	DVREVAL	No data found for the current product code.
DV-RVL-131	DVREVAL	Unhandled exception while processing revaluation.
DV-RVL-132	DVREVAL	No data found for the current contract ref no.
DV-RVL-141	DVREVAL	Unhandled exception while processing revaluation.
DV-RVL-151	DVREVAL	Unhandled exception while processing revaluation.
DV-RVL-161	DVREVAL	Unhandled exception while building the accounting entry lists.
DV-RVL-171	DVREVAL	Unhandled exception while processing the amount tags.
DV-RVL-301	DVREVAL	Unhandled exception while calculating the fair value of contract.
DV-RVL-302	DVREVAL	No confirmed records for the fair values of the contract.
DV-RVL-303	DVREVAL	No rates are maintained for the contract for carrying out revaluation.
DV-RVL-311	DVREVAL	Unhandled exception while calculating the leg fair value.
DV-RVL-313	DVREVAL	No rates are maintained for the contract for carrying out revaluation.
DV-RVL-	DVREVAL	No rates are maintained for the branch to carry out revaluation.



Function ID	Error Code	Message
314		
DV-RVL-315	DVREVAL	Failed to round the fair value amount.
DV-RVL-321	DVREVAL	Unhandled exception while revaluation processing.
DV-RVL-331	DVREVAL	Unhandled exception while revaluation processing.
DV-RVL_312	DVREVAL	No rates are maintained for the branch to carry out revaluation.
DV-RVN-001	DVRESET	Unhandled Exception while processing rate revision.
DV-SCH-001	DVSCHE00	Unhandled Exception while getting next schedule Date.
DV-SCH-011	DVSCHE00	Unhandled Exception while getting next schedule Date.
DV-SCH-021	DVSCHE00	Unhandled Exception while getting next periodic Date.
DV-SCH-031	DVSCHE00	Unhandled Exception while getting schedule Date.
DV-SCH-032	DVSCHE00	Error while checking whether the scheduled date is a holiday.
DV-SCH-033	DVSCHE00	Improper Holiday maintenance.
DV-SCH-041	DVSCHE00	Unhandled Exception while Computing Reset Date.
DV-SCH-042	DVSCHE00	Error while checking whether the scheduled date is a holiday.
DV-SCH-043	DVSCHE00	Improper Holiday maintenance.
DV-SCH-051	DVSCHE00	Unhandled Exception while Adding months.
DV-SCH-101	DVSCHE01	Unhandled Exception while defaulting Principal Schedules.
DV-SCH-	DVSCHE01	Error While rounding the amount.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
102		
DV-SCH-111	DVSCHE1	Unhandled Exception while Exploding Principal Schedules.
DV-SCH-112	DVSCHE1	Principal amount Cannot be Negative.
DV-SCH-113	DVSCHE1	The Frequency and Frequency Units are Invalid.
DV-SCH-121	DVSCHE1	Unhandled Exception while defaulting Interest Schedules.
DV-SCH-131	DVSCHE1	Unhandled Exception while Exploding Interest Schedules.
DV-SCH-132	DVSCHE1	The Frequency and Frequency Units is Invalid.
DV-SCH-133	DVSCHE1	Interest amount is Negative.
DV-SCH-141	DVSCHE1	Unhandled Exception while Defaulting Revision Schedules.
DV-SCH-151	DVSCHE1	Unhandled Exception while Exploding Revision Schedules.
DV-SCH-152	DVSCHE1	The Frequency and Frequency Units are Invalid.
DV-SCH-201	DVSCHE2	Unhandled Exception while Replicating Principal Schedules.
DV-SCH-211	DVSCHE2	Unhandled Exception while Replicating Principal Schedule Periods.
DV-SCH-221	DVSCHE2	Unhandled Exception while Replicating Interest Schedules.
DV-SCH-231	DVSCHE2	Unhandled Exception while Replicating Interest Schedule Periods.
DV-SCH-241	DVSCHE2	Unhandled Exception while Replicating Revision schedules.
DV-SCH-251	DVSCHE2	Unhandled Exception while Replicating Revision Schedule.
DV-SCH-	DVSCHE3	Unhandled Exception while splitting the Contract Schedules.

Function ID	Error Code	Message
301		
DV-SCH-311	DVSCHE3	Unhandled Exception while re-defaulting Principal Schedules.
DV-SCH-321	DVSCHE3	Unhandled Exception while re-defaulting Non Principal Schedules.
DV-SCH-331	DVSCHE3	Unhandled Exception while re-defaulting Interest Schedules.
DV-SCH-341	DVSCHE3	Unhandled Exception while re-defaulting Revision schedules.
DV-SCH-401	DVSCHE4	Unhandled Exception while Replicating Principal Schedules.
DV-SCH-411	DVSCHE4	Unhandled Exception while replicating Interest Schedules.
DV-SCH-421	DVSCHE4	Unhandled Exception while replicating Revision Schedules.
DV-SET-001	DVAUSET0	Unhandled exception while processing for branch.
DV-SET-011	DVAUSET0	Unhandled exception while processing for contract.
DV-SET-021	DVAUSET0	Unhandled exception while processing principal components.
DV-SET-031	DVAUSET0	Unhandled exception while processing interest components.
DV-SET-041	DVAUSET0	Unhandled exception while populating interest liquidation amount.
DV-SET-051	DVAUSET0	Unhandled exception while populating interest accrual amounts.
DV-SET-063	DVAUSET0	Unhandled exception while populating interest accrual.
DV-SET-101	DVAUSET1	Unhandled exception while processing interest components.
DV-SET-102	DVAUSET1	Reset not done for component \$1for the period starting \$2.
DV-SET-	DVAUSET1	Reset not done for component \$1for the period starting \$2.

Function ID	Error Code	Message
103		
DV-SET-104	DVAUSET1	No data found for component \$1for the period starting \$2.
DV-SET-105	DVAUSET1	Reset not done for component \$1for the period starting \$2.
DV-SET-106	DVAUSET1	No data found for component \$1for the period starting \$2.
DV-SET-107	DVAUSET1	Reset not done for component \$1for the period starting \$2.
DV-SET-108	DVAUSET1	No data found for component \$1for the period starting \$2.
DV-SUB-001	DVSUBSYS	Unhandled Exception while Processing Brokerage.
DV-SUB-011	DVSUBSYS	Unhandled Exception while processing Advices.
DV-SUB-021	DVSUBSYS	Unhandled Exception while Processing User Defined Fields.
DV-SUB-031	DVSUBSYS	Unhandled Exception while processing Charge.
DV-SUB-041	DVSUBSYS	Unhandled Exception while Processing MIS.
DV-SUB-042	DVSUBSYS	Error While defaulting MIS details from contract.
DV-SUB-051	DVSUBSYS	Unhandled Exception while picking settlement details.
DV-SUB-061	DVSUBSYS	Unhandled Exception while processing tax.
DV-SUB-071	DVSUBSYS	Unhandled Exception while processing module tags.
DV-SUB-081	DVSUBSYS	Unhandled Exception while processing interest tags.
DV-SUB-082	DVSUBSYS	No Settlement Details are maintained for the tag \$1.
DV-SUB-	DVSUBSYS	Unhandled Exception while processing charge tags.

<b>Function ID</b>	<b>Error Code</b>	<b>Message</b>
091		
DV-SUB-101	DVSUBSYS	Unhandled Exception while processing tax tags.
DV_AMR-001	DVAMORT0	Unhandled exception while building queue array.

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## 8. Annexure A - Accounting Entries and Advices

### 8.1 Accounting Entries for Derivatives

This section contains details of the suggested accounting entries that can be set up, for the Derivatives module of Oracle FLEXCUBE. The details of the suggested Accounting Entries and Advices are listed event-wise.

### 8.2 DV Events

The following is an exhaustive list of events that can take place during the lifecycle of a Derivatives contract.

<b>Event Code</b>	<b>Event Description</b>
DAMN	Contract Amendment
DASG	Contract Assignment
DASS	Contract Assumption
DBOK	Contract Booking
DIAC	Contract Interest Accrual
DIAM	Contract Inception Amortization
DILQ	Contract Interest Liquidation
DINT	Contract Initiation
DPLQ	Contract Principal Liquidation
DRVL	Contract Revaluation
DRVN	Contract Rate Revision
DRVS	Contract Reversal
DTAM	Contract Termination Amortization
DTRB	Booking of Termination Date
DTER	Contract Termination
DRRL	Contract Revaluation Reversal

### 8.3 Amount Tags

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

<b>Amount Tag</b>	<b>Description</b>
CUR_INRVL_PAY	Current In Leg Payable
CUR_INRVL_REC	Current In Leg Receivable
CUR_NETRVL_EXP	Current Net Revaluation Expense
CUR_NETRVL_INC	Current Net Revaluation Income
CUR_OUTRVL_PAY	Current Out Leg Payable
CUR_OUTRVL_REC	Current Out Leg Receivable
INCP_EXP_AMORT	Inception Expense Amortization Amount
INCP_GAIN	Inception Gain
INCP_GAIN_DEF	Inception Gain Deferred
INCP_INC_AMORT	Inception Income Amortization Amount
INCP_LOSS	Inception Loss
INCP_LOSS_DEF	Inception Loss Deferred
INLEG_PRN	In Leg Principal
INLEG_PRN_CONT	In Leg Contingent Principal Amount
INLEG_PRN_DECR	In Leg Principal Decrement
INLEG_PRN_INCR	In Leg Principal Increment
INLEG_PRN_LIQD	In Leg Principal Liquidation
NET_INT_EXP	Net Interest Expense
NET_INT_INC	Net Interest Income
OUTLEG_PRN	Out Leg Principal
OUTLEG_PRN_CONT	Out Leg Contingent Principal Amount
OUTLEG_PRN_DECR	Out Leg Principal Decrement

<b>Amount Tag</b>	<b>Description</b>
OUTLEG_PRN_INCR	Out Leg Principal Increment
OUTLEG_PRN_LIQD	Out Leg Principal Liquidation
PRV_INRVL_PAY	Previous In Leg Revaluation Payable
PRV_INRVL_REC	Previous In Leg Revaluation Receivable
PRV_NETRVL_EXP	Previous Net Revaluation Expense
PRV_NETRVL_INC	Previous Net Revaluation Income
PRV_OUTRVL_PAY	Previous Out Leg Revaluation Payable
PRV_OUTRVL_REC	Previous Out Leg Revaluation Receivable
TRMN_EXP_AMORT	Termination Expense Amortization Amount
TRMN_GAIN	Termination Gain
TRMN_GAIN_DEF	Termination Gain Deferred
TRMN_INC_AMORT	Termination Income Amortization Amount
TRMN_LOSS	Termination Loss
TRMN_LOSS_DEF	Termination Loss Deferred
Component_LIQD_CY	Current year Unrealized accrual amount for a component
Component_LIQD_PY	Previous year Unrealized accrual amount for a component
NET_INT_INCC	Net interest Income on Cash basis
NET_INT_INCA	Net interest Income on Accrual basis
NET_INT_EXPC	Net interest expense on Cash Basis
NET_INT_EXPA	Net interest expense on Accrual Basis
Component_IAC/EAC_NPRF	<p>_NPRF tag would be created for each component. This tag would represent accruals for net profit deals.</p> <p>For example, DV_IN_INT_IAC_NPRF</p>
Component_IAC/EAC_NLSS	Accruals for Net loss deals



Amount Tag	Description
Component_DLIQ_PY	Previous year Unrealized outstanding
Component_DLIQ_CY	Current year Unrealized outstanding

In addition to these you can define amount tags as per your requirement for the ICCF and tax components that are attached to the product.

\* The 'component' is the ICCF component that you have created.



NET\_INT\_INCC, NET\_INT\_INCA, NET\_INT\_EXPC, NET\_INT\_EXPA Amount tags used in case of FRA and NET\_INT\_EXP, NET\_INT\_INC Amount Tags used in case of IRS/CCS.

## 8.4 Accounting Roles

The following list contains the Accounting Roles that are applicable to the Derivative contracts that you can process at your bank.

Accounting Role	Description
BROK_PAID	Brokerage Paid
BROK_PAYABLE	Brokerage Payable
CONT_ASSET	Contingent Asset
CONT_ASSET_OFS	Contingent Asset Offset
CONT_FAIR_VAL	Contract Fair Value Account
CONT_LIAB	Contingent Liability
CONT_LIAB_OFS	Contingent Liability Offset
DV_IN_INT_INC	DV_IN_INT - Income
DV_IN_INT_REC	DV_IN_INT - Receivable
DV_IN_INT_RIA	DV_IN_INT - Received in Advance
DV_OUT_INT_EXP	DV_OUT_INT - Expense
DV_OUT_INT_PAY	DV_OUT_INT - Payable
DV_OUT_INT_PIA	DV_OUT_INT - Paid in Advance
INCP_EXP	Inception Expense

<b>Accounting Role</b>	<b>Description</b>
INCP_GAIN_DEF	Inception Gain Deferral Account
INCP_INC	Inception Income
INCP_LOSS_DEF	Inception Loss Deferral Account
INLEG_ASSET	In Leg Asset
INLEG_RVL_EXP	In Leg Revaluation Expense
INLEG_RVL_INC	In Leg Revaluation Income
NET_RVL_EXP	Net Revaluation Expense
NET_RVL_INC	Net Revaluation Income
OUTLEG_LIAB	Out Leg Liability
OUTLEG_RVL_EXP	Out Leg Revaluation Expense
OUTLEG_RVL_INC	Out Leg Revaluation Income
TRMN_EXP	Termination Expense
TRMN_INC	Termination Income
TRMN_GAIN_DEF	Termination Gain Deferral Account
TRMN_LOSS_DEF	Termination Loss Deferral Account
Component_REC	Receivable
Component_PAY	Payable
Component_INC	Realized Income
Component_EXP	Realized Expense
Component_INC_UNRLZ	Unrealized Income
Component_EXP_UNRLZ	Unrealized Expense
TRMN_INC_UNRLZ	Unrealized termination income
TRMN_EXP_UNRLZ	Unrealized termination expense
NET_INT_INC	Net interest income
NET_INT_EXP	Net interest expense

Accounting Role	Description
NET_INT_RIA	Netted interest Received in advance
NET_INT_PIA	Netted interest paid in advance
NET_INT_INC_UNRLZ	Unrealized Net interest Income
NET_INT_EXP_UNRLZ	Unrealized Net interest Expense

## 8.5 **Event-wise Accounting Entries and Advices**

In this section we will discuss the suggested accounting entries and advices that should be generated for each event in the life cycle of Derivative contracts.



Also note that some of the Amount Tags linked to the Accounting Roles are user defined.

### 8.5.1 **DBOK: Contract Booking**

#### **Accounting Entries**

Accounting Role	Amount Tag	Dr./Cr. Indicator
BROK_PAID	BROKAMT	DEBIT
BROK_PAYABLE	BROKAMT	CREDIT
CONT_FAIR_VAL	INCP_GAIN	DEBIT
INCP_INC	INCP_GAIN	CREDIT
CONT_FAIR_VAL	INCP_GAIN_DEF	DEBIT
INCP_GAIN_DEF	INCP_GAIN_DEF	CREDIT
CONT_FAIR_VAL	INCP_LOSS	CREDIT
INCP_EXP	INCP_LOSS	DEBIT
CONT_FAIR_VAL	INCP_LOSS_DEF	CREDIT
INCP_LOSS_DEF	INCP_LOSS_DEF	DEBIT
CONT_ASSET	INLEG_PRN	DEBIT
CONT_ASSET_OFS	INLEG_PRN	CREDIT
CONT_LIAB	OUTLEG_PRN	CREDIT
CONT_LIAB_OFS	OUTLEG_PRN	DEBIT

**Advices**

<b>Advice Name</b>	<b>Description</b>
DV_FRA_CONF	FRA Contract Confirmation

### 8.5.2 **DINT: Contract Initiation**

#### Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
CONT_ASSET	INLEG_PRN	CREDIT
CONT_ASSET_OFS	INLEG_PRN	DEBIT
INLEG_ASSET	INLEG_PRN	DEBIT
CUSTOMER	INLEG_PRN	CREDIT
Accounting Role	Amount Tag	Dr./Cr. Indicator
CONT_LIAB	OUTLEG_PRN	DEBIT
CONT_LIAB_OFS	OUTLEG_PRN	CREDIT
OUTLEG_LIAB	OUTLEG_PRN	CREDIT
CUSTOMER	OUTLEG_PRN	DEBIT

#### Advices

Nil

### 8.5.3 **DILQ: Contract Interest Liquidation**

#### Accounting Entries

Accounting Role	Amount Tag	Dr./Cr. Indicator
CUSTOMER	DV_IN_INT_ILIQ	DEBIT
DV_IN_INT_INC	DV_IN_INT_ILIQ	CREDIT
CUSTOMER	DV_OUT_INT_ELIQ	CREDIT
DV_OUT_INT_EXP	DV_OUT_INT_ELIQ	DEBIT

You will need to maintain the following accounting entry set-up when an arrears contract is liquidated with previous year adjustment option.

In/ Out leg	Dr./Cr. Indicator	Accounting Role	Amount Tag
In	Debit	Customer	Component_RLIQ
	Credit	Component_REC	Component_RLIQ

Out	Debit	Component_PAY	Component_RLIQ
	Credit	Customer	Component_RLIQ
In	Debit	Component_INC_UNRLZ	Component_RLIQ_PY
	Credit	Component_INC	Component_RLIQ_PY
	Debit	Component_INC_UNRLZ	Component_RLIQ_CY
	Credit	Component_INC	Component_RLIQ_CY
Out	Debit	Component_EXP	Component_RLIQ_PY
	Credit	Component_EXP_UNRLZ	Component_RLIQ_PY
	Debit	Component_EXP	Component_RLIQ_PY
	Credit	Component_EXP_UNRLZ	Component_RLIQ_PY

**Advices**

Nil

Accounting Entry Setup (Settlement on Cash basis - Advance and Arrears)

DR/CR	Accounting Role		Amount Tag	
DR	CUSTOMER	Customer	DV_IN_INT_ILIQ	Interest amount (Inleg)
CR	DV_IN_INT_INC	In leg Income GL	DV_IN_INT_ILIQ	Interest Amount (Inleg)
DR	DV_OUT_INT_EXP	Out leg Expense GL	DV_OUT_INT_ELIQ	Interest amount (Outleg)
CR	CUSTOMER	Customer	DV_OUT_INT_ELIQ	Interest amount (Outleg)
DR	CUSTOMER	Customer	NET_INT_IN C	Net Income
CR	DV_IN_INT_INC	Net Income	NET_INT_IN C	
DR	DV_OUT_INT_EXP	Net Expense	NET_INT_EXP	Net Expense

CR	CUSTOMER	Customer	NET_INT_E XP	
----	----------	----------	-----------------	--

**Example:**

Assume the following parameters for a DV IRS deal

In leg start date                        -: 01-jan-2004

Frequency                                -: Quarterly

In leg payment method                -: Arrears

In leg interest Component -: DV\_IN\_INT

Out leg start date                      -: 01-jan-2004

Frequency                                -: Half yearly

Out leg payment method              -: Arrears

Out leg interest Component         -: DV\_OUT\_INT

Assume the following cash flows:

In Schedule Dates	Out Schedule Dates	IN Interest amount	OUT Interest amount	Net Amount
01-MAR-2004		100		NA
01-JUL-2004	01-JUL-2004	100	50	+50
01-OCT-2004		100		NA
01-JAN-2005	01-JAN-2005	100	150	-50

Accounting entries passed on 01-MAR-2004

DR/CR	Accounting Role		Amount Tag	
	Role	Description	Tag	Amount
DR	CUSTOMER	Customer	DV_IN_INT_ILIQ	100
CR	DV_IN_INT_INC	In leg Income GL	DV_IN_INT_ILIQ	100

Accounting entries passed on 01-JUL-2004 (Net Inflow)

DR/CR	Accounting Role		Amount Tag	
	Role	Description	Tag	Amount
DR	CUSTOMER	Customer	NET_INT_INC	50
CR	DV_IN_INT_INC	Net Interest Income	NET_INT_INC	50



Accounting entries passed on 01-OCT-2004

DR/CR	Accounting Role		Amount Tag	
	Role	Description	Tag	Amount
DR	CUSTOMER	Customer	DV_IN_INT_ILIQ	100
CR	DV_IN_INT_INC	In leg Income GL	DV_IN_INT_ILIQ	100

Accounting entries passed on 01-JAN-2005 (Net Outflow)

DR/CR	Accounting Role		Amount Tag	
	Role	Description	Tag	Amount
DR	DV_OUT_INT_EXP	Net Interest Expense	NET_INT_EXP	50
CR	CUSTOMER	Customer	NET_INT_EXP	50

**Accounting Entry Setup (Settlement on Non Cash basis - Advance Contracts)**

DR/CR	Accounting Role		Amount Tag	
	Role	Description	Tag	Description
DR	CUSTOMER	Customer	DV_IN_INT_DLIQ	Interest amount (Inleg)
CR	DV_IN_INT_RIA	In leg interest Received in advance	DV_IN_INT_DLIQ	Interest Amount (Inleg)
DR	DV_OUT_INT_PIA	Out leg Expense Paid in Advance	DV_OUT_INT_DLIQ	Interest amount (Outleg)
CR	CUSTOMER	Customer	DV_OUT_INT_DLIQ	Interest amount (Outleg)
DR	CUSTOMER	Customer	NET_INT_INC	Net Income on Accrual basis
CR	DV_IN_INT_RIA	Net Interest received in advance	NET_INT_INC	
DR	DV_OUT_INT_PIA	Net expense paid in advance	NET_INT_EXP	Net Expense on Accrual

DR/CR	Accounting Role		Amount Tag	
CR	CUSTOMER	Net Expense paid in advance	NET_INT_EXP	basis

**Accounting Entry Setup (Settlement on Non Cash basis - Arrears Contracts)**

DR/CR	Accounting Role		Amount Tag	
	Role	Description	Tag	Description
DR	CUSTOMER	Customer	DV_IN_INT_RLIQ	Interest amount (Inleg)
CR	DV_IN_INT_REC	In leg receivable GL	DV_IN_INT_RLIQ	Interest Amount (Inleg)
DR	DV_OUT_INT_PAY	Out leg payable GL	DV_OUT_INT_RLIQ	Interest amount (Outleg)
CR	CUSTOMER	Customer	DV_OUT_INT_RLIQ	Interest amount (Outleg)
DR	CUSTOMER	Customer	NET_INT_INC	Net Income on Accrual basis
CR	DV_IN_INT_REC	Net Interest Receivable	NET_INT_INC	
DR	DV_OUT_INT_PAY	Net expense Payable	NET_INT_EXP	Net Expense on Accrual basis
CR	CUSTOMER	Net Expense	NET_INT_EXP	



In all the above scenarios (Settlement on cash and non cash basis), netting tags (NET\_INT\_INC and NET\_INT\_EXP) will be updated only if the in leg and out leg schedules coincide. Other amount tags will not be applicable in this case.

**8.5.4 DPLQ: Contract Principal Liquidation**

**Accounting Entries**

Accounting Role	Amount Tag	Dr./Cr.
CONT_ASSET	INLEG_PRN_DECR	CREDIT

<b>Accounting Role</b>	<b>Amount Tag</b>	<b>Dr./Cr.</b>
CONT_ASSET_OFS	INLEG_PRN_DECR	DEBIT
CUSTOMER	INLEG_PRN_DECR	DEBIT
INLEG_ASSET	INLEG_PRN_DECR	CREDIT
CONT_ASSET	INLEG_PRN_INCR	DEBIT
INLEG_ASSET	INLEG_PRN_INCR	DEBIT
CUSTOMER	INLEG_PRN_INCR	CREDIT
CONT_ASSET_OFS	INLEG_PRN_INCR	CREDIT
CONT_ASSET	INLEG_PRN_LIQD	CREDIT
CONT_ASSET_OFS	INLEG_PRN_LIQD	DEBIT
CUSTOMER	INLEG_PRN_LIQD	DEBIT
INLEG_ASSET	INLEG_PRN_LIQD	CREDIT
CONT_ASSET_OFS	OUTLEG_PRN_DECR	CREDIT
OUTLEG_LIAB	OUTLEG_PRN_DECR	DEBIT
CUSTOMER	OUTLEG_PRN_DECR	CREDIT
CONT_LIAB	OUTLEG_PRN_DECR	DEBIT
CONT_ASSET_OFS	OUTLEG_PRN_INCR	DEBIT
OUTLEG_LIAB	OUTLEG_PRN_INCR	CREDIT
CUSTOMER	OUTLEG_PRN_INCR	DEBIT
CONT_LIAB	OUTLEG_PRN_INCR	CREDIT
CONT_LIAB	OUTLEG_PRN_LIQD	DEBIT
OUTLEG_LIAB	OUTLEG_PRN_LIQD	DEBIT
CUSTOMER	OUTLEG_PRN_LIQD	CREDIT
CONT_LIAB_OFS	OUTLEG_PRN_LIQD	CREDIT

**Advices**

Nil

### 8.5.5 DRVL: Contract Revaluation

#### Accounting Entries

Accounting Role	Amount Tag	Dr./Cr.
CONT_FAIR_VAL	CUR_INRVL_PAY	CREDIT
INLEG_RVL_EXP	CUR_INRVL_PAY	DEBIT
CONT_FAIR_VAL	CUR_INRVL_REC	DEBIT
INLEG_RVL_INC	CUR_INRVL_REC	CREDIT
CONT_FAIR_VAL	CUR_NETRVL_EXP	CREDIT
NET_RVL_EXP	CUR_NETRVL_EXP	DEBIT
CONT_FAIR_VAL	CUR_NETRVL_INC	DEBIT
NET_RVL_INC	CUR_NETRVL_INC	CREDIT
CONT_FAIR_VAL	CUR_OUTRVL_PAY	CREDIT
OUTLEG_RVL_EXP	CUR_OUTRVL_PAY	DEBIT
CONT_FAIR_VAL	CUR_OUTRVL_REC	DEBIT
OUTLEG_RVL_INC	CUR_OUTRVL_REC	CREDIT
CONT_FAIR_VAL	PRV_INRVL_PAY	DEBIT
INLEG_RVL_EXP	PRV_INRVL_PAY	CREDIT
CONT_FAIR_VAL	PRV_INRVL_REC	CREDIT
INLEG_RVL_INC	PRV_INRVL_REC	DEBIT
CONT_FAIR_VAL	PRV_NETRVL_EXP	DEBIT
NET_RVL_EXP	PRV_NETRVL_EXP	CREDIT
CONT_FAIR_VAL	PRV_NETRVL_INC	CREDIT
NET_RVL_INC	PRV_NETRVL_INC	DEBIT
CONT_FAIR_VAL	PRV_OUTRVL_PAY	DEBIT
OUTLEG_RVL_EXP	PRV_OUTRVL_PAY	CREDIT
CONT_FAIR_VAL	PRV_OUTRVL_REC	CREDIT

Accounting Role	Amount Tag	Dr./Cr.
OUTLEG_RVL_INC	PRV_OUTRVL_REC	DEBIT

**Advices**

No advices allowed for this Event.

**8.5.6 DIAM: Contract Inception Amortization**

**Accounting Entries**

Accounting Role	Amount Tag	Dr./Cr.
INCP_EXP	INCP_EXP_AMORT	DEBIT
INCP_LOSS_DEF	INCP_EXP_AMORT	CREDIT
INCP_GAIN_DEF	INCP_INC_AMORT	DEBIT
INCP_INC_AMORT	INCP_INC_AMORT	CREDIT

**Advices**

No advices allowed for this Event.

**8.5.7 DTER: Contract Termination**

**Accounting Entries for NPV/Rebate**

Accounting Role	Amount Tag	Dr./Cr.
DV_IN_INT_INC	DV_IN_INT_IAC	CREDIT
DV_IN_INT_RIA	DV_IN_INT_IAC	DEBIT
DV_IN_INT_INC	DV_IN_INT_JEAC	DEBIT
DV_IN_INT_REC	DV_IN_INT_JEAC	CREDIT
DV_OUT_INT_EXP	DV_OUT_INT_EAC	DEBIT
DV_OUT_INT_PIA	DV_OUT_INT_EAC	CREDIT
DV_OUT_INT_EXP	DV_OUT_INT_JIAC	CREDIT
DV_OUT_INT_PAY	DV_OUT_INT_JIAC	DEBIT
CONT_ASSET	INLEG_PRN_CONT	CREDIT
CONT_ASSET_OFS	INLEG_PRN_CONT	DEBIT
CONT_ASSET	INLEG_PRN_LIQD	CREDIT

<b>Accounting Role</b>	<b>Amount Tag</b>	<b>Dr./Cr.</b>
CUSTOMER	INLEG_PRN_LIQD	DEBIT
CONT_ASSET_OFS	INLEG_PRN_LIQD	DEBIT
INLEG_ASSET	INLEG_PRN_LIQD	CREDIT
CONT_LIAB	OUTLEG_PRN_CONT	DEBIT
CONT_LIAB_OFS	OUTLEG_PRN_CONT	CREDIT
CONT_LIAB	OUTLEG_PRN_LIQD	DEBIT
OUTLEG_LIAB	OUTLEG_PRN_LIQD	DEBIT
CUSTOMER	OUTLEG_PRN_LIQD	CREDIT
CONT_LIAB_OFS	OUTLEG_PRN_LIQD	CREDIT
CUSTOMER	TRMN_GAIN	DEBIT
TRMN_INC	TRMN_GAIN	CREDIT
CUSTOMER	TRMN_LOSS	CREDIT
TRMN_EXP	TRMN_LOSS	DEBIT

**Advices**

<b>Advice Name</b>	<b>Description</b>
DV_FRA_TRMN	FRA Termination

**8.5.8 DAMN: Contract Amendment**

**Accounting Entries**

<b>Accounting Role</b>	<b>Amount Tag</b>	<b>Dr./Cr.</b>
CONT_ASSET	INLEG_PRN_DECR	CREDIT
CONT_ASSET_OFS	INLEG_PRN_DECR	DEBIT
CONT_ASSET	INLEG_PRN_INCR	DEBIT
CONT_ASSET_OFS	INLEG_PRN_INCR	CREDIT
CONT_LIAB	OUTLEG_PRN_DECR	DEBIT
CONT_LIAB_OFS	OUTLEG_PRN_DECR	CREDIT

Accounting Role	Amount Tag	Dr./Cr.
CONT_LIAB	OUTLEG_PRN_INCR	CREDIT
CONT_LIAB_OFS	OUTLEG_PRN_INCR	DEBIT

**Advices**

Advice Name	Description
DV_FRA_AMND	FRA Amendment

**8.5.9 DIAC: Contract Interest Accrual**

**Accounting Entries**

Accounting Role	Amount Tag	Dr./Cr.
DV_IN_INT_INC	DV_IN_INT_IAC	CREDIT
DV_IN_INT_RIA	DV_IN_INT_IAC	DEBIT
DV_IN_INT_INC	DV_IN_INT_RAC	CREDIT
DV_IN_INT_REC	DV_IN_INT_RAC	DEBIT
DV_OUT_INT_EXP	DV_OUT_INT_EAC	DEBIT
DV_OUT_INT_PIA	DV_OUT_INT_EAC	CREDIT
DV_OUT_INT_EXP	DV_OUT_INT_PAC	DEBIT
DV_OUT_INT_PAY	DV_OUT_INT_PAC	CREDIT

Entries that are passed for the DIAC event (Arrears Contracts) for transfer of unrealized to realized income are as follows:

In/Out leg	Dr./Cr. Indicator	Accounting Role	Amount Tag
In	Debit	Component_REC	Component_RAC
	Credit	Component_INC_UNRLZ	Component_RAC
Out	Debit	Component_EXP_UNRLZ	Component_PAC
	Credit	Component_PAY	Component_PAC

Entries that are passed for the DIAC event (Advance Contracts) for transfer of unrealized to realized income are as follows:

In/Out leg	Dr./Cr. Indicator	Accounting Role	Amount Tag
In	Debit	Component_RIA	Component_IAC
	Credit	Component_INC_UNRLZ	Component_IAC
Out	Debit	Component_EXP_UNRLZ	Component_EAC
	Credit	Component_PIA	Component_EAC
Final Accruals (In addition to above)			
In	Debit	Component_INC_UNRLZ	Component_DLIQ_P Y
	Credit	Component_INC	Component_DLIQ_P Y
	Debit	Component_INC_UNRLZ	Component_DLIQ_C Y
	Credit	Component_INC	Component_DLIQ_C Y
Out	Debit	Component_EXP	Component_DLIQ_P Y
	Credit	Component_EXP_UNRLZ	Component_DLIQ_P Y
	Debit	Component_EXP	Component_DLIQ_P Y
	Credit	Component_EXP_UNRLZ	Component_DLIQ_P Y

#### Advices

No advices allowed for this Event.

#### 8.5.10 DTAM: Contract Termination Amortization

##### Accounting Entries

Accounting Role	Amount Tag	Dr./Cr.
TRMN_EXP	TRMN_EXP_AMORT	DEBIT
TRMN_LOSS_DEF	TRMN_EXP_AMORT	CREDIT



Accounting Role	Amount Tag	Dr./Cr.
TRMN_GAIN_DEF	TRMN_INC_AMORT	DEBIT
TRMN_INC	TRMN_INC_AMORT	CREDIT

Entries that are passed during the for transfer of unrealized to realized income are as follows:

Gain/Loss	Dr./Cr.	Accounting Role	Amount Tag
Gain	Debit	TRMN_GAIN_DEF	TRMN_INC_AMORT
	Credit	TRMN_INC_UNRLZ	TRMN_INC_AMORT
Loss	Debit	TRMN_EXP_UNRLZ	TRMN_EXP_AMOR T
	Credit	TRMN_LOSS_DEF	TRMN_EXP_AMOR T
On Contract Maturity (In addition to above)			
Gain	Debit	TRMN_INC_UNRLZ	TRMN_GAIN_PY
	Credit	TRMN_INC	TRMN_GAIN_PY
	Debit	TRMN_INC_UNRLZ	TRMN_GAIN_CY
	Credit	TRMN_INC	TRMN_GAIN_CY
Loss	Debit	TRMN_EXP	TRMN_LOSS_PY
	Credit	TRMN_EXP_UNRLZ	TRMN_LOSS_PY
	Debit	TRMN_EXP	TRMN_LOSS_CY
	Credit	TRMN_EXP_UNRLZ	TRMN_LOSS_CY

If the amount tag is of type Component\_RLIQ/DLIQ\_PY and if the accounting role pertains to unrealized income/expense, the head for the accounting role will be replaced by the previous year adjustment GL, while passing accounting entries.



The transfer of income/expense from the previous year adjustment GL to the realized income/expense GL happens only if the Track PY P&L Adjustment option has been set as a branch preference through the 'Branch Parameter' screen.

#### **Example**

You are processing an FRA contract which has the following interest components:

- DV\_IN\_INT – In leg
- DV\_OUT\_INT – Out leg

The previous year unrealized Income/Expense for the components are as follows:

- DV\_IN\_INT – 300 (Unrealized Income)
- DV\_OUT\_INT – 400 (Unrealized Expense)

Assuming the deal to be in net profit, with inflow as 500 and outflow as 275, the accounting entries passed during liquidation and final accrual are:

**DILQ**

Debit	CUSTOMER	500 (DV_IN_INT_DLIQ)
Credit	DV_IN_INT_RIA	500
Debit	DV_OUT_INT_PIA	275 (DV_OUT_INT_DLIQ)
Credit	Customer	225

**DIAC**

Assuming accrual amounts to be 75 and 45 for in and out legs respectively

Debit	DV_IN_INT_RIA	75 (DV_IN_INT_IAC)
Credit	DV_IN_INT_INC_UNRLZ	75
Debit	DV_OUT_INT_EXP_UNRLZ	45 (DV_OUT_INT_EAC)
Credit	DV_OUT_INT_PIA	45

**Moving Unrealized Income/Expense to real Income/Expense**

Debit	Previous Yr Adjustment GL	300 (DV_IN_INT_DLIQ_PY)
Credit	DV_IN_INT_INC	300
Debit	DV_IN_INT_INC_UNRLZ	200 (DV_IN_INT_DLIQ_CY)
Credit	DV_IN_INT_INC	200
Debit	DV_IN_INT_EXP	275 (DV_OUT_INT_DLIQ_PY)
Credit	Previous Yr Adjustment GL	275



When an arrears contract is liquidated (DILQ event) or an advance contract completes accruals (DIAC event), the income transfer to the realized income GL from the unrealized GL is performed first using the Previous Year Adjustment GL maintained in Chart of Accounts. This is because the previous year unrealized income would have already moved to the year ends P and L (EYPL) GL after financial closure. The remaining amount if any is debited from the current year unrealized income GL.

### 8.5.11 DRRL: Contract Revaluation Reversal

#### Accounting Entries

**Case I – Next Day in BOD (when next day is not the beginning of a new financial year) or at the time of the next revaluation.**

Accounting Role	Amount Tag	Debit /Credit
In Leg entries		
INLEG_RVL_INC	PRV_INRVL_REC	Debit
CONT_FAIR_VAL	PRV_INRVL_REC	Credit
CONT_FAIR_VAL	PRV_INRVL_PAY	Debit
INLEG_RVL_EXP	PRV_INRVL_PAY	Credit
Out Leg entries		
OUTLEG_RVL_INC	PRV_OUTRVL_REC	Debit
CONT_FAIR_VAL	PRV_OUTRVL_REC	Credit
CONT_FAIR_VAL	PRV_OUTRVL_PAY	Debit
OUTLEG_RVL_EXP	PRV_OUTRVL_PAY	Credit
In case of Revaluation Netting		
NET_RVL_INC	PRV_NETRVL_INC	Debit
CONT_FAIR_VAL	PRV_NETRVL_INC	Credit
CONT_FAIR_VAL	PRV_NETRVL_EXP	Debit
NET_RVL_EXP	PRV_NETRVL_EXP	Credit

**Case II – Next Day during BOD (if the next day is the beginning of a new financial year).**

Accounting Role	Amount Tag	Debit /Credit
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<b>In Leg entries</b>		
INLEG_RVL_INC	PRV_INRVL_REC_PY	Debit
CONT_FAIR_VAL	PRV_INRVL_REC_PY	Credit
CONT_FAIR_VAL	PRV_INRVL_PAY_PY	Debit
INLEG_RVL_EXP	PRV_INRVL_PAY_PY	Credit
<b>Out Leg entries</b>		
OUTLEG_RVL_INC	PRV_OUTRVL_REC_PY	Debit
CONT_FAIR_VAL	PRV_OUTRVL_REC_PY	Credit
CONT_FAIR_VAL	PRV_OUTRVL_PAY_PY	Debit
OUTLEG_RVL_EXP	PRV_OUTRVL_PAY_PY	Credit
<b>In case of Revaluation Netting</b>		
NET_RVL_INC	PRV_NETRVL_INC_PY	Debit
CONT_FAIR_VAL	PRV_NETRVL_INC_PY	Credit
CONT_FAIR_VAL	PRV_NETRVL_EXP_PY	Debit
NET_RVL_EXP	PRV_NETRVL_EXP_PY	Credit

For FRA contracts satisfying the following conditions the accounting entries for the Interest Settlement (Cash and Accrual) and Interest Accrual events are given below with the help of an example.

**Conditions**

- The Netting Required option has to be enabled at the derivatives type level and Accrual Required has to be either enabled or disabled for both the legs. An error message will be shown if this is not the case.
- This applies only to FRA contracts having the following definition of the derivative type attached in the product:
  - Netting Required should be checked
  - Payment method for both the in leg and out leg is 'Advance'.
  - Principal Exchange required is No.
  - Asynchronous Interest schedules are not allowed.
  - Asynchronous Revision schedules are not allowed

**Example**

An FRA contract has DV\_IN\_INT as the In Leg interest component, and DV\_OUT\_INT as the Out Leg interest component. The deal is settled on Value Date with the following values for interest components:

DV\_IN\_INT = USD  
57.9818955567

DV\_OUT\_INT = USD  
32.1851185555

Rounded amounts before netting

DV\_IN\_INT = USD 57.98

DV\_OUT\_INT = USD 32.19

The Net Interest income is 57.98 – 32.19 = USD 25.79.

**Case I - Settlement on Cash basis**

Debit/Credit	Accounting Role	Amount Tag	Amount
Debit	Customer	NET_INT_INCC	USD 25.79
Credit	NET_INT_INC	NET_INT_INCC	USD 25.79

**Case II - Settlement on Accrual basis**


Since the deal makes a net profit for the bank, the accounting entries for the liquidation event (DILQ) are:

Debit/Credit	Accounting Role	Amount Tag	Amount
Debit	Customer	NET_INT_INCA	USD 25.79
Credit	NET_INT_RIA	NET_INT_INCA	USD 25.79

Accruals for In and Out Leg are performed separately. For the above deal, In Leg accrued amount is USD 5.25 and the Out Leg accrued amount is USD 3.47. The deal has made a net profit since the inflow is more than the outflow.

Entries passed during Contract Interest Accrual (DIAC) are given below.

Debit/ Credit	Accounting Role	Amount Tag	Amount
Debit	NET_INT_RIA	DV_IN_INT_IAC_NPRF	USD 5.25
Credit	NET_INT_INC	DV_IN_INT_IAC_NPRF	USD 5.25
Debit	NET_INT_INC	DV_IN_INT_IAC_NPRF	USD 3.47
Credit	NET_INT_RIA	DV_IN_INT_IAC_NPRF	USD 3.47

 Component\_IAC/EAC\_NLSS/NPRF tags for each of the interest components are created automatically on creation of a new interest class.

### 9.1 Introduction

The inputs you have made at different stages of maintaining a derivative contract are pieced together and can be extracted in the form of meaningful reports as and when you may require them. The following are the reports that you can generate for the Derivatives module:

- Interest Accrual report
- Back Dated Deals report
- Contract Activity report
- Customer-wise Details report
- Customer-wise Summary report
- Process Exception report
- Revaluation Log report
- Settled Deals report

When a report is generated, it can be directed to one of the following destinations:

- The printer
- Online or
- Stored as spool files and printed later using the spool

In the Application Browser, these reports are available under the option Reports, for the Derivatives module. The reports that have been spooled can be printed or viewed through the Reports Browser screen.



*Both these screens have been documented in the manual about Common Procedures in Oracle FLEXCUBE.*

The report headers for all the reports carry the following information:

<b>Branch</b>	This is the code of the branch for which the report is being generated.
<b>User ID</b>	This is the user ID of the person generating the report.
<b>Date</b>	This indicates the date of generation of the report.
<b>Time</b>	This indicates the time of generation of the report.
<b>Page</b>	The report may run into several pages. Each page of the report is numbered.
<b>Module</b>	This is the name of the Oracle FLEXCUBE module for which you are generating the

<b>Branch</b>	This is the code of the branch for which the report is being generated.
	report. Any report on derivatives will have DV as its module name.

## 9.2 Interest Accrual Report

The interest accrual report gives details of accruals done on hedge type of derivative contracts.

You can invoke the screen by typing the code 'DVRPACCR' in the field at the top right corner of the Application tool bar and click on the adjoining arrow button.

### Selection Criteria

Select the accrual processing date on which you want to generate the interest accrual details report.

#### 9.2.1 Contents of the report

The report will be sorted based on the Branch and the User ID of persons who entered the contracts.

The contents of the report are discussed under the following heads:



## **Header**

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

## **Body of the report**

The report contains information on:

### **Contract reference number**

This is the reference number of the derivative contract whose accrual related details are being reported.

### **Component**

This is the component of the contract against which the accrual details are being reported. When more than one component is involved they will be reported one by one.

### **Period Start Date**

This is the start date of the accrual period for the particular component.

### **Period End Date**

This is the end date of the accrual period for the particular component.

### **Payment Method**

This is the method of payment for the particular component.

### **Previous Accrual to Date**

This is the previous accrued amount until date.

### **Current Accrual to Date**

This is the current accrued amount until date.

### **Current Run Accrual**

This is the current run accrued amount.

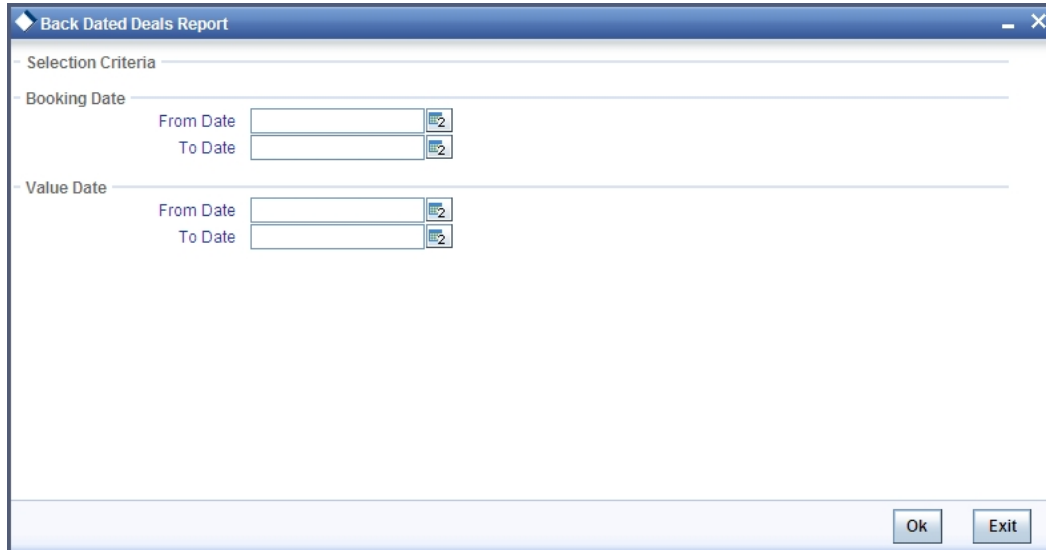
### **Accrual Till Date**

The total amount accrued until date.

## 9.3 Back Dated Deals Report

The Back Dated Deals report gives details of those deals which were inserted into the system with the value date earlier than that of Booking Date.

You can invoke the screen by typing the code 'DVRPBKDT' in the field at the top right corner of the Application tool bar and click on the adjoining arrow button.



### Selection Criteria

#### **Booking Date and Value Date**

By indicating the From and To booking dates you can generate the report only for those contracts that were booked within the specified period.

In addition you can specify that the generated report should contain data of back valued deals inserted into the system with the value date falling within the specified period.

### 9.3.1 Contents of the report

The contents of the report are discussed under the following heads:

#### Header

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

## **Body of the report**

The report contains information on:

### **CIF ID**

This is the CIF ID of the counterparty involved in the contract.

### **Customer Name**

Apart from the CIF ID the name of the customer involved in the contract is also reported.

### **Contract Reference Number**

This is the reference number of the contract whose details are being reported.

### **In Leg Principal**

This is the In Leg Principal Amount.

### **Contract Type**

This indicates whether the contract whose details are being reported is a Trade type of contract or a Hedge contract.

### **Booking Date**

This is the date on which the derivatives contract was booked.

### **Out Leg Principal**

This is the Out Leg Principal Amount.

### **Value Date**

This is the date on which the Swap takes effect. In the case of an FRA this would typically be the date on which the deal settles.

### **Maturity Date**

This is the date on which the Swap matures. In the case of an FRA this would typically be the last date for the computation period.

### **Maker ID**

This is the Login ID of the user who entered the contract.

### **Maker Date**

This is the date on which the contract was entered.

**Checker ID**

This is the Login ID of the user who authorized the contract.

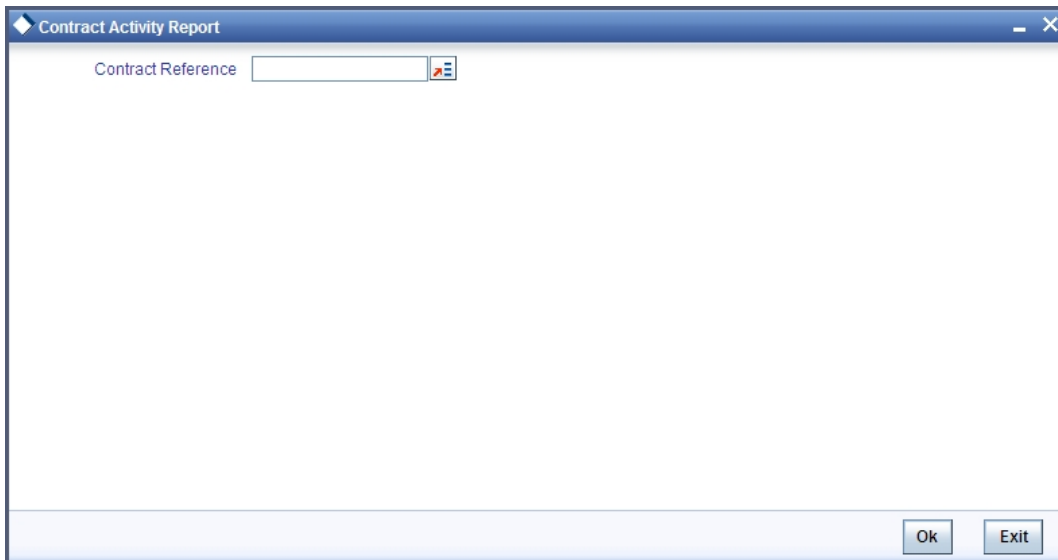
**Checker Date**

This is the date on which the contract was authorized.

## 9.4 **Contract Activity Report**

The Contract Activity report gives details of all the activities that were performed on the contract in a chronological order. This is from the date on which the contract was booked in the system upto today's date.

You can invoke the screen by typing the code 'DVRPCACT' in the field at the top right corner of the Application tool bar and click on the adjoining arrow button.

**Selection Criteria**

You have to specify the reference number of the contract for which the report is to be generated.

### 9.4.1 **Contents of the report**

Apart from the header the following information will be provided for the Contract Activity report. The contents of the report are discussed under the following heads:

## **Header**

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

## **Body of the Report**

The report contains information on:

### **Contract Reference Number**

This is the reference number of the contract that you specified at the time of generating the report.

### **Version Number**

This is the latest version number of the contract.

The system assigns a version number to a contract whenever a it is created in the system. From then on each amendment and reinstatement results in the next version of the contract being created. When you generate a report the latest version number of the contact is reported.

### **Event Sequence Number**

The sequence in which the various events such as Contract Booking, Initiation, Interest Accrual etc were carried out on the particular contract will be reported.

### **Event Code and Description**

In addition to the event sequence the code assigned to the event by the system will be reported along with the description associated with it. For instance the DBOK is the code assigned to the Contract Booking event, when you generate the report both the code and the description of the event will be reported.

### **Event Date**

This is the date of the event

### **Counterparty and Customer Name**

This is the counterparty involved in the contract. The CIF code along with the name of the counterparty will be reported in the generated report.

### **Maker ID/Maker Dt Stamp**

The Login ID of the user who initiated the event and the date on which it was initiated will be reported.

## Checker ID/Checker Dt Stamp

The Login ID of the user who authorized the event and the date on which the event was authorized will be reported.

## 9.5 Customer-Wise Contract Details Report

The Customer-wise Details report gives you details of all contracts where the counterparty involved is a specific customer of your bank.

You can invoke the screen by typing the code 'DVRPCSDT' in the field at the top right corner of the Application tool bar and click on the adjoining arrow button.

The screenshot shows a window titled "Customer wise Details". It contains the following fields:

- Selection Criteria**: A horizontal line.
- Customer**: A text box labeled "Customer" with a dropdown arrow.
- Booking Date**: Two date pickers labeled "From Date" and "To Date".
- Value Date**: Two date pickers labeled "From Date" and "To Date".

At the bottom right, there are "Ok" and "Exit" buttons.

### Selection Criteria

Once you indicate the ID of the customer for whom the report should be generated you have to specify the Booking date range within which the contracts generated for the specific customer should fall. You can do this by way of specifying the From and To booking dates.

In addition to the booking date range you can also specify that the report should be generated for contracts, which have value dates falling within a specified date range.

The generated report will contain details of the various activities carried out on all the contracts that were processed between the specified date range (both for the Booking Date and the Value Date) for the particular customer.

### 9.5.1 Contents of the report

The report options that you selected while generating the report are printed at the beginning of the report.

The contents of the report are discussed under the following heads:

### **Header**

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

### **Body of the report**

The report contains information on:

#### **Counterparty**

This is the CIF ID of the customer involved in the contract.

#### **Contract Reference Number**

This is the reference number of the contract for which details are being reported.



Only details of those contracts where the particular customer happens to be the counterparty involved will be reported.

#### **In Leg Notional Principal**

This is the In Leg Notional Principal Amount

#### **Booking Date**

The date on which the derivative contract was booked is reported here.

#### **Effective Date**

This is the date on which the interest or FX exposure rate comes into effect.

#### **Maturity Date**

If the contract is a swap type of contract then this is the date on which the swap matures. When the contract is an FRA this would typically be the last day for the computation period.

#### **Out Leg Notional Principal**

This is the Out Leg Notional Principal Amount

#### **Derivative Type and Description**

This is the derivative type to which the contract belongs. The description associated with the derivative type will also be reported along with the type.

**Buy or Sell**

This indicates whether the contract whose details are being reported is a Buy type or Sell type of contract.

**Contract Type**

This indicates whether the contract is a Trade contract or a Hedge contract.

**Product Code and Description**

The code of the product associated with the contract is reported here.

**In Leg and Out Leg Interest Component Details**

The in and out leg interest details for each of the components involved in the contract will be reported under this head. These details include the following:

- Component
- Value Date
- Rate Type
- Rate Code
- Rate
- Currency

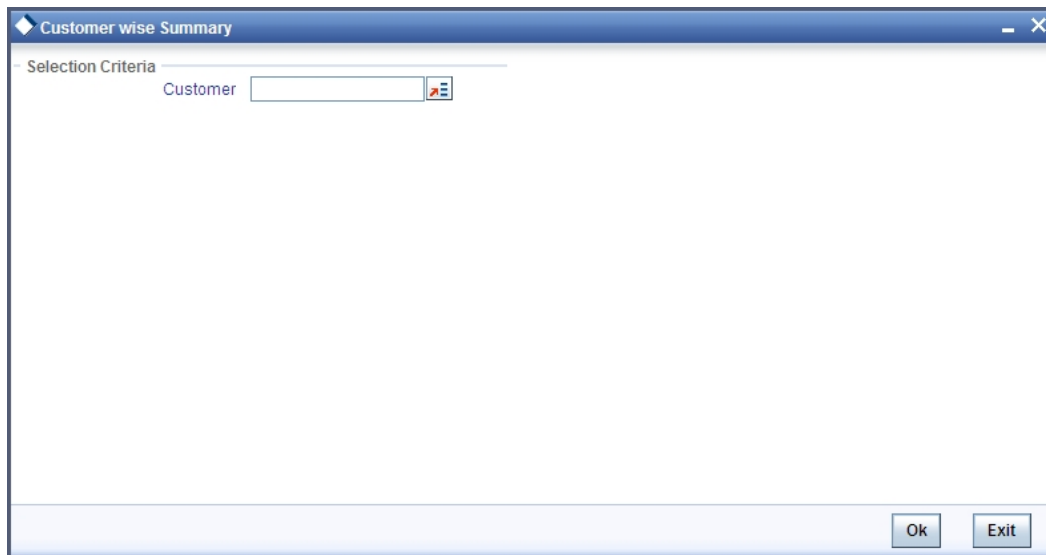
## 9.6 **Customer-Wise Contract Summary Report**

The Customer-wise summary report summarizes the details of all contracts where the counterparty involved in the contract is the specified customer.

After you indicate the name of the customer, the details of all those contracts where the specified customer is the counterparty involved will be summarized in the report.



You can invoke the screen by typing the code 'DVRPCSSM' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.



### **Selection Criteria**

Select the customer ID on which you want to generate the customer-wise summary report.

#### **9.6.1 Contents of the report**

The report options that you selected while generating the report are printed at the beginning of the report.

The contents of the report are discussed under the following heads:

#### **Header**

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

#### **Body of the report**

The report contains information on:

#### **Counterparty**

This is the CIF ID of the customer involved in the contract.

### Counterparty Name

This is the name of the customer involved in the contract.

### Contract Reference Number

This is the reference number of the contract being reported.

### Type Description

This is the description of the derivative type to which the derivative contract belongs.

### Value Date

If the derivative type being reported is a Swap then this is the date on which the swap takes effect. When the derivative type for which details are being reported is an FRA this would be the date on which the deal settles.

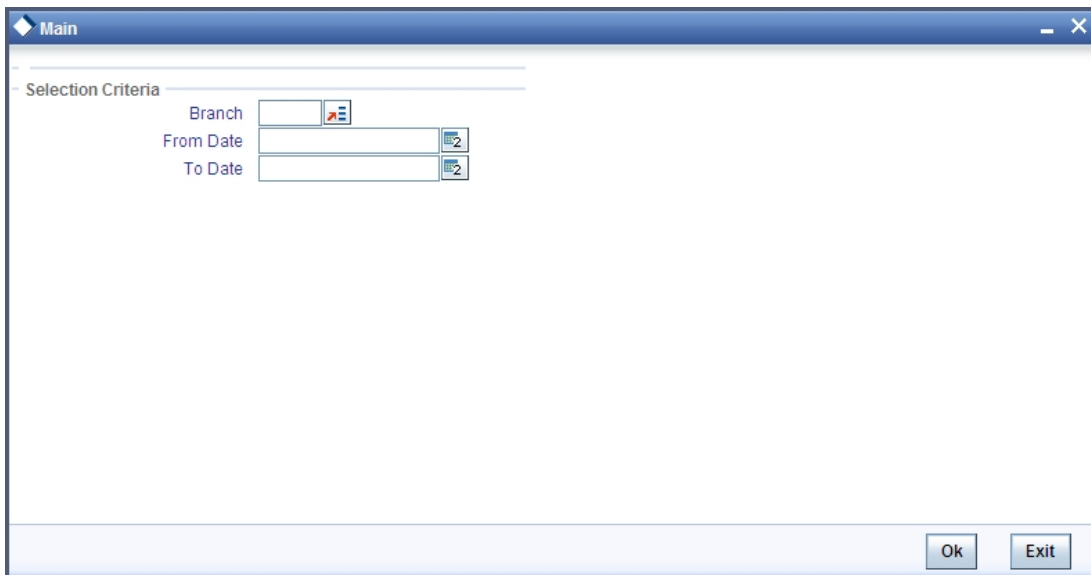
### Settlement Date

This is the date on which the various components associated with the contract get settled.

## 9.7 Process Exception Report

When the complete details required for processing a contract are not available the system will stop processing those contracts. This report provides a list of all the exceptions that were encountered when the contracts stored in the specified branch were being processed.

You can invoke the screen by typing the code 'DVRPEXCP' in the field at the top right corner of the Application tool bar and click on the adjoining arrow button.



The screenshot shows a window titled 'Main' with a standard Windows-style title bar. Below the title bar is a horizontal line. Underneath, there is a section labeled 'Selection Criteria'. This section contains three input fields: 'Branch' with a dropdown arrow, 'From Date' with a calendar icon, and 'To Date' with a calendar icon. At the bottom right of the window, there are two buttons: 'Ok' and 'Exit'.

## **Selection Criteria**

You can choose to generate the report either for all the branches of your bank or only for a particular branch.

### **9.7.1 Contents of the report**

The report options that you selected while generating the report are printed at the beginning of the report.

The contents of the report are discussed under the following heads:

#### **Header**

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

#### **Body of the report**

The report contains information on:

##### **Transaction Date**

This is the date on which the contract was first processed in the system.

##### **Branch Code**

This is the code of the branch where the contract was processed.

##### **Process Name**

The name of the process during which the exception was encountered is reported here.

##### **Contract Reference Number**

This is the reference number of the contract for which the process exception details are being reported.

##### **Error Code**

The code assigned to the error for which the process exception was raised is reported here.

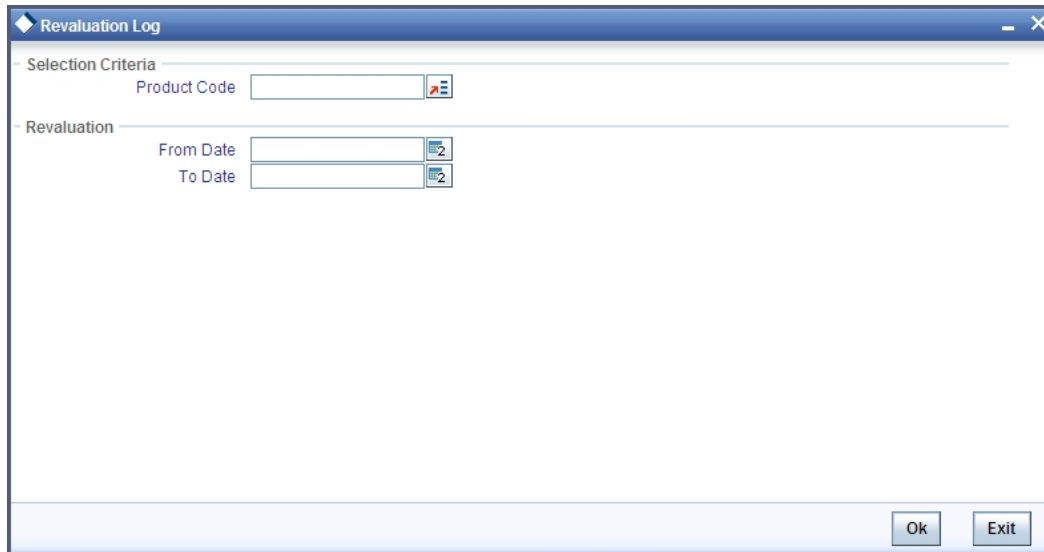
##### **Error Parameter**

The error message specific to the particular contract will be reported in this field.

## 9.8 Revaluation Log report

Through the Revaluation Log report you can get product-wise details of all contracts which were revalued within a specific period. Thus at the product level you can gauge the gains and losses due to changes in the market interest rates or the exchange rates.

You can invoke the screen by typing the code 'DVRPRVAL' in the field at the top right corner of the Application tool bar and click on the adjoining arrow button.



The screenshot shows a window titled "Revaluation Log" with a standard Windows-style title bar (minimize, maximize, close buttons). The window is divided into two main sections by horizontal lines. The first section, "Selection Criteria", contains a text input field labeled "Product Code" followed by a small dropdown arrow icon. The second section, "Revaluation", contains two text input fields: "From Date" and "To Date", each followed by a small calendar icon. At the bottom right of the window, there are two buttons: "Ok" and "Exit".

### Selection Criteria

After you select the product which is to be revalued you have to indicate the period for which revaluation should be carried out. You can do this by way of specifying the From and To dates. The details of those contracts within the products which were revalued between period specified will be reported.



You can choose to generate the revaluation log report either for one particular product or for all the products.

### 9.8.1 Contents of the report

The report options that you selected while generating the report are printed at the beginning of the report.

The contents of the report are discussed under the following heads:

## **Header**

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

## **Body of the report**

The report contains information on:

### **Branch Code**

This is the code of the branch for which the product-wise revaluation details are being reported.

### **Revaluation Sequence Number**

This is the sequence number which was assigned to the revaluation

### **Value Date**

This is the date as of which the swap takes effect. In the case of an FRA this is the date as of which the deal settles.

### **Transaction Date**

This is the date on which the contract was first processed in the system.

### **Contract Reference Number**

This is the reference number of the contract involved in the product for which revaluation details are being reported.

### **Previous Revaluation accounting entries**

These are the revaluation entries that were passed in the previous revaluation cycle. These include the following:

- Previous In Receivable
- Previous Out Payable
- Previous Net Revaluation Income
- Previous Net Revaluation Expense

Each of these entries will be reversed in the current revaluation cycle.

### **Product Code**

The code of the product for which you are generating the revaluation details is reported here.

## Current Revaluation accounting entries

These are the accounting entries, which have been passed in the current revaluation cycle:

- Current In Receivable
- Current Out Payable
- Current Net Revaluation Income
- Current Net Revaluation Expense

Values for each of these fields will be displayed depending on whether the particular entry is applicable for the particular or not.

## 9.9 Settled Deals Report

Through the Settled Deals report options screen you can generate a detailed report on all contracts which were settled as well as on those contracts which were terminated.

You can invoke the screen by typing the code 'DVRPSTLD' in the field at the top right corner of the Application tool bar and click on the adjoining arrow button.

The screenshot shows a dialog box titled "Settled Deals Report". It has a blue title bar with standard window controls (minimize, maximize, close). The dialog is divided into three sections by horizontal lines:

- Selection Criteria:** Contains two checked checkboxes: "Settled" and "Term".
- Booking Date:** Contains two text boxes labeled "From Date" and "To Date", each with a calendar icon to its right.
- Value Date:** Contains two text boxes labeled "From Date" and "To Date", each with a calendar icon to its right.

At the bottom right of the dialog, there are two buttons: "Ok" and "Exit".

### Selection Criteria

Firstly you have to indicate whether the report should be generated for settled deals or whether the report should contain details of contracts which were terminated.

After you indicate this specification you have to specify the date range within which the settled/terminated contracts were booked. Similarly you can specify that the report should contain deals bearing a value date falling within a specific date range.

The generated report will contain details of contracts satisfying the above criteria.

### **9.9.1 Contents of the report**

The report options that you selected while generating the report are printed at the beginning of the report.

The contents of the report are discussed under the following heads:

#### **Header**

The Header carries the title of the Report, information on the branch code, the branch date, the user id, the module name, the date and time at which the report was generated and the page number of the report.

#### **Body of the report**

The report contains information on:

##### **Counterparty Name**

This is the CIF ID of the customer involved in the contract that was settled/terminated.

##### **Contract Reference Number**

This is the reference number of the contract which was settled/terminated.

##### **Booking Date**

This is the date on which the settled/terminated contract was booked.

##### **Effective Date**

This is the date on which the contract comes into effect.

##### **Maturity Date**

This is the date on which the Swap matures. In the case of an FRA this would typically be the last date for the computation period.

##### **Contract Status**

This is the status of the contract.

##### **Contract Type**

This is the derivative type to which the derivative contract belongs.

**Type Description**

This is the description associated with the derivative type

**Termination Contract Type**

This indicates whether the termination of the contract was a normal termination or was assigned to another counterparty.

**Termination Date**

If you are generating the details of a contract which was terminated, the date on which the contract was terminated is reported.

**In Leg Principal**

This is the in leg principal amount of the settled/terminated contract

**Out Leg Principal**

This is the out leg principal amount of the settled/terminated contract



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## 10. Screen Glossary

### 10.1 Function ID List

The following table lists the function id and the function description of the screens covered as part of this User Manual.

<b>Function ID</b>	<b>Function Description</b>
DVBAUDLY	Mandatory Batch Program Maintenance
DVDBRNPM	Derivative Branch Parameter Maintenance
DVDBRRAT	Derivatives Revaluation Branch Interest Rates
DVDCNRAT	Derivatives Revaluation Contract Interest Rates
DVDCNVAL	Derivatives Revaluation Contract Fair Values
DVDCPMNT	Counter Party Master Agreement Maintenance
DVDDTMNT	Derivative Type Maintenance
DVDMGMNT	Messaging Parties Maintenance
DVDPRMNT	Derivatives Product Definition
DVDTREAS	Derivatives Contract Reassign
DVDTRONL	Contract Input
DVRPACCR	Interest Accrual Report
DVRPBKDT	Back Dated Deals Report
DVRPCACT	Contract Activity Report
DVRPCSDT	Customer wise Details
DVRPCSSM	Customer wise Summary
DVRPEXCP	Process Exception Report
DVRPRVAL	Revaluation Log
DVRPSTLD	Settled Deals Report
EIDMANPR	Mandatory Batch Program Maintenance
STDCLMNT	Clearing House Maintenance



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Oracle Corporation  
World Headquarters  
500 Oracle Parkway  
Redwood Shores, CA 94065  
U.S.A.

Worldwide Inquiries:  
Phone: +1.650.506.7000  
Fax: +1.650.506.7200  
[www.oracle.com/ financial\\_services/](http://www.oracle.com/financial_services/)

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