ITMS - Derivative Functionality

Integrated Treasury Management Systems ITMS - Derivative Functionality

Instruments Supported in ITMS

1. Swaps
   - Interest Rate Swap (IRS)
     - Overnight Index Swaps (OIS)
     - MIFOR Swaps
   - Structured Swaps
     - Swaps with Amortizing Principal
     - Swaps with variable fixed rate
   - Currency Swap
   - Basis Swap
2. Forward Rate Agreements (FRA)
   - Standard FRA
3. FX-Options
   - Rupee Options
   - Cross Currency Options

Functionality Supported in ITMS

Master Definition

1. Business Entities

   The following entities can be defined
   - Counterparty
   - Broker
   - Nostro
2. Trading Entities
   - Products can be defined as
     - Entirely new products by assigning attributes
     - Create product by inheriting attributes from an existing product
   - New attribute can be added to an existing product
   - Default value can be set for each attribute

3. **Holiday**

   Holiday can be defined for

   - Category wise - Bank, Exchange and party
   - Currency wise
   - Holiday Centre wise

4. **Bilateral Arrangement**

   Settlement instruction can be defined for each party with agreement reference number.

Front Office

1. **Swaps**
   - Swap Types
     - IRS
     - Basis Swap
     - Currency Swap
   - Notional Swaps
     - Bullet Interest Payment
     - Intermediary Interest Payment
   - Structured Swaps
     - Swap with Amortization Principal
     - Swap with variable fixed rates
   - Define different Holiday center for the different events.
   - Event Calendar
   - Different Business day convention at deal level
     - Following
     - Preceding
     - Modified Following
     - Modified Preceding
   - Compounding Method
     - Add and Compound
     - Compound and Add
   - Reset Type
     - In Advance
     - In Arrears
   - Principal Amortization Type
     - % of Original Principal
     - % of Balance Principal
     - Constant Amount
     - Variable Amount

2. **FRA**
   - ⇨ Currency
     - Local Currency
     - Foreign Currency
   - ⇨ Payment Type
     - Advance - Settlement will happen on the start date of the forward period.
     - Arrears - Settlement will happen on the end date of the forward period
3. **FX-Options**
   - ⇨ Option Type
     - American Call/Put - Option can be exercised anytime before the expiry date
     - European Call/Put - Option can be exercised only on the expiry date
   - ⇨ Zero cost option
   - ⇨ Premium currency
     - Underlying currency
     - Counter currency
   - ⇨ Premium Type
     - % of Underlying
     - % of Counter currency
     - Amount of Underlying
     - Amount of Counter Currency
4. **Deal Capture**
   - ⇨ Normal Deal
   - ⇨ Draft Deal
5. **Front Office Authorization**

   Based on the workflow setup deal will moves to FO authorization
6. **Settlement Details**

   We don't have the option to change the settlement details during the life time of the transaction. We have to give this new requirement to BM and BOC.
7. **Deal Amendment**
8. **Deal Reversal**
9. **Informal Revaluation**

   Based on the access to user.
10. **Deal Termination**

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1. **Accounting Entries**
   - Trade Date Accounting
   - Value Date Accounting

   Accounting entries are passed for
   - Contingent Entries for the Notional Amount
   - Interest Accrual Entries
   - Settlement Entries
   - P/L Entries for the Payoff
   - Revaluation Entries
2. **Swift Message Generation**

   The following swift messages will be generated
   - 202, 203 – Notice to Pay
   - 210 – Notice to Receive
3. **Interest Rate Reset**
   - Automatic reset of interest rates during EOD or Manual resetting based on a product level attribute
   - Using alternative benchmarks (maximum 2) for reset when the rate for the primary benchmark is not available for a day
4. **Interest Rate Correction**

   The latest reset rate can be corrected on any subsequent day before the next reset.
5. **Revaluation**
   - Automatic or manual based on product level parameter
     - Automatic revaluation during EOD at specified revaluation frequency specified at product level
     - Default swap curves defined for a currency and for a product will be used for automatic revaluation
     - Linear interpolation will be used to derive rates for non standard tenors
     - Manual revaluation can be done anytime during the day
     - User can select any curve and edit the rate used for revaluation
     - In manual revaluation, different rates can be used for different BPS
   - Formal or Informal Revaluation
     - Formal revolution - Accounting entries will be passed immediately or during EOD
     - Informal revaluation - Only for MIS purpose

6. **FRA Fixing**
    - ⇨ On the fixing date all the FRAs to be fixed on a day will be moved to a queue
    - ⇨ EOD will not go through unless the all FRAs in that queue are fixed
    - ⇨ The settlement rate can be edited by the user
7. **Option Exercise**
    - ⇨ An American option will be available for Exercise till the expiry date, while a European option will be available for exercise only on the expiry date.
    - ⇨ EOD will not go through unless all the options expiring on that day are either exercised or abandoned.
    - ⇨ The exercise of an option will result in an FX spot transaction if the exercise type for the product is 'Take delivery'.
    - ⇨ If the exercise type for a product is 'Settle difference', on exercising the option, the difference between the strike price and the market rate will be settled.
8. **Swap Maturity Settlement**
    - ⇨ Maturity: Automatic or Manual based on product level attribute
    - ⇨ The swap can be automatically matured during BOD
    - ⇨ Or Settlement instruction should be given manually for swaps
    - ⇨ Payoff generated for the Net amount
9. **Swap Unwind or Termination**
    - ⇨ Swap Unwind can be done on a cash date or as of a Forward date
    - ⇨ Payoff entries are passed for the settlement amount
    - ⇨ Cancellation rate can be taken from swap curve selected or entered by the user
10. **Authorization**

    The Back office can authorize the following events
    - ⇨ Deal Entry
    - ⇨ Swift messages generated
    - ⇨ FRA fixing
    - ⇨ Option exercise
    - ⇨ Swap Maturity
    - ⇨ Swap Unwind
11. **Option Premium Settlement**

End of Day

1. Revaluation Accounting Entries: Derivatives
2. Resetting Interest Rates
3. Interest Compounding
4. Cash Flow Re-Computation
5. Calculating Interest Accrual
6. Accounting Interest Accrual
7. Merge Payoff Income and Expense
8. Payoff Amortization/Accretion
9. Consolidated Accrual Entries - IRS
10. EOD Reports

Beginning of Day

1. Intermediate Interest Settlement
2. Intermediate Principal Settlement
3. Maturity Of MM and IRS
4. Maturity of Derivatives
5. Passing Pay off Entries
6. Moving Deals for Reset/ Fixing
7. Processing Forward Events
8. Processing Forward Settlements
9. BOD Reports

Reports

IRS

1. List of Outstanding IRS Contracts
2. List of IRS contracts Maturing
3. List of IRS contracts Terminated
4. List of IRS contracts Confirmed
5. List of IRS contracts Unconfirmed
6. List of IRS contracts Fixed
7. Interest Accrued for IRS Contracts
8. Revaluation of IRS Contracts
9. Reset Confirmation
10. Cash flow Summary Report
11. Deal Register Report
12. Future Reset Report
13. Carry Report
14. Pay In/Pay Out Report

End of Day

15. Valuation
    a. Swap Value Report
        i. Detailed
        ii. Summarized
    b. Curve Blipping Report
        i. Detailed
        ii. Summarized
    c. DV01 Parallel Shift Report
        i. Detailed
        ii. Summarized
    d. P & L Report

FRA

1. List of Outstanding FRA Contracts
2. List of FRA contracts Maturing
3. List of FRA contracts Terminated
4. List of FRA contracts Confirmed
5. List of FRA contracts Unconfirmed
6. List of FRA contracts Fixed
7. Revaluation of FRA Contracts

FX-Option

1. List of Outstanding Option Contracts
2. List of Option contracts Expiring
3. List of Option contracts Confirmed
4. List of Option contracts Unconfirmed
5. List of Option contracts Exercised
6. Premium Paid on Options
7. Premium Received on Options
8. Revaluation of Option contracts

Statistical volume of Derivative contracts traded during the period (based on deal date for IRS, FRA and FX- Options)