

# **Intellect™ One Treasury**

## **PRODUCT ADOPTION DOCUMENT**

### **<Foreign Exchange>**

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## 1.0 Introduction

This document describes in detail about Intellect™ One Treasury Foreign Exchange Module covering its functionalities and business process flow.

### 1.1 Purpose

This document is intended to provide the specification for Intellect™ One Treasury Foreign Exchange Module. The intended audience for this document is

1. Business Users
2. Testers
3. Technical Architects & Developers

## 1.2 Acronyms/Glossary of Terms

S.No.	Term	Explanation
1.	PAD	Product Adoption Document™
2.	RTM	Risk, Treasury & Markets
3.	CCY	CCY denotes the currency used for the transaction.
4.	FCY	Foreign Currency
5.	LCY	Local Currency or Book Currency
6.	EOD	End of Day
7.	BOD	Beginning of Day
8.	EOM	End of Month
9.	FO NEW	Front office New deal
10.	FO AUTH	Front office Authorized deal
11.	FO MOD	Front office Modified deal
12.	FO CANCEL	Front office cancelled deal
13.	BO ENRICH	Back office Enriched deal
14.	BO AUTH	Back office authorized deal
15.	BO REVERSE	Back office reversed deal
16.	BO CANCEL	Back office cancelled deal
17.	FX	Foreign Exchange

18.	FO	Front Office
19.	BO	Back Office
20.	OUTRIGHT	Cash/Spot/Forward
21.	CASH	Today+0 days
22.	TOM	Today+1 days
23.	SPOT	Today spot days configured for currency
24.	FORWARD	Today +'N' days(Beyond spot days)
25.	L1	Leg 1/Near Leg
26.	L2	Leg2 /Far Leg
27.	B2B	Back 2 Back
28.	MTD	Month till date
29.	YTD	Year to date
30.	AGL	Aggregate Gap Limit
31.	IGL	Individual gap limit
32.	LIABILITY NO	The list of customers is grouped into base number or liability number.
33.	P&L	Profit & Loss
34.	SWIFT	Society for Worldwide Interbank Financial Telecommunication
35.	BLOTTERS	A Blotter refers to an excel-like window to see details of trades with various other required attributes as per given selection criteria

36.	MTM	Mark to Market
37.	EOM	End of Month
38.	Acc.	Accounting
39.	RCN	Responsibility Centre Number
40.	RRC	Rate Reasonability Check
41.		Currency position adjustments
42.	Reval	Revaluation
43.	Rebate	Rebate
44.	NPV	Net Present Value
45.	SLM	Straight Line Method
46.	IDPT	Inter Desk Position Transfer
47.		Management action trigger
48.	NOP	Net Open Position
49.		Overnight Sell
50.		Overnight Buy

### 1.3 List of Hot Keys/Shortcuts Used

S.No.	Hot Keys	Function of Hot Key
1	SHIFT +	To paste a deal number on a Deal capture screen and retrieve the deal details on pressing <ENTER>

	INSERT	
2	COPY+INSERT	To copy and Insert a deal

## 1.4 References

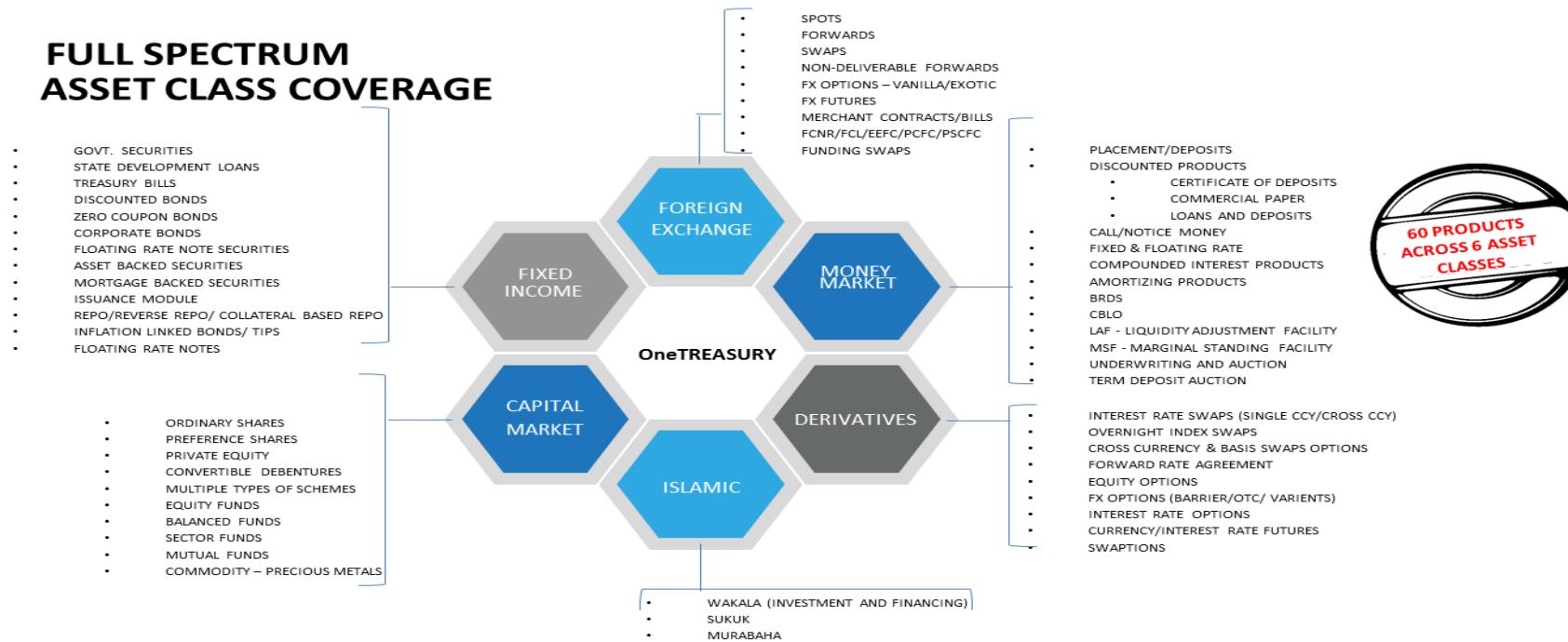
This section should provide references for any specifics on Regulatory requirements, Compliance, Market research that this PRODUCT offers  
 Example –

S No.	Category	Reference

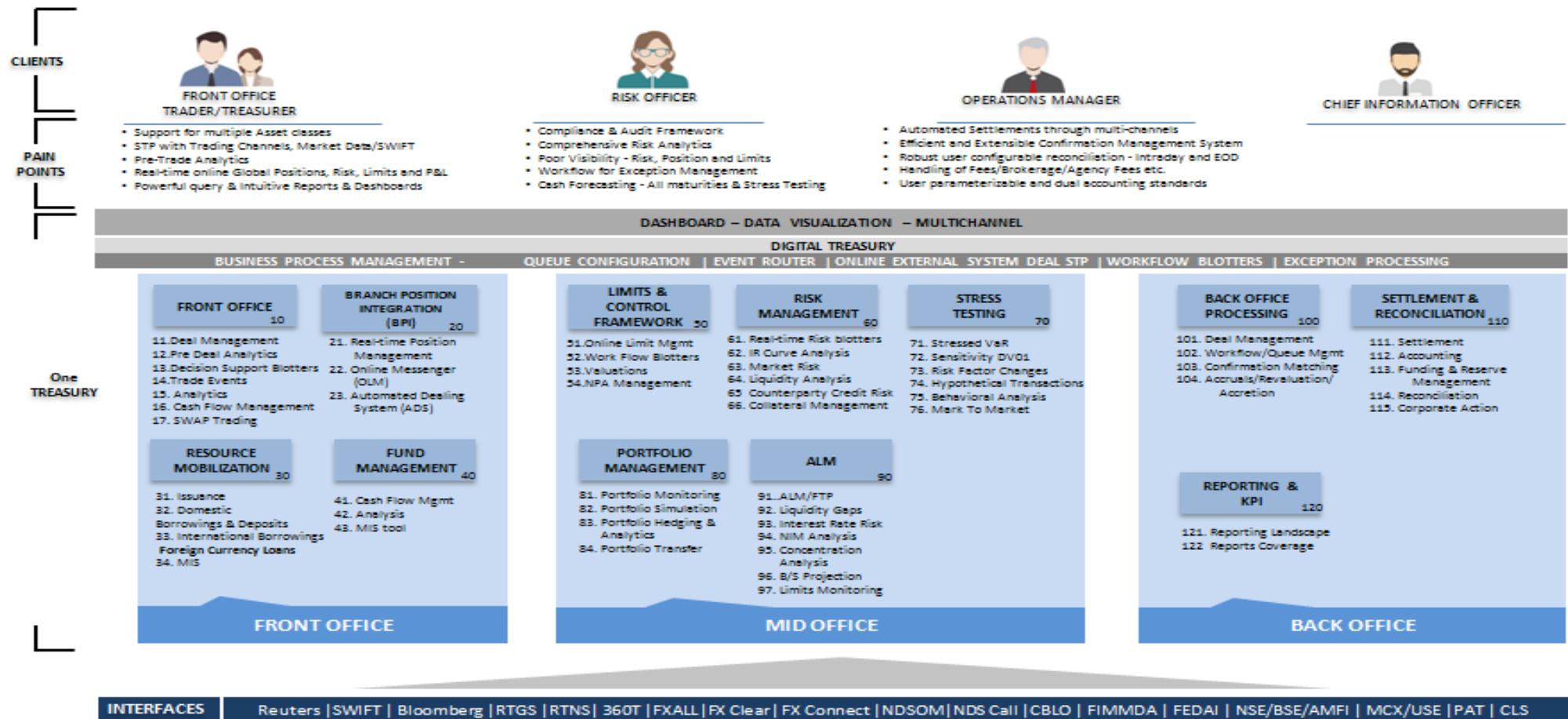
## 2.0 Overview of the Intellect One Treasury

Intellect™ One Treasury Product provides a single platform for integrated risk & treasury management. One Treasury Solution provides Real Time Cash flows and Position Managements. It helps in identifying market and liquidity risk on a real time basis along with limits and control frameworks. Intellect™ One Treasury supports 60 Products across 6 asset classes on a single platform.

## FULL SPECTRUM ASSET CLASS COVERAGE



## 2.1 L0 Architecture



## 2.2 FX Module Overview

Intellect™ One Treasury Foreign Exchange module is a rich application covering wide features of *Cash/Spot /Forward/Swaps/Non-Deliverable Forwards*. System does capture trades done on trading platforms or through STP automatically. One Treasury integrates with Reuters, Bloomberg, NDS or any similar integration touch points seamlessly through the standard integration GATEWAY. It also supports manual trade booking through Deal Capture screen for trade. System provides real time limit checking and 'What-IF' analysis to support decision making.

One Treasury also supports Back office operations such as enrichment, authorization of the deals generating accounting entries followed by settlement and delivery of the booked trades. Intellect™ One Treasury also generates swift text messages which can be integrated with SWIFT terminals for transmitting the messages.

Intellect™ One Treasury Foreign Exchange covers full functionality from Front to back office. So, the flow of FX Module is defined as:

S. No.	Module Name/Description	Module ID
1.	Static Data Setup(Maintenances/Master)	Setup
2.	Front Office Deal Management	FX FO
3.	Middle Office Deal Management	FX MO
4.	Back Office Deal Management	FX BO
5.	Reports	Reports
6.	Interfaces	Interfaces
7.	Common Utilities	

## 3.0 Static Data Setup

Intellect™ One Treasury supports maintenances and configuration of static data's in the application through setup screens. Setup screens are categorised based upon usage and functionality. One Treasury Supports 2 levels of Check for any request creation and its approval. This check is applicable for all setup screens.

Based upon request raised, a user has option for

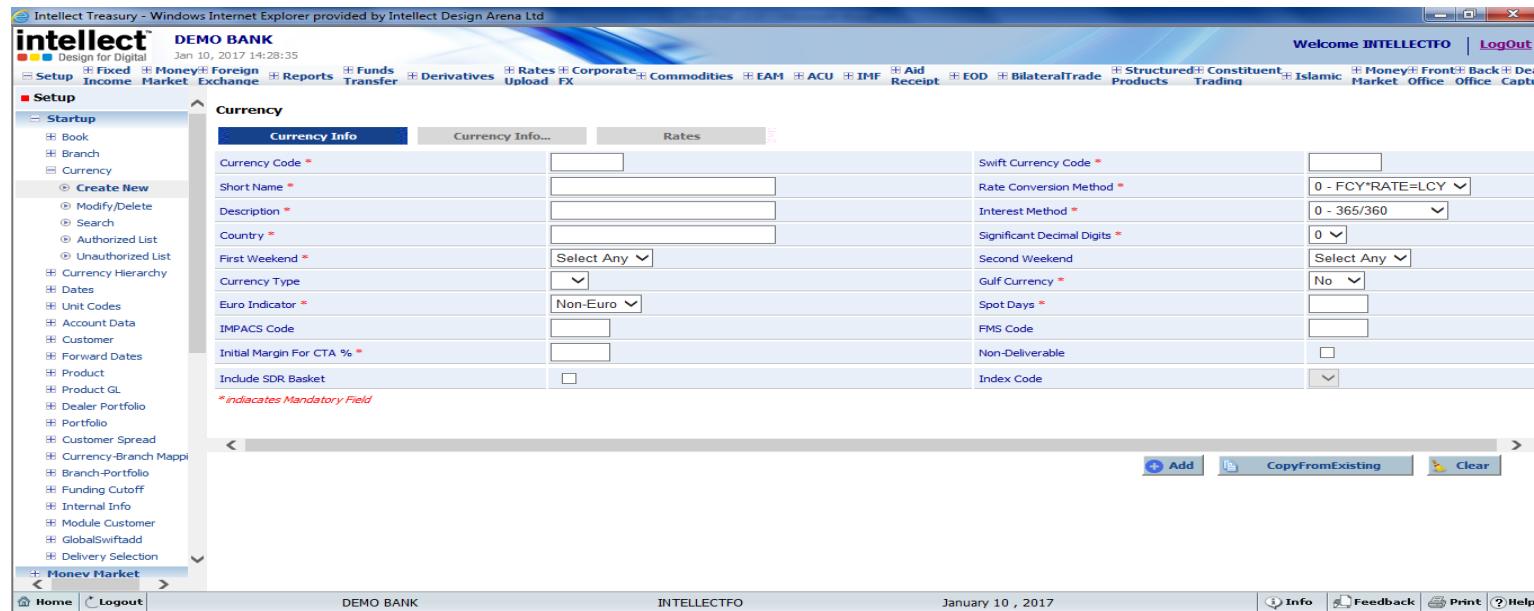
- a.i.a. Creating a new Parameters
- a.i.b. Modify/Delete the existing values
- a.i.c. Searching for existing values
- a.i.d. Viewing Authorized and Unauthorized lists.

### 3.1 Currency Setup

Currency Setup is the first master for setting up and used as base for creating other setups also.

#### 3.1.1 Screen Path & Layout

**Navigation Path:** Intellect One Treasury >> Setup >> Start Up>> Currency Master



The screenshot shows the Intellect Treasury software interface for currency setup. The main window displays a form with various input fields and dropdown menus. The sidebar on the left provides navigation through different setup modules.

### 3.1.2 Description

#### ➤ Prerequisites

- Unit codes Setup

Currency Setup screen consist of 3 tabs which accommodates the details such as swift currency code, Rate Conversion method, significant decimal digit, spot days(Based upon currency selected default spot days is auto populated) , and minimum and maximum rates, Interest rates along with other information.

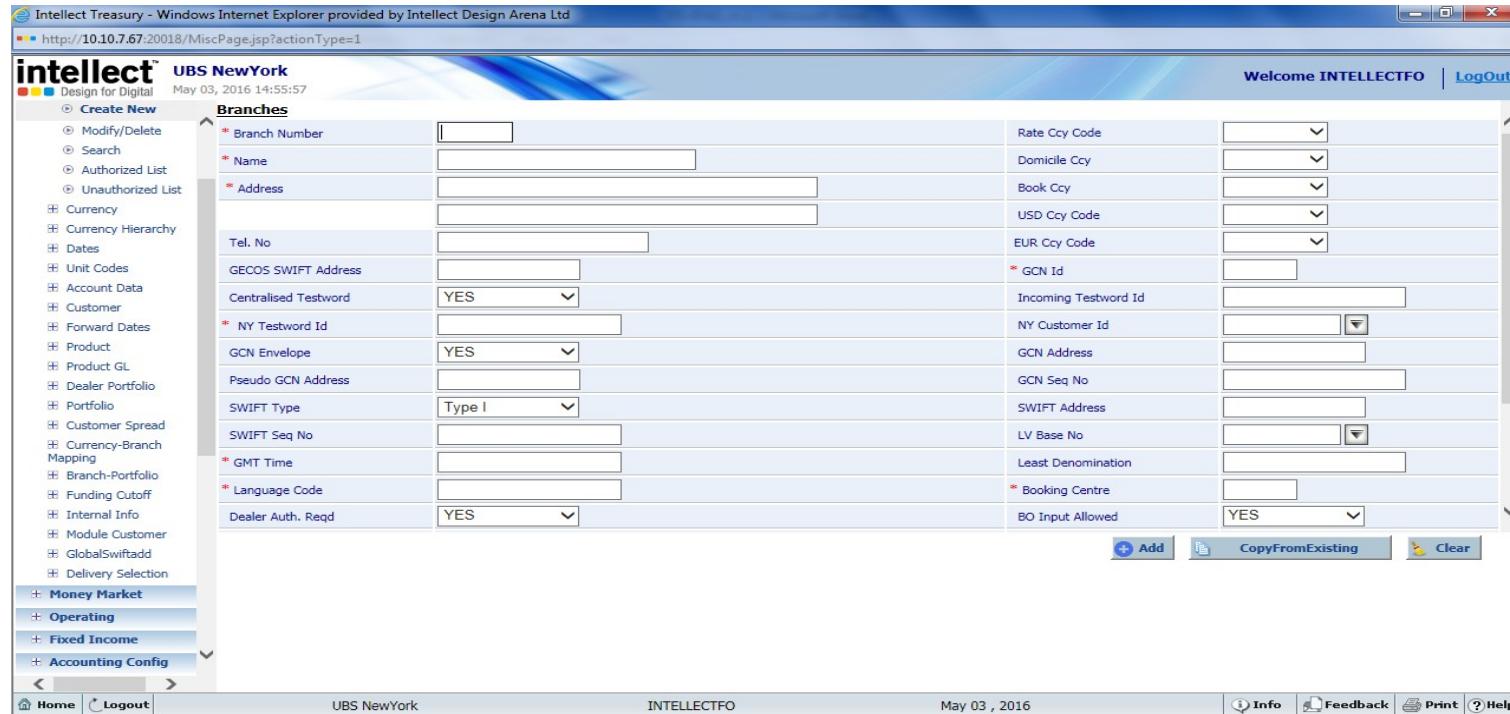
The weekends are to be selected as per the respective countries. Once the [3.11 Account Data](#) is maintained, the currency can be mapped to the respective account.

## 3.2 Branch Setup

This maintenance is used for setting up branch in the application.

### 3.2.1 Screen Path & Layout

**Navigation Path:** Intellect One Treasury >> Setup >> Start Up>> Branch



### 3.2.2 Description

- Prerequisites
  - Currency

Creation of branch is one time activity. Intellect™ One Treasury supports multi branching functionality. Important fields which are asterisk marked should be filled in order to create a treasury branch.

### 3.3 Dealer Setup

In Treasury department, dealers perform and manage trading and deal booking activities. So this maintenance is used for configuring dealers in the system.

#### 3.3.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Setup >> Admin >> Dealer

intellect Treasury - Windows Internet Explorer | provided by intellect Design Arena Ltd

http://10.10.7.67:20018/MiscPage.jsp?actionType=1

**intellect™ UBS NewYork**

Welcome INTELLECTFO | LogOut

May 03, 2016 14:55:57

**Operating**

- + Fixed Income
- + Accounting Config
- + Tax & Brokerage
- Admin
  - + Dealer Group
  - + Dealer
  - Create New**
  - Modify/Delete
  - Search
  - Authorized List
  - Unauthorized List
  - + Dealer Mapping
  - + Download Config
  - + Printer
  - + Printer Mapping
  - + UserEnt
  - + Warehouse Movement
- + Futures
- + Document Managerer
- + Commodities
- + EAM

**Dealer Limits**

**General** [Restrictions] [Portfolio Selections] [Miscellaneous] [Limits]

Dealer Id *	DLR2	Dealer Name *	DLR2
Access Level *	DEALER	Dealer Group *	MGMT
Daylight Limit (USD) *	10000.00	Overnight Limit (USD) *	10000.00
MAT Daily Limit (USD) *	10000.00	MAT MTD Limit (USD) *	10000.00
Dealer Type	INDIVIDUAL	Split Cross Currency	YES
GMR Check Required	YES	Remarks	
Default Branch *	UBS NewYc		

All Branches	Selected Branches	All Portfolios	Selected Portfolios
UBS NewYork UBS Copenhagen UBS Zurich CBA DEMO BANK5 DEMO BANK6 DEMO BANK7	UBS NewYork	AFS CAMB CAMB CAMB CAMB CAMP	HFT
<input type="button" value="Branch *"/>	<input type="button" value="&gt;"/> <input type="button" value="&lt;"/> <input type="button" value="&lt;&lt;"/>	<input type="button" value="Portfolio *"/>	<input type="button" value="&gt;"/> <input type="button" value="&lt;"/> <input type="button" value="&gt;&gt;"/>

### 3.3.2 Description

#### ➤ Pre-requisites

- Branch
- Portfolio
- Dealer Group

Dealer Master consists of multiple tabs to maintain values for dealer size limits (Trading limits), restrictions for portfolio, products and currencies.

## 3.4 User Setup

This master is used for mapping user id with treasury department dealers.

### 3.4.1 Screen Path and Layout

**Navigation Path:** Intellect™ One Treasury >> Setup >> Admin >> Dealer Mapping

The screenshot shows the 'Dealer Mapping' page of the Intellect Treasury application. The left sidebar has a tree view with 'Dealer Mapping' selected under 'Admin'. The main area has three input fields: 'User ID \*' (INTELLECTFO), 'Dealer ID \*' (MGMT), and 'Language \*' (en\_US). Below the fields are three buttons: '+ Add', 'CopyFromExisting', and 'Clear'.

### 3.4.2 Description

#### ➤ Prerequisites

- Dealer

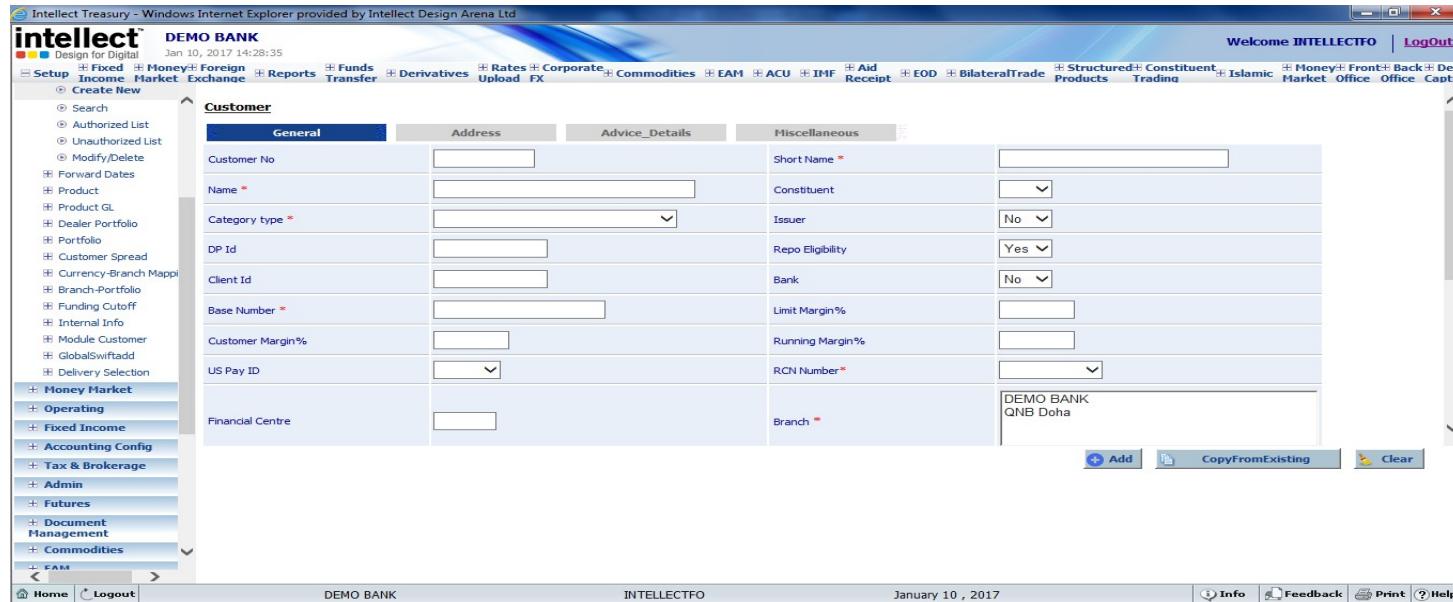
Intellect™ One Treasury is an entitlement based system and for dealers to access the application, user id should be assigned which is mapped to a specific dealers through dealer mapping master.

## 3.5 Counterparty Setup

Customer maintenance is used for creating/setup of treasury customers in the application.

### 3.5.1 Screen Path and Layout

**Navigation Path:** Intellect™ One Treasury >> Setup >> Start Up>> Customer Master



### 3.5.2 Description

#### ➤ Prerequisites

- Unit Code Master where customer category type and other values such as country are maintained in the system.

- Branch Master

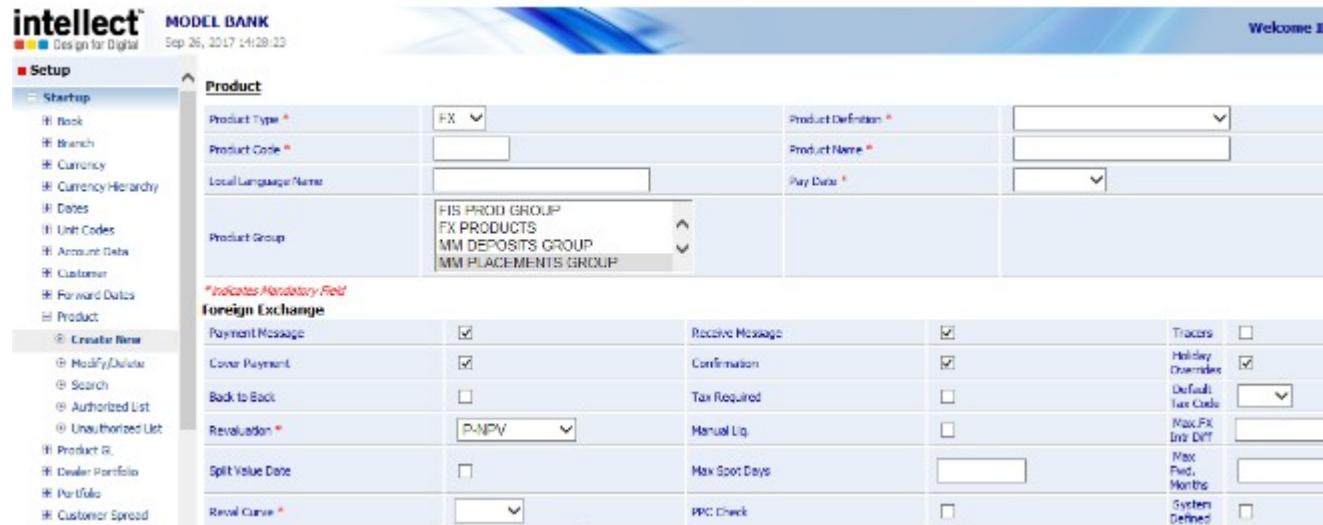
Configuration of customer details, mapping to specific branch, module is done in this master.

## 3.6 Product Setup

Product Maintenance screen is used for configuring various types of Treasury product in the system. Intellect™ One Treasury supports creation of sub products under each product with its own underlying parameters.

### 3.6.1 Screen Path and Layout

**Navigation Path:** Intellect™ One Treasury >> Setup >> Start Up >> Product Master



The screenshot shows the 'Product' configuration screen in the Intellect One Treasury system. The left sidebar has a 'Setup' section selected, which contains options like 'Branch', 'Currency', 'Product', and 'Create Rule'. The main area is titled 'Product' and includes fields for 'Product Type' (set to 'FX'), 'Product Code', 'Local Language Name', and 'Product Group' (which lists 'FIS PROD GROUP', 'FX PRODUCTS', 'MM DEPOSITS GROUP', and 'MM PLACEMENTS GROUP'). Below this is a section for 'Foreign Exchange' with various checkboxes and dropdowns for payment and confirmation messages, tax requirements, and spot date settings. A note at the bottom left says '\*Indicates Mandatory Field'.

### 3.6.2 Description

#### ➤ Prerequisites

- Unit Codes Maintenances
- Product level configuration such as
  - To generate specific Message Types(Such as Payment, Cover, Receive, Delivery Messages)
  - Selection of Revaluation methods (Such as P-NPV, R-Rebate , S-Straight Line ,N-No Reval )
  - Hard(Overrides), Soft(Errors) and Deal Verification Checks

In current application 1XX Product series belongs to Cash/Spot ,2XX series products belongs to Forward, 3XX series belongs SWAP-Spot , 4XX series belongs SWAP-Forward and 22X belongs to Non-Deliverable Forwards.

### 3.7 Portfolio

Portfolio maintenance is used for creating Portfolio's in the application.

#### 3.7.1 Screen Path and Layout

**Navigation Path:** Intellect™ One Treasury >> Setup >> Start Up >> Portfolio Master

PORTRFOlio details - Windows Internet Explorer provided by Intellect Design Arena Ltd  
http://10.10.7.67:20018/PORTFOLIOEvent.do?Event=PORTFOLIO\_ListView&ListAction=QUERY&%24%24Portfolio\_code=LQDT&ListType=APPLICATION&E

**Portfolio**

**General Details**

Portfolio Code \* LQDT

Portfolio Description \* LIQUIDITY PORTFOLIO

CounterParty

Portfolio Type \* Risk Trsy

Investment Guidelines

Reporting Currency \* USD

\* indicates Mandatory Field

**Additional Details**

**Close**

### 3.8.2 Description

➤ **Prerequisites**

- Unit codes
- Currencies

Intellect™ One Treasury tracks investments portfolio wise. This Master is also used for restricting/configuring portfolios to specific modules and currencies under additional details tab.

### 3.9 Account Data

#### 3.9.1 Screen Path and Layout

**Navigation Path:** Intellect One Treasury >> Setup >> Start up >> Account Data

Intellect Treasury - Windows Internet Explorer provided by Intellect Design Arena Ltd  
<http://10.10.7.67:20018/MiscPage.jsp?actionType=1>

**intellect** UBS NewYork      Welcome INTELLECTFO | LogOut

May 03, 2016 18:16:36

**Create New**

- Create New
- Modify/Delete
- Search
- Authorized List
- Unauthorized List

**Customer**

**Forward Dates**

**Product**

**Product GL**

**Dealer Portfolio**

**Portfolio**

**Customer Spread**

**Currency-Branch Mapping**

**Branch-Portfolio**

**Funding Cutoff**

**Internal Info**

**Module Customer**

**GlobalSwiftAdd**

**Delivery Selection**

**+ Money Market**

**+ Operating**

**+ Fixed Income**

**+ Accounting Config**

**Account Data**

Customer No. *	<input type="text"/>	Customer Name	<input type="text"/>
Account No. *	<input type="text"/>	RCN No. *	<input type="text"/>
Account Desc. *	<input type="text"/>		
Status *	<input type="text"/>	Sys.Prod.Code	<input type="text"/>
Swift Ccy Code *	<input type="text"/>	Other Account No.	<input type="text"/>
Account Type *	<input type="text"/>	Margin Balance	<input type="text"/>
Acc.With.Corrrespondent #	N - Nostro M - Margin Account C - Current Account B - Bank Account G - GL O - Custodian Account V - Vostro Account P - proforma account	Balance Type *	<input type="text"/>
Balance *		Rate Code *	<input type="text"/>
Acc Balance Read*			

\* indicates Mandatory Field  
# Mandatory for Nostro Account

**Add** **CopyFromExisting** **Clear**

### 3.9.2 Description

➤ Prerequisites

- Customer
- Unit Codes
- Currency

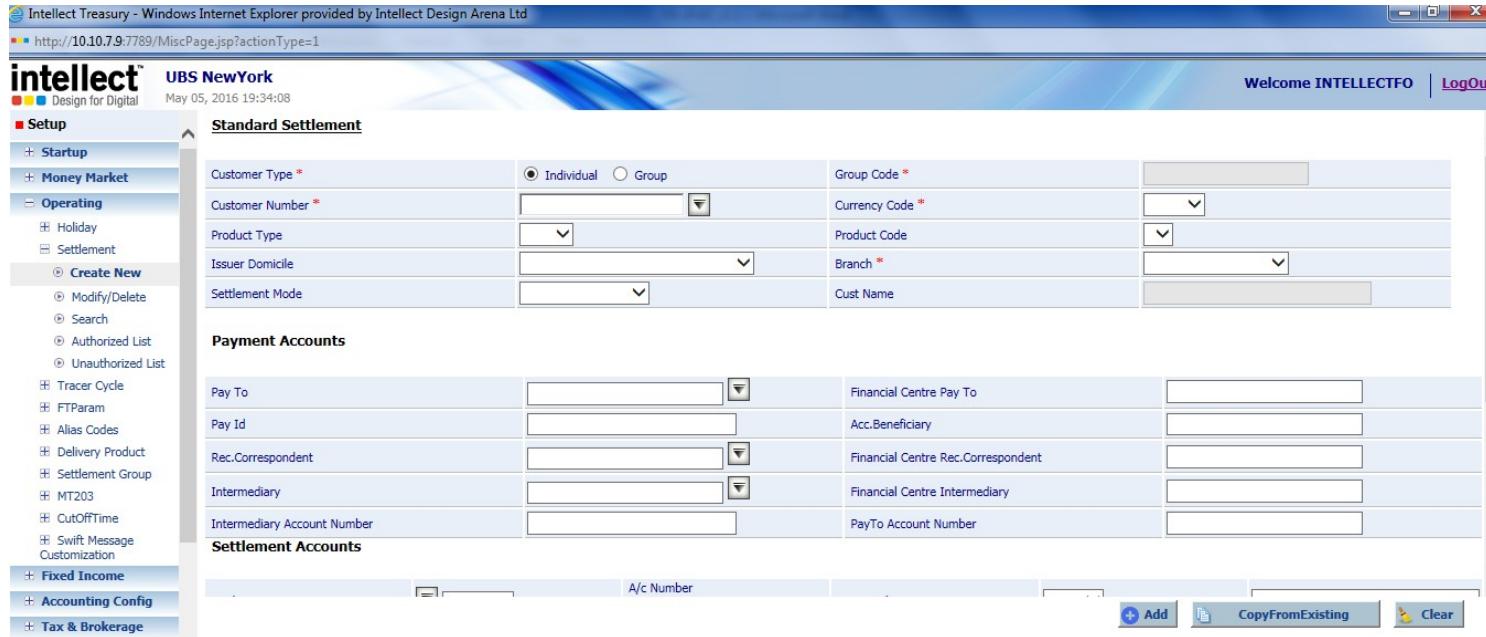
➤ This maintenance is used for maintaining accounts for customers. Account type field consists of different accounts that can be maintained with the respective currency. Each currency defined in the system can be configured to the respective account type.

## 3.10 Standard Settlement (SSI)

This master is used for maintaining settlement instructions for payment and settlements for the transactions done in the system.

### 3.10.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Setup >> Operating >> Settlement



### 3.10.2 Description

#### ➤ Prerequisites

- Customer
- Product
- Currency

- Account Data
- Branch

Settlement Master is used for mapping customers with their respective account numbers (Currency wise). This screen is used for defining payment and settlement accounts for the customers.

### 3.11 Accounting Setup

Intellect™ One Treasury supports maintenance and configuration of accounting entries using Accounting Config Master.

#### 3.11.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Set Up >> Accounting Config.

#### 3.11.2 Description

➤ Prerequisites

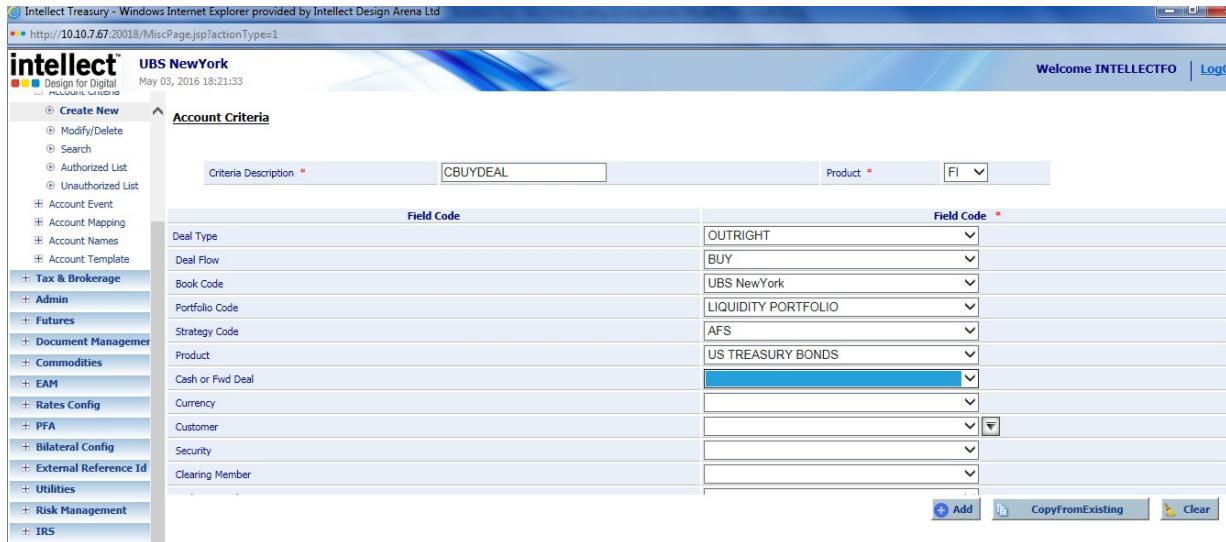
- Book
- Portfolio
- Strategy
- Product
- Currency
- Customer
- Security
- Unit codes

Accounting setup includes creation of events, criteria's and templates for configuring accounting entries. Whenever the event occurs, the corresponding entries are passed based on the criterion that matches the current data.

### 3.11.2.1 Account Criteria

#### 3.11.2.1.1 Screen Path and Layout

**Navigation Path:** Intellect™ One Treasury >> Set Up >> Accounting Config >> Account Criteria



Field Code	Field Code *
Deal Type	OUTRIGHT
Deal Flow	BUY
Book Code	UBS NewYork
Portfolio Code	LIQUIDITY PORTFOLIO
Strategy Code	AFS
Product	US TREASURY BONDS
Cash or Fwd Deal	
Currency	
Customer	
Security	
Clearing Member	

#### 3.13.2.1.2 Description

##### ➤ Prerequisites

- Unit codes
- Customer
- Currency
- Branch

- o Product

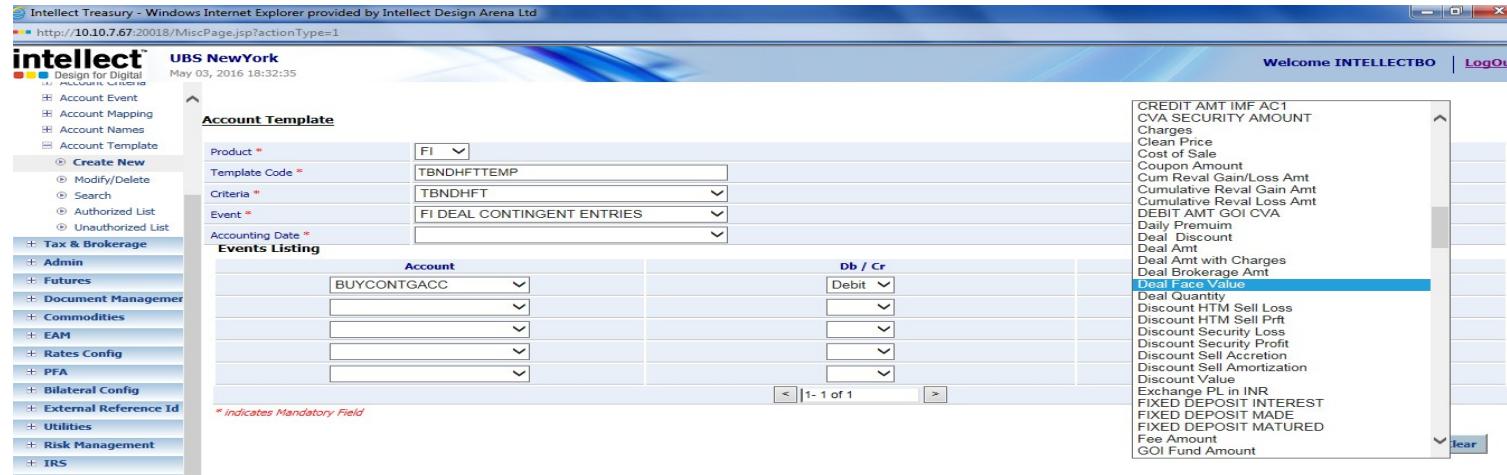
In Foreign Exchange module, to setup the accounting entries, first step is to define the criteria for the entries which have to be generated. Criteria's which can be defined are

S. No	Criteria	Description
1.	Deal Type	Type of Deal( Outright or SWAP )
2.	Deal Flow	Buy/Sell
3.	Book Code	Specific to Book Code
4.	Portfolio Code	Investment, Liquidity
5.	Product	SPOT, FORWARD or SWAP
6.	Cash or Forward Deal	Whether its Cash or Forward Deal
7.	Currency	Specific to Particular currency
8.	Customer	For specific Customer
9.	Clearing Member	Specific Clearing Member

**P.S:** Intellect™ One Treasury supports Account Criteria configuration as per the requirement of the User. Criteria's can be defined for a specific event or a generic event.

### 3.13.2.2 Account Template

Account Template is used to configure the accounts for the specific Account Criteria, Event and the Accounting Date. Based upon account criteria created, appropriate account template is created. Values for events are trigger for generating accounting entries for a specific events such deal authorization, deal settlement etc. List of events mentioned in table. Accounting Date signifies on which date accounting entries should be passed.



The screenshot shows the 'Account Template' configuration page in the Intellect Treasury system. The left sidebar includes links for Account Event, Account Mapping, Account Names, Account Template, Create New, Modify/Delete, Search, Authorized List, Unauthorized List, Tax & Brokerage, Admin, Futures, Document Management, Commodities, EAM, Rates Config, PFA, Bilateral Config, External Reference Id, Utilities, Risk Management, and IRS. The main form has fields for Product (set to FI), Template Code (TBNDHFTTEMP), Criteria (TBNDHFT), Event (FI DEAL CONTINGENT ENTRIES), and Accounting Date. Below these are sections for 'Events Listing' and 'Account'. The 'Events Listing' section contains a table with columns for Account (BUYCONTGACC) and Db / Cr (Debit). The 'Account' section lists various accounting codes. A large dropdown on the right lists numerous accounting events and dates, with 'Deal Face Value' highlighted. A note at the bottom indicates that the asterisk (\*) indicates a mandatory field.

#### 3.13.2.2.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Set Up >> Accounting Config >> Account Template

#### 3.13.2.2.2 Description

➤ Prerequisites

- Account Criteria
- Accounting Event
- Accounting Date

- List of Events that can be configured
  - ⌚ FI DEAL AUTH - Deal authorization event
  - ⌚ FI DEAL PL ENTRIES – PL Entries event
  - ⌚ FI EXP/INC BOOKING FOR SALE – Expense/Income
  - ⌚ FI PURCHASE REV FOR SALE -
  - ⌚ FI DEAL CONTINGENT ENTRIES – Contingent Entries
  - ⌚ FI DEAL REV CONTINGENT – Reversal of Contingent Entries
  - ⌚ FI DEAL REV PL – Reversal of Profit/Loss
  - ⌚ FI REPO DEAL AUTH – Repo deal authorization
  - ⌚ FI REVERSE PL – Reversal of Profit/Loss
  - ⌚ FI DEAL SETTLEMENT – Settlements
  - ⌚ FI EXP/INC BKNG FOR REDEMPTION – Expense/Income for Redemption
  - ⌚ FI PL ENTRIES FOR REDEMPTION – Profit/Loss entries for Redemption
  - ⌚ FI SETTLEMENT FOR REDEMPTION – Settlement entries for Redemption
  - ⌚ FI PURCHASE REV FOR REDEMPTION -
  - ⌚ FI ACCRUALS – Accrual entries event
  - ⌚ FI ACCR REVERSAL FOR COUPON – Accrual reversal for Coupon

- ⌚ FI ACC BAL RECON FOR COUPON -
- ⌚ FI RECV FROM CUSTODIAN FOR CP -
- ⌚ FI ACCRETION PROCESS – Accretion Event
- ⌚ FI ACCRETION FOR SHORT SALE – Accretion Entries for Short sell
- ⌚ FI AMORTISATION PROCESS – Amortisation Process
- ⌚ FI AMORT FOR SHORT SALE – Amortisation Process for short sell
- ⌚ FI REVALUATION PROCESS -
- ⌚ FI REVAL FOR SHORT SALE -
- ⌚ FI REPO ACCRUAL – Accrual Event for Repo
- ⌚ FI REPO ACCR SHORT SALE – Accrual Event for Repo Short Sell
- ⌚ FI DEAL REVERSAL – Deal reversal Event

- User can select the Account, Dr/Cr and Account Field as per the requirement. See Sample template.

### Account Template

Template Code *	BUYDEALPOLICY
Criteria *	CBUYDEAL
Event *	FI DEAL AUTH
Accounting date *	Transaction Date

### Events Listing

Account	Db / Cr	Field
Security Investment	Debit	Allocation Amount
Security Investment	Credit	Allocated Deal Discount
Security Investment	Debit	Allocated Deal Premium
Interest Accrued But not	Debit	AllocatedAccruedInterest
Brokerage Acc	Debit	Deal Brokerage Amt

< | 1-5 of 9 | >

\* Indicates Mandatory Field

### 3.13.2.3 Account Event

Account event is where the GL or Customer account numbers will be mapped to accounts already maintained in Account Template.

#### 3.13.2.3.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Set Up >> Accounting Config >> Account Event

Intellect Treasury - Windows Internet Explorer provided by Intellect Design Arena Ltd  
<http://10.10.7.67:20018/MiscPage.jsp?actionType=1>

**UBS NewYork** May 03, 2016 19:33:25      Welcome INTELLECTFO | [Logout](#)

**Account Event**

Create New    Modify/Delete    Search    Authorized List    Unauthorized List

Account Mapping    Account Names    Account Template

Tax & Brokerage    Admin    Futures    Document Management    Commodities    EAM    Rates Config    PFA    Bilateral Config    External Reference Id    Utilities    Risk Management

**Events Listing**

Account	Db / Cr	Field Code	Account Number	RCN Acc No	Flag Acc No
<input type="checkbox"/> FCY Settlement account	Credit	Buy Consolidated PS	1111100	TREASURY	G-GL
<input type="checkbox"/> FCY Settlement account	Debit	Buy Consolidated PS			
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					

\* indicates Mandatory Field

[Add](#) | [CopyFromExisting](#) | [Clear](#)

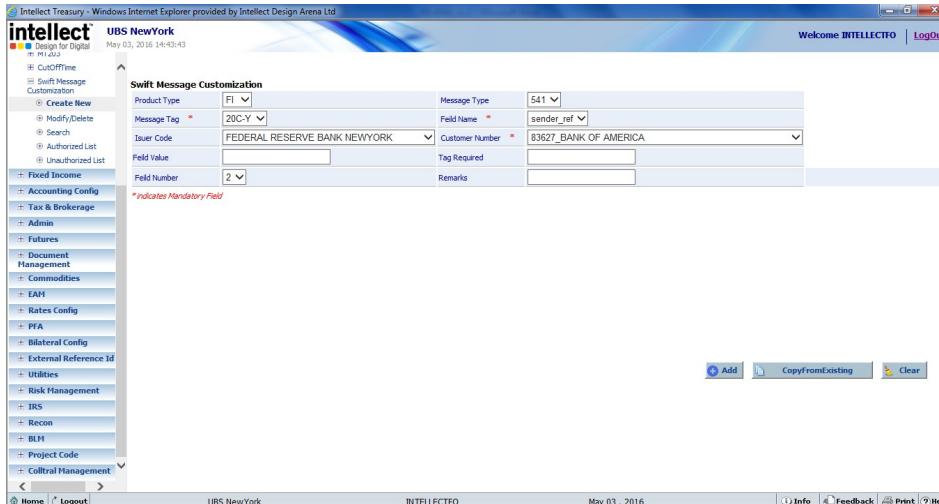
### 3.13.2.3.2 Description

- Prerequisites
  - Template Code(From Account Template)
  - Criteria Code ( From Account Criteria)
  - Deal Events
- Based upon selected template code, corresponding values will be populated. Account Number, RCN Account Number and Flag Account number (G-GL and C- Customer Accounts) are entered for mapping.

## 3.14 Swift Messages Configuration

### 3.14.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Set Up >> Operating >> Swift Message Configuration



### 3.14.2 Description

➤ Prerequisites

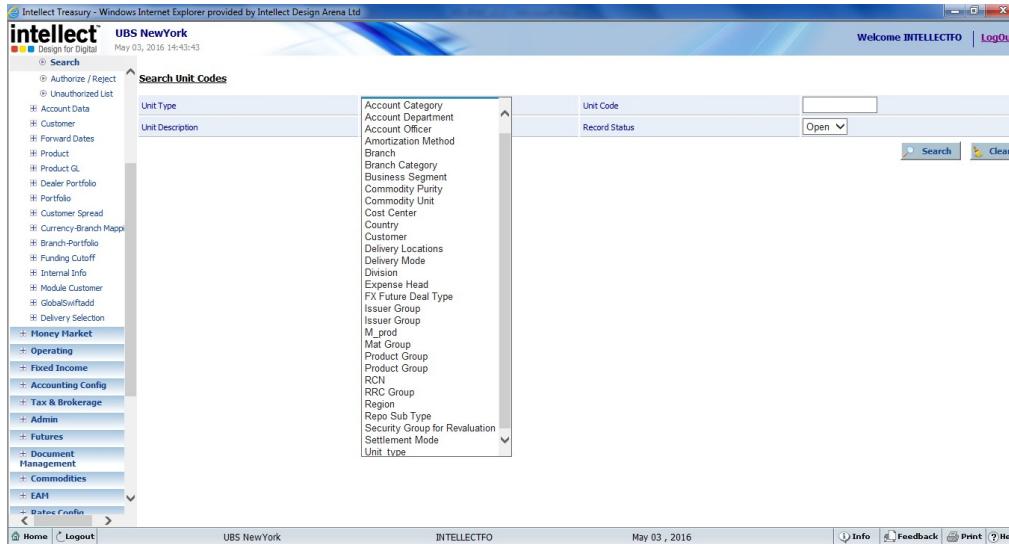
- Product
- Customer
- Unit Codes

Intellect™ One Treasury supports configuration and customization of Swift Messages as per requirement. For any particular product type and counterparty, System shows list of all the tags along with field values for specific message type which is selected.

## 3.15 Unit Codes

### 3.15.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Set Up >> Start Up >> Unit Codes



### 3.15.2 Description

- Prerequisites
  - Unit Type

Intellect One Treasury uses Unit codes maintenance for storing the information and segregation of units such as Country, Branch, Branch Category etc. fields used in the application.

## 3.16 Internal Info

Internal Info Master is used for configuring parameters based upon business logic which can be specific to any module or common.

### 3.16.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Set Up >> Start Up >> Internal Info

The screenshot shows a web-based application window titled "Internalinfo details - Internet Explorer". The main title bar is "Internal Info maintenance". The form contains the following fields:

Branch *	Module *	
MODEL BANK	FX	
Parameter Name *	Parameter Value *	Parameter Description *
ACCOUNTING_FRAMEWC	EVENT	Used for the Method of generating entry EVENT o
Maker	Checker	
MAKER	CHECKER	
Make Date Time	Check Date Time	
01/29/2014	01/29/2014 14:43 PM	

A note at the bottom left says "\* indicates Mandatory Field". At the bottom right are buttons for "Modify", "Delete", and "Close".

### 3.16.2 Description

➤ Prerequisites

- Branch
- Product

- Parameter Name

## 4.0 Front Office Functionality

Intellect™ Treasury FX Front Office module support various aspects of foreign exchange deal booking along with monitoring, managing of the positions and limits involved. Following are some prominent features of FX FO Module which is available in the system.

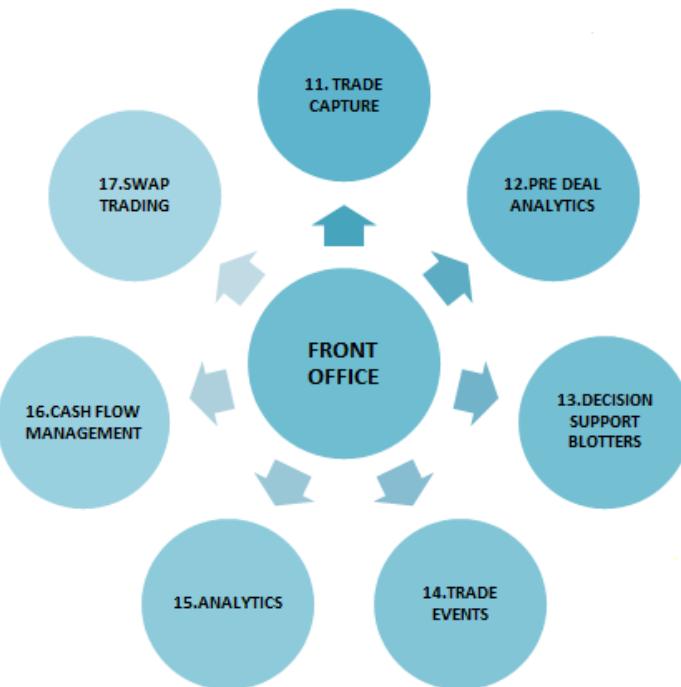


Figure: Front Office Functions

Intellect™ One Treasury Foreign Exchange FO Module supports following types of deal/trade booking in the system.

- Outright Deal (Cash,Tom ,Spot,NDF and Forward )

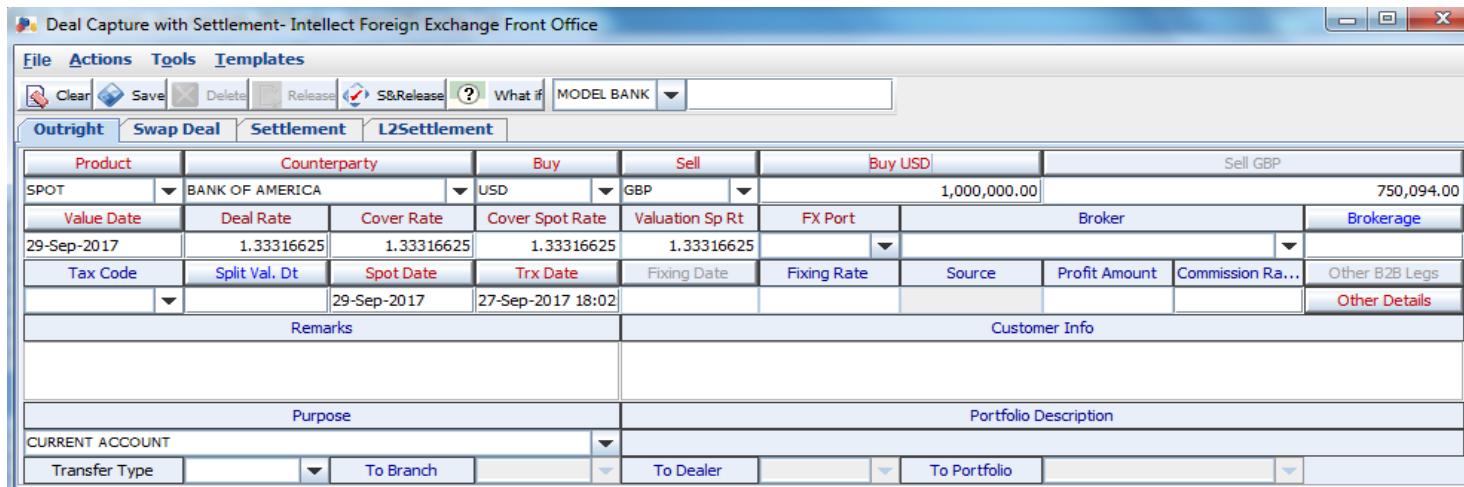
- SWAP Deal (Swap Spot, Swap Forward)

## 4.1 FX Outright Deal

Outright Deal Tab is used to book the CASH,TOM,SPOT ,NDF and Forward deals . It provides to capture settlement instructions based on the product , customer and currency code of the deal for simple outright deals . It also used for modification, Cancellation and authorization of the already booked deal.

Outright Deal capture screen is used for creating/entering new deal in the system. Mandatory Inputs for a deal booking are marked with Red Labels while the fields with blue labels are conditional mandatory and black ones are optional. ([See More Details: Outright Data Field Definitions](#)).

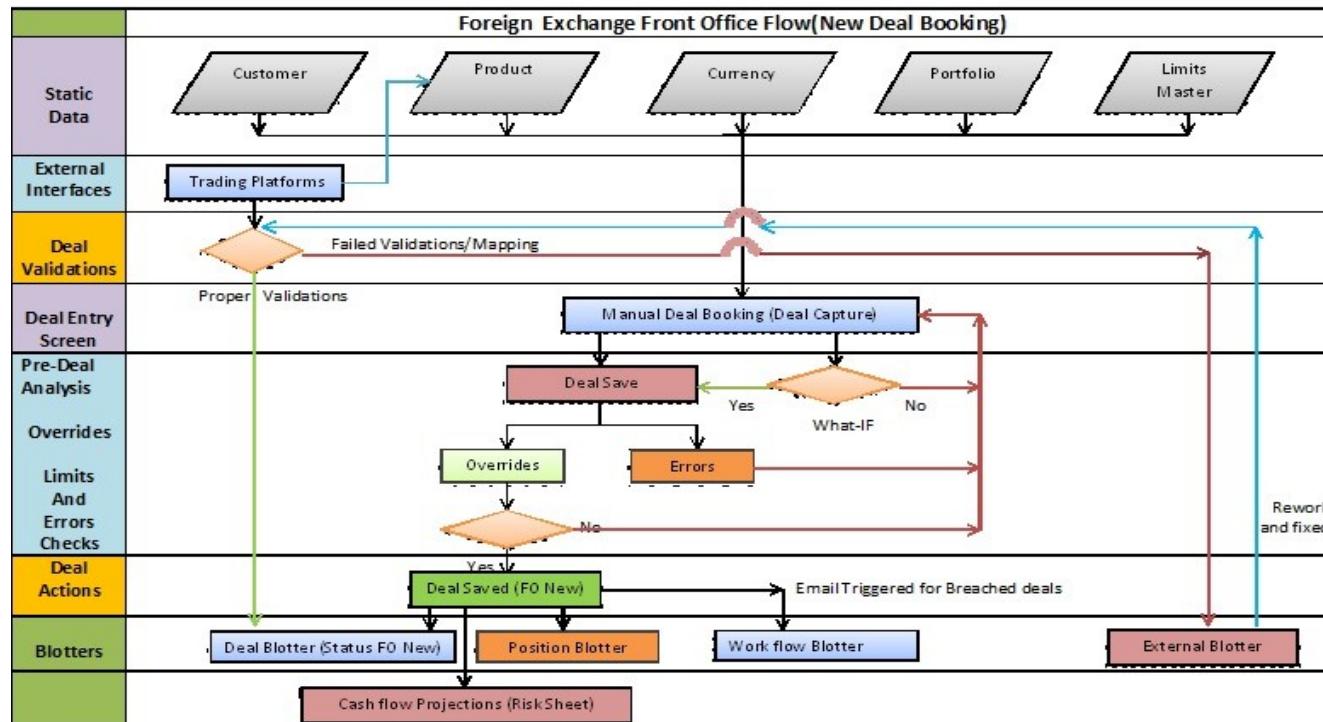
### 4.1.1 Screen Layout & Functional Description



**Navigation Path:** Intellect™ One Treasury >>Foreign Exchange >> Front Office >> Outright Deal Capture

Figure: FX FO Outright Deal Capture Screen

## 4.1.2 Process Flow



#### 4.1.3 Process Description

##### ➤ Prerequisites

Following Static Data should be maintained prior to deal booking in the system.

- Product
  - Currency
  - Portfolios
  - Customer/ Counterparty
  - Spot Rates
  - Spot Dates
  - Forward Dates
  - Forward Rates
- To capture outright deal in the system, basic details should be entered like Product, Sell Currency, Buy Currency , Buy Amount and Value Date along with Counterparty details.
- Based upon Buy Amount ,System Calculates the deal rate ,Cover rate,Spot rate ,Cover spot rate and Sell Amount.
- After deal related Calculations, user can check for Pre-Trade Analysis using [What-IF](#) Feature available in the system.
- After What-IF Verification, as per process flow of new deal booking, deal can be saved in the system. While Saving System Prompts for [Hard \(Errors\)](#) and [Soft Checks \(Overrides\)](#) as configured in the application at product level.

- While booking/Saving the deal, application verifies the [business validations](#) and in case of any breaching/violation of business rules, the same will be displayed on the Screen. Now the deal has been saved. For further actions on deal(s) please refer to the section [4.3 User Actions](#)
- Once the deal has been booked, System generated a unique reference number and same will be stored in the application.

For example: **1EC1701000071**

Where 1<sup>st</sup> digit represents Module Number (Outright deal starts with 1ECXXXX Series)

Next Two Alphabets = Booking center

Next 5 digits stand for System Defined JDate

Last 5 digits are for unique number generation. (It takes values from 1 to 99999)

- In case of Limit Breach, the deal sent to Workflow Blotter for approval and e-mail triggered from the system.

#### 4.1.5 Other Details

User can check the specific pre trade analysis through **Other details** tab. These are basically the rates maintained for the Currency combination and it also shows the conversion rates with respect to USD with notional P&L. Spread is added on these rates and displayed on the screen. In addition, this screen also provides the profit and loss in USD and LCY.  
[\(See More Details: Other Details Field Definitions\).](#)

**Spot-Fwd Deal Details**

	GBP - USD	LKR - USD	GBP - LKR
<b>Deal Spot Rate</b>	1.55113600	133.17480000	206.57222657
<b>Swap Points</b>	0.32609603	0.00000000	43.42777343
<b>Forward Rate</b>	1.87723203	133.17480000	250.00000000
<b>Cover Spot Rate</b>	1.54683919	133.17480000	206.00000000
<b>Cover Points</b>	0.00429681	0.00000000	0.57222657
<b>Cover Forward Rate</b>	1.55113600	133.17480000	206.57222657
<b>LCY Equivalent</b>	250,000	Spread	-43.42777343
<b>Spread PL in LCY</b>	-43,426.71	FX P/L in LCY	-43,427.77343
<b>Spread PL in USD</b>	-326.09	Eff Int Rate	
<b>Commission in LCY</b>			
<b>OK</b>			

Figure : Outright Other Details Screen

#### 4.1.6 Deal Settlement

User can book the deal with maintained settlement instructions based on the product ,customer and currency code of the deal for simple outright deals and swap deals . Settlement information's like accounting and beneficiary details can be updated through this tab. ([See More Details: Deal Settlement Field Definitions](#)).

Contingent Settlement fields are standard settlements which are generated at time of deal inception and reversed at value date. The accounts like contingent Bought ,contingent sold ,Reval P/L and interest accounts are displayed.

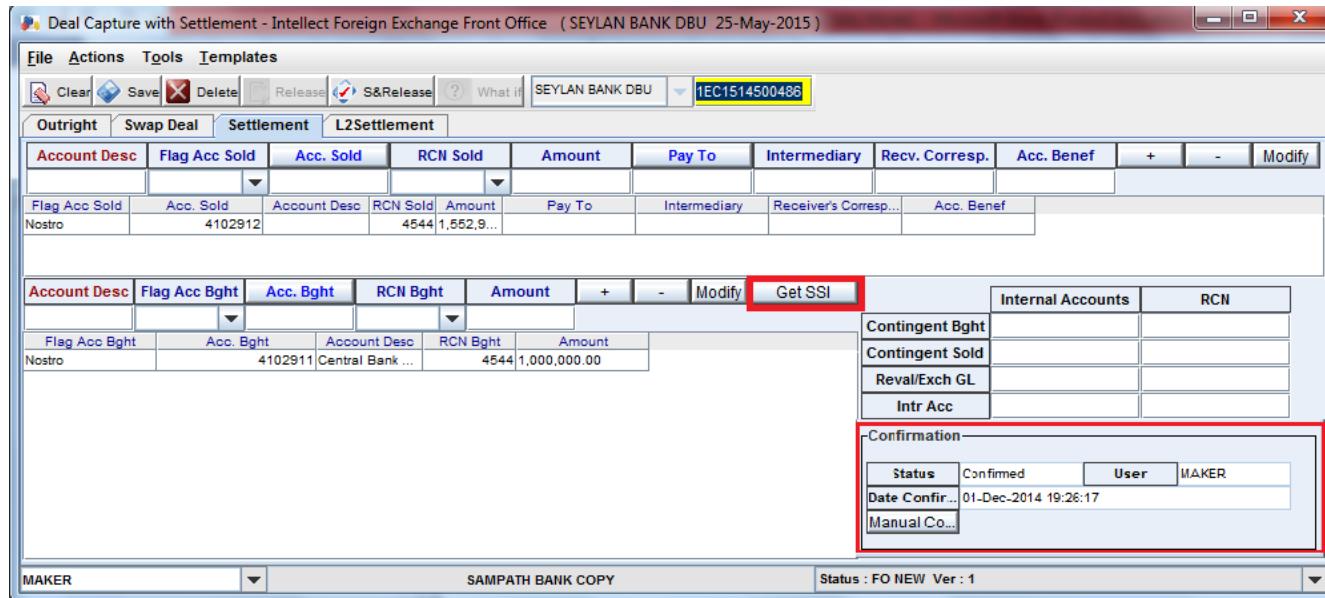


Figure: FX Deal Settlement Tab.

#### 4.1.7 Manual Confirmation

The FO Auth Deals which are to be authorized in the Back-office are to be confirmed prior to BO Authorization. To provide the confirmation in front office or back office is also configurable for the dealer. This confirmation is automatically done through the *Confirmation matching System*. In case if the deal is still unconfirmed due to counterparty delaying in sending the message or any other reason than it can be manually confirmed through this functionality.

- Once user done the manual /Auto confirmation of the deal then Deal Status can be changed to Unconfirmed to Confirmed along with User ID , Date and time
- Along with settlement details ,there is option of **manual confirmation** which can be done as highlighted in right corner of screen in the above Figure

## 4.2 FX SWAP Deal

Swap Deal Tab is used to book Swap trades .In majority it captures **Swap Spot Forward** and **Swap Forward- Forward** products.

Swap deals are having two legs as described below:

- For **swap spot forward** product, the first leg (Near Leg) has the value date as Cash /Tom/Spot/ date and the second leg is always forward deal called far leg .
- For **swap forward- forward** product, the first leg (Near Leg) has the value date as forward date and the second leg is also forward date called far leg.
- Below is the Swap Deal capture screen shot.

### 4.2.1 Screen Layout & Functional Description

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Front Office >> Swap Deal.

Swap Deal							
Product		Counterparty(Near Leg)		Counterparty(Far Leg)		Buy	Sell
SWAP-SPOT NEA		BARCLAYS BANK		BARCLAYS BANK		JPY	GBP
		Buy JPY	Sell GBP	Value Date	PIPS	Deal Rate	Deal Spot Rate
NEAR LEG		2,000,000.00	13,452.91	29-Sep-2017	0.00	148.66666702	148.66666702
		Sell JPY	Buy GBP	Value Date	PIPS	Deal Rate	Deal Spot Rate
FAR LEG		2,000,000.00	13,104.75	06-Oct-2017	39,527.25	152.61641875	148.66369375
L1 Fixing Date		L1 Fixing Rate	L2 Fixing Date	L2 Fixing Rate	L1 Valuation Rate	L1 Valuation Sp Rt.	L2 Valuation Rate
					148.66666702	148.66666702	152.61641875
Broker		Brokerage	L2 Commission	Source	L1 Profit Amount	L2 Profit Amount	<input type="checkbox"/> B2B <input type="checkbox"/> Rollover
							Other Details
Remarks				Customer Info			

Figure : Swap deal capture Screen

#### 4.2.3 Process Flow

Kindly refer to the [4.1.3 Process Flow](#) for deal process flow in front office.

#### 4.2.4 Process Description

➤ **Prerequisites**

Following Static Data should be maintained prior to deal booking in the system.

- Product
- Currency

- Portfolios
  - Customer/ Counterparty
  - Spot Rates
  - Spot Dates
  - Forward Dates
  - Forward Rates
- To capture Swap deal in the system, basic details should be entered like Product, Counterparty (Near Leg) ,Counterparty (Far Leg) , Buy Currency, Sell Currency , Buy Amount , Value Date for Near Leg and Far Leg and Portfolio for Near Leg and Far Leg
- Based upon Buy amount of Near leg ,Sell amount of Far leg is defualted to that Buy amount and System calculates the Sell Amount for Near leg and Buy amount for Far leg .
- And also calculates the Deal rate for Near leg & Far leg ,Spot rate for Near leg & Far leg and PIPS for Near leg & Far leg ,
- To capture Swap deal ,details of all the mandatory fields in the deal capture screen can be Refer [10.2.4 Data field for Swap Deal](#) for field details.
- After deal related [Calculations](#), user can check for Pre-Trade Analysis using [What-IF Feature](#) available in the system.
- After What-IF Verification, as per process flow of new deal booking, deal can be saved in the system. While Saving System Prompts for [Hard \(Errors\)](#) and [Soft Checks \(Overrides\)](#) as configured in the application at product level.
- While booking/Saving the deal, application verifies the business validations (provide hyperlink) and in case of any breaching/violation of business rules, the same will be displayed on the Screen. Now the deal has been saved. For further actions on deal(s) please refer to the section [4.3 User Actions](#)

- Once the deal has been booked, System generated two unique reference number and same will be stored in the application.

For example: **1EC1727000003L1** For Near Leg

**1EC1727000003L2** For Far Leg

Where 1<sup>st</sup> digit represents Module Number (FX deal starts with 1ECXXXX Series)

Next Two Alphabets = Booking centre

Next 5 digits stand for System Defined Date

Last 5 digits are for unique number generation. (It takes values from 1 to 99999)

- In case of Limit Breach, the deal sent to Workflow Blotter for approval and e-mail triggered from the system.
- Settlement details for Near leg deal is same as outright deal which is explained in [\*\*4.1.6 Deal Settlement\*\*](#) section
- Settlement details for Far leg deal can be captured in “**L2 Settlement**” Tab , all the fields information is applicable as explained in [\*\*4.1.6 Deal Settlement\*\*](#) section .
- Confirmation for Near leg deal is same as outright deal which is explained in [\*\*4.1.7 Manual Confirmation\*\*](#) section
- Confirmation for Far leg deal can be done in “**L2 Settlement**” Tab ,remaining fields information is same as explained in [\*\*4.1.7 Manual Confirmation\*\*](#) section .

#### 4.2.5 Other Details for Swap Deals

User can check the specific pre trade analysis through **Other details** tab. These are basically the rates maintained for the currency combination and it also shows the conversion rates with respect to USD with notional P&L. Spread is added on these rates and displayed on the screen. In addition, this screen also provides the profit and loss in USD and LCY.

	JPY - USD	GBP - USD	JPY - GBP		
L1 Cover Spot Rate	111.56973135	1.33250000	148.66666702		
L1 Swap Points	0.00000000	0.00000000	0.00000000		
L1 Forward Rate	111.56973135	1.33250000	148.66666702		
L1 Cover Spot Rate	111.56973135	1.33250000	148.66666702		
L1 Cover Points	0.00000000	0.00000000	0.00000000		
L1 Cover Forward Rate	111.56973135	1.33250000	148.66666702		
L2 Deal Spot Rate	111.56750000	1.33250000	148.66369375		
L2 Swap Points	0.03500000	0.03500000	3.95272500		
L2 Forward Rate	111.60250000	1.36750000	152.61641875		
L2 Cover Spot Rate	111.56750000	1.33250000	148.66369375		
L2 Cover Points	0.03500000	0.03500000	3.95272500		
L2 Cover Forward Rate	111.60250000	1.36750000	152.61641875		
	Spread	Spread PL in LCY	Spread PL in USD		
		FX P/L in LCY	Eff Int Rate	LCY Equivalent	
NEAR LEG	0.00000000	0.00	0.00		13,452.91
FAR LEG	0.00000000	0.00	0.00	-348.43382417	136.7401424
					13,104.75

Other details window in swap deal has similar fields descriptions under near and far leg accordingly. Refer to the [4.1.5 Other Details](#) section

## 4.3 User Actions

### 4.3.1 Screen Layout & Path

**Navigation Path:** Intellect One Treasury >> Foreign Exchange >> Front Office >>Actions

Deal Capture with Settlement - Intellect Foreign Exchange Front Office (UBS NewYork 31-May-2016)

File	<b>Actions</b>	Tools	Templates						
	<b>Save</b> Ctrl-V	Release	S&Release						
	<b>Delete/Cancel</b> Ctrl-D	What if	UBS NewYork						
	<b>Settlement</b>	1EC1613100226							
	<b>L2Settlement</b>								
	<b>Counterparty</b>	Buy	Sell						
	MERICA	USD	INR						
				Buy USD	Sell INR				
				1,000,000.00	134,574,833.34				
<b>Value Date</b>	<b>Deal Rate</b>	<b>Cover Rate</b>	<b>Cover Spot Rate</b>	<b>Valuation Sp Rt</b>	<b>FX Port</b>	<b>Broker</b>	<b>Brokerage</b>		
14-Jun-2016	134.57483334	134.57483334	63.24150000	63.24150000	VALO	FXCM[2]	0		
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Amount	Commission Ra...	Other B2B Legs
		11-May-2016	May-2016 17:48:44		TRSY				Other Details
<b>Remarks</b>				<b>Customer Info</b>					
<b>Purpose</b>				<b>Portfolio Description</b>					
CURRENT ACCOUNT				PARA VALORES NEGOCIO					
Transfer Type	To Branch	To Dealer	To Portfolio						
VPFOUSR	BANK OF AMERICA	Status : FO AUTH Ver : 1							

### 4.3.2 Description

➤ Prerequisites

- Deal Should be already entered in the system
- Valid or Proper Entitlement to take Actions

User can perform action/s on the deal using tools and then selecting desired option or by using directly the menu icons provided in the deal capture screen.



Following table shows the Action performed by the user and its impact on deal status.

S. No.	Current Deal Status	Action Performed	Revised Deal Status	Subsequent Actions Possible
1.	FO NEW	Modification	FO MODIFIED	Cancellation , Authorization
2.	FO NEW	Cancel	FOCANCEL	No Further action is possible in Front Office
3.	FONEW	Saved	FOAUTHORIZED	Direct Cancellation is not possible in FO.
4.	FOMOD	Saved	FOAUTHORIZED	No Action in FO, After Send Back Only the deal can be modified.
5.	FO MOD	Cancel	FO CANCEL	No Further action is possible in Front Office.
6.	FO AUTH	Save	FO MODIFIED	Cancellation , Authorization

## 5.0 Middle Office Deal Management

Intellect™ Treasury Application consists of comprehensive check-lists for analysing the impact of deal/trade booking (Pre and Post Analysis) in the system covering limit management, risk and Configurable alerts.

Those checks are categorized in Intellect™ One Treasury under following categories:

- Limit Management

- Pre-Trade Analysis(What-IF)
- Overrides(Soft Checks)
- Error(Hard Checks)
- Business Checks/Validations

## 5.1 Limit Management

Limit monitoring consists of Limit definition, online limit checking, update utilization and risk authorization. Limits are maintained using Limit definition and Limit Values Setup screens.

### 5.1.1 Screen Path & Setup

**Navigation Path:** Intellect™ One Treasury >> Setup >> Risk Management

### 5.1.2 Description

Intellect™ One Treasury System, Limit maintenance is a two-step process. First the proposed limit should be defined in the System. After defining and authorization, Values are assigned using Limit Values Setup Screen. Following are the limits which are supported for Foreign Exchange transactions:

- Dealer MAT
- Dealer Limit
- Treasury Limit
- BUY CCY- Per Txn Limit
- Sell CCY- Per Txn Limit
- Pre-Settlement Risk
- Settlement Risk Limit
- Loss Limit

- o Open Position Limit

### **5.1.2.1 Dealer MAT**

For each dealer , MAT Daily Limit and MAT MTD Limit can be maintained along with Daylight and Overnight Limits in USD while maintaining a dealer. The MAT limits are known as Management Action Triggers, which shows the maximum loss the dealer is allowed to make.

Please refer to [10.1 Computation Logic & Formulas](#) for calculations.

#### **5.1.2.1.1 Screen Path & Setup**

**Navigation Path:** Intellect™ One Treasury >> Setup >> Admin>>**Dealer**

<b>Dealer Limits</b>																											
<b>General</b>		<b>Restrictions</b>	<b>Portfolio Selections</b>																								
		<b>Miscellaneous</b>	<b>Limits</b>																								
<b>Dealer Id *</b>	MGMT	<b>Dealer Name *</b>	MANAGEMENT DEALER																								
<b>Access Level *</b>	ALL	<b>Dealer Group *</b>	MGMT																								
<b>Daylight Limit (USD) *</b>	10,000,000.00	<b>Overnight Limit (USD) *</b>	10,000,000.00																								
<b>MAT Daily Limit (USD) *</b>	5,000,000.00	<b>MAT MTD Limit (USD) *</b>	10,000,000.00																								
<b>Dealer Type</b>	INDIVIDUAL	<b>Split Cross Currency</b>	YES																								
<b>GMR Check Required</b>	YES	<b>Remarks</b>																									
<b>Default Branch *</b>	MODEL BAN																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2"><b>All Branches</b></th> <th colspan="2"><b>Selected Branches</b></th> </tr> </thead> <tbody> <tr> <td colspan="2">MODEL BANK</td> <td colspan="2">MODEL BANK</td> </tr> <tr> <td colspan="2">&lt;</td> <td colspan="2">&gt;</td> </tr> </tbody> </table>		<b>All Branches</b>		<b>Selected Branches</b>		MODEL BANK		MODEL BANK		<		>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2"><b>All Portfolios</b></th> <th colspan="2"><b>Selected Portfolios</b></th> </tr> </thead> <tbody> <tr> <td colspan="2">FIIN FILD FIWC FXLD FXWC MMIN</td> <td colspan="2">MMWC MMIN  FXWC FXLD</td> </tr> <tr> <td colspan="2">&lt;</td> <td colspan="2">&gt;</td> </tr> </tbody> </table>		<b>All Portfolios</b>		<b>Selected Portfolios</b>		FIIN FILD FIWC FXLD FXWC MMIN		MMWC MMIN  FXWC FXLD		<		>	
<b>All Branches</b>		<b>Selected Branches</b>																									
MODEL BANK		MODEL BANK																									
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<b>All Portfolios</b>		<b>Selected Portfolios</b>																									
FIIN FILD FIWC FXLD FXWC MMIN		MMWC MMIN  FXWC FXLD																									
<		>																									

### 5.1.2.1.2 Description

➤ Prerequisites

- Maintenance of MAT ( Daily Limit, MTD Limit ) in Dealer Screen
- FX Deal Booking

While deal booking, MAT has to be recomputed taking the current deal into account. If the calculated MAT goes beyond the allowed limit then that will be shown in What-IF Analysis and an override/error message is displayed based on the configuration. See below screenshot for same.

Message	Description	Limit
EXCHANGE RATE	Deal(1.36816625) and Market rate(1.368166) DIFFERENCE is with in Min. Limit(5) and (20)	IN LIMIT
DealerMAT	MGMT Group Daily MAT limit exceeded. MAT limit is: 10000 Current MAT: 13201.249	LIMIT BURST
DEALER LIMIT CHECK	Deal Amount (3,000,000.00) is between Maximum Deal Amount (5,000,000,000.00 and Minimum Deal Amount (100,000.00) (USD Equivalents)	IN LIMIT
Treasury Limit Check	Daylight Net Open Position Limit is: 250000000 Current Position is: 4089833.02	IN LIMIT
Treasury Limit Check	OverNight Net Open Position Limit is: 10000000 Current Position is: 4089833.02	IN LIMIT
SELL CCY - PER TXN LI...	Sold Position 21152842.965 and DayLight OverSold Limit 90000000	IN LIMIT
BUY CCY - PER TXN LIMIT	Bought Position 12854348.13 and DayLight OverBought Limit 50000000	IN LIMIT
PSR SR LIMIT	Utilization amt 18196321.16 is within the Limit amt 100000000 PSR-BOA. Utilization amt 2921794.04 is within the Limit amt 10000000 SettRisk-BOA.	IN LIMIT
LOSS LIMIT	MGMT Realized PL is: 6,576,569.13, YTD PL : 120,000.00 (USD Equivalent)	IN LIMIT
OPEN POSITION LIMIT	Open Position Limit is not defined	IN LIMIT

What-IF Analysis Screen for Dealer MAT Limit

## 5.1.2.2 Dealer Limits

### 5.1.2.2.1 Screen Layout & Setup

**Navigation Path:** Intellect™ One Treasury >> Setup >> Admin >> **Dealer**

Dealer Limits								
General		Restrictions		Portfolio Selections		Miscellaneous		Limits
Product Type	Product Code	Portfolio Code	Min Amount	Max Amount	Percentage Factor	Tenor	Period date	
FX	SPOT	ALL	100000	5000000000	100			
FX	FORWARD	ALL	100000	5000000000	100			
MM	INTERBANK DI	ALL	100000	5000000000	100			
MM	INTERBANK PI	ALL	100000	5000000000	100			
FI	TREASURY BO	ALL	1000000	50000000000	100			
FI	DISCOUNTED	ALL	1000000	50000000000	100			

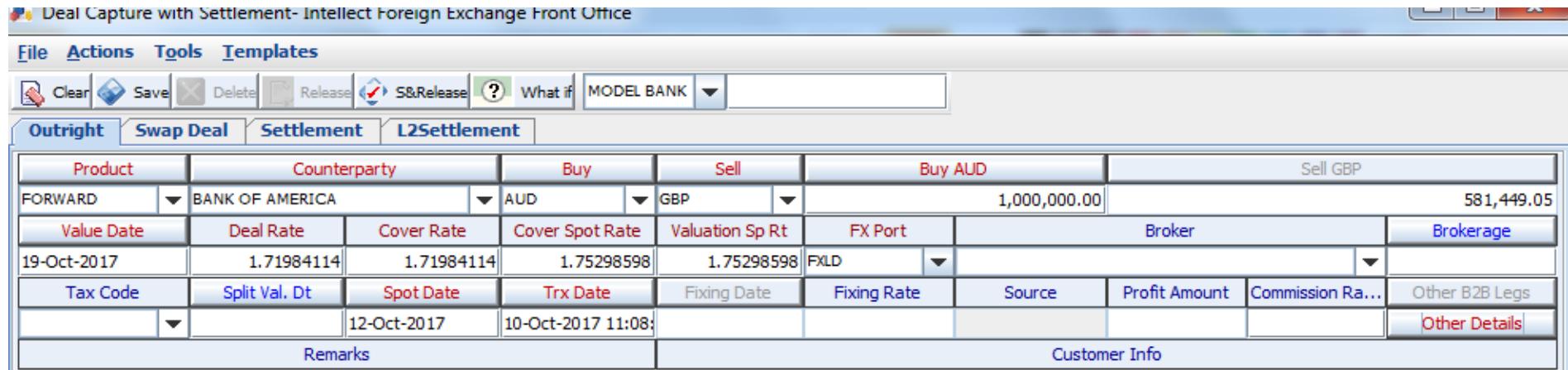
### 5.1.2.2.2 Description

➤ Prerequisites

- Maintenance of max and minimum amount for module wise ( FX, MM, ...etc) under limits tab in Dealer Screen
- FX Deal Booking

In Intellect™ One Treasury, Dealer Limits are maintained when defining the dealer in the system, to track the Day light and Overnight NOP (Net Open Position). Dealer Limits check is done during deal entry as to ensure that the dealers' NOPs are within a specified range. Please refer to [10.1 Computation Logic & Formulas](#) for calculations.

**For Example:** Consider Following scenarios, When an FX deal is booked with AUD as BUY currency and GBP as Sell currency then the dealer limit can calculate like convert the Buy amount to USD equivalent using currency mid rate..



The screenshot shows the 'Deal Capture with Settlement- Intellect Foreign Exchange Front Office' application. The interface includes a menu bar with File, Actions, Tools, and Templates. Below the menu is a toolbar with Clear, Save, Delete, Release, S&Release, What if, and MODEL BANK buttons. The main window has tabs for Outright, Swap Deal, Settlement, and L2Settlement, with Settlement selected. The Settlement tab displays a grid of deal details. Key data points include:

Product	Counterparty	Buy	Sell	Buy AUD	Sell GBP				
FORWARD	BANK OF AMERICA	AUD	GBP	1,000,000.00	581,449.05				
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation Sp Rt	FX Port	Broker	Brokerage		
19-Oct-2017	1.71984114	1.71984114	1.75298598	1.75298598	FXLD				
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Amount	Commission Ra...	Other B2B Legs
		12-Oct-2017	10-Oct-2017 11:08						Other Details
Remarks				Customer Info					

While deal booking, dealer limit can be seen in What-IF Analysis i.e [Pre-Trade Analysis](#) and an override/error message is displayed based on the configuration. See below screenshot for same.

Message	Description	
EXCHANGE RATE	Deal(1.71984114) and Market rate(1.719841) DIFFERENCE is within Min. Limit(5) and (20)	IN LIMIT
DealerMAT	MGMT Group Daily MAT limit exceeded. MAT limit is: 10000 Current MAT: 11810.257	LIMIT BURST
DEALER LIMIT CHECK	Deal Amount (774,780.86) is between Maximum Deal Amount (5,000,000,000.00 and Minimum Deal Amount (100,000.00) (USD Equivalents)	IN LIMIT
Treasury Limit Check	Daylight Net Open Position Limit is: 2500000000 Current Position is: 4088442.027	IN LIMIT
Treasury Limit Check	OverNight Net Open Position Limit is: 10000000 Current Position is: 4088442.027	IN LIMIT
PSR SR LIMIT	Utilization amt 15956521.16 is within the Limit amt 100000000 PSR-BOA.	IN LIMIT
LOSS LIMIT	Utilization amt 774780.86 is within the Limit amt 10000000 SettRisk-BOA.	IN LIMIT
OPEN POSITION LIMIT	MGMT Realized PL is: 1,009,946.35. YTD PL : 120,000.00 (USD Equivalent)	IN LIMIT
	Open Position Limit is not defined	IN LIMIT

What-IF Analysis Screen for Dealer Limit

### 5.1.2.3 Treasury Limits / Bank Limits

Treasury limit can be defined at the branch level for NOP daylight and overnight position of all currencies .These limits are defined at the branch level in USD.

#### 5.1.2.3.1 Screen Layout and Setup

**Navigation Path:** Intellect™ One Treasury >> Setup >> Rates Config >> Foreign Exchange >> **Treasury Limits**

Branch *	MODEL BANK	Limit Currency *	USD
Total OverNight Limit *	10,000,000.00	Total Daylight Limit *	250,000,000.00
Earmark Overnight Amount	0.00	Earmark Daylight Amount	0.00
Available Overnight Limit	10,000,000.00	Available Daylight Limit	250,000,000.00
Remarks	Treasury Limits for Bank		

\*indicates Mandatory Field

### 5.12.3.2 Description

➤ Prerequisites

- Branch
- Currency

In Intellect™ One Treasury, Treasury limits are defined in Setup of 'Treasury Limits ', to track the banks NOP, treasury defines limit to take care of its exposure. In our system NOP at bank level is tracked at branch level, we maintain NOP day light and overnight. When a FX deal is booked in the system NOP of the bank is compared with the limit maintained in the branch and alerts the management depending on the configuration whether it is an override or an error. Please refer to [10.1 Computation Logic & Formulas](#) for calculations.

**For Example:** Consider Following scenarios, Consider Following scenarios, When an FX deal is booked with USD as BUY currency and GBP as Sell currency then the Treasury limits can calculate like

If NOP position has to be computed as NET position (This is set in internal info table )

then (buy amount – sell amount) is added to the existing to NOP position.

If not, then buy amount + sell amount is added to the existing NOP position.

If this NOP position exceeds the maintained limit then an override/error is displayed based on the configuration

Deal Capture with Settlement- Intellect Foreign Exchange Front Office

Outright Swap Deal Settlement L2Settlement										
Product	Counterparty		Buy		Sell		Buy USD		Sell GBP	
FORWARD	BANK OF AMERICA		USD	GBP			3,000,000.00		2,192,715.98	
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation Sp Rte	FX Port		Broker		Brokerage	
19-Oct-2017	1.36816625	1.36816625	1.33316625	1.33316625	FXLD					
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate		Source	Profit Amount	Commission Ra...	
		12-Oct-2017	10-Oct-2017 11:08						Other B2B Legs	
Remarks					Customer Info					Other Details

While deal booking, Treasury limit can be seen in What-IF Analysis i.e [Pre-Trade Analysis](#) and an override/error message is displayed based on the configuration. See the below screenshot for same.

What if

Message	Description	L
EXCHANGE RATE	Deal(1.36816625) and Market rate(1.368166) DIFFERENCE is with in Min. Limit(5) and (20)	IN LIMIT
DealerMAT	MGMT Group Daily MAT limit exceeded. MAT limit is: 10000 Current MAT: 13201.249	LIMIT BURS
DEALER LIMIT CHECK	Deal Amount (3,000,000.00) is between Maximum Deal Amount (5,000,000,000.00 and Minimum Deal Amount (100,000.00) (USD Equivalents)	IN LIMIT
Treasury Limit Check	Daylight Net Open Position Limit is: 250000000 Current Position is: 4089833.02	IN LIMIT
Treasury Limit Check	OverNight Net Open Position Limit is: 10000000 Current Position is: 4089833.02	IN LIMIT
SELL CCY - PER TXN LI...	Sold Position 21152842.965 and DayLight OverSold Limit 90000000	IN LIMIT
BUY CCY - PER TXN LIMIT	Bought Position 12854348.13 and DayLight OverBought Limit 50000000	IN LIMIT
PSR SR LIMIT	Utilization amt 18196321.16 is within the Limit amt 100000000 PSR-BOA. Utilization amt 2921794.04 is within the Limit amt 100000000 SettRisk-BOA.	IN LIMIT
LOSS LIMIT	MGMT Realized PI is: 6,576,569.13. YTD PL : 120,000.00 (USD Equivalent)	IN LIMIT
OPEN POSITION LIMIT	Open Position Limit is not defined	IN LIMIT

What-IF Analysis Screen for Treasury Limit

**P.S:** Similar Messages were repeated during deal booking process, in form of [Overrides](#) or [Error](#) Pop ups based upon limit configuration defined under setup.

#### 5.1.2.4 Currency Limits ( Buy /Sell Currency - Per Txn Limit )

System can keep track of an individual currency NOP or a group of currencies put together and a limit defined. And all the currency limits are maintained in USD equivalent. If both bought and sold currencies belong to the same basket then the net amount will be checked with the maintained limit. Otherwise individual currency limit will be checked.

##### 5.1.2.4.1 Screen Layout & Setup

**Navigation Path:** Intellect™ One Treasury >> Setup >> Startup >> **Currency**.

Daylight Bght amount and Daylight sold amount can be defined in Currency maintenance screen as shown in below:

Currency			
Currency Info		Currency Info...	
		Rates	
Currency Code *	840	Swift Currency Code *	USD
Short Name *	USD	Rate Conversion Method *	0 - FCY*RATE=LCY ▾
Description *	UNITED STATES DOLLAR	Interest Method *	0 - 365/360 ▾
Country *	US	Significant Decimal Digits *	2 ▾
First Weekend *	7 - Sat ▾	Second Weekend	1 - Sun ▾
Currency Type	0 ▾	Gulf Currency *	No ▾
Euro Indicator *	Non-Euro ▾	Spot Days *	2
IMPACS Code		FMS Code	1
Initial Margin For CTA % *	1	Non-Deliverable	<input type="checkbox"/>
Include SDR Basket	<input type="checkbox"/>	Index Code	▼
<i>* indicates Mandatory Field</i>			
Volatility Factor	0.0	Limit USD	0.0
Daylight Bght	50000000	Daylight Sold	70000000
Overnight Bght		Overnight Sold	
Transfer Days	1	Fixing Days	0
Nice CCY Code	0	CB Region Code	0
HO CCY Code	0	CB CCY Code	0

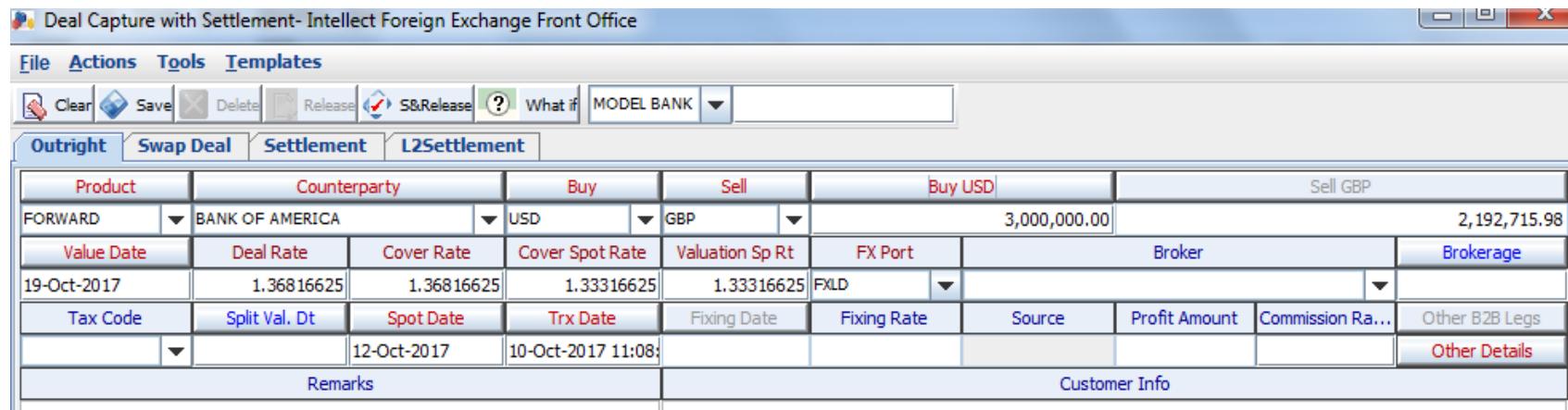
#### 5.1.2.4.2 Description

- Prerequisites
  - Dealer
  - Currency

#### 5.1.2.4.3 BUY CCY- Per Txn Limit

After deal got booked, system convert the Buy currency amount in USD and adding to the existing Bought Position and then compares to the defined limit amount. If the calculated Buy Position goes beyond the allowed limit then that will be shown as part of [Pre-Trade or What-IF Analysis](#) and an override/error message is displayed based on the configuration. See below screenshot for same.

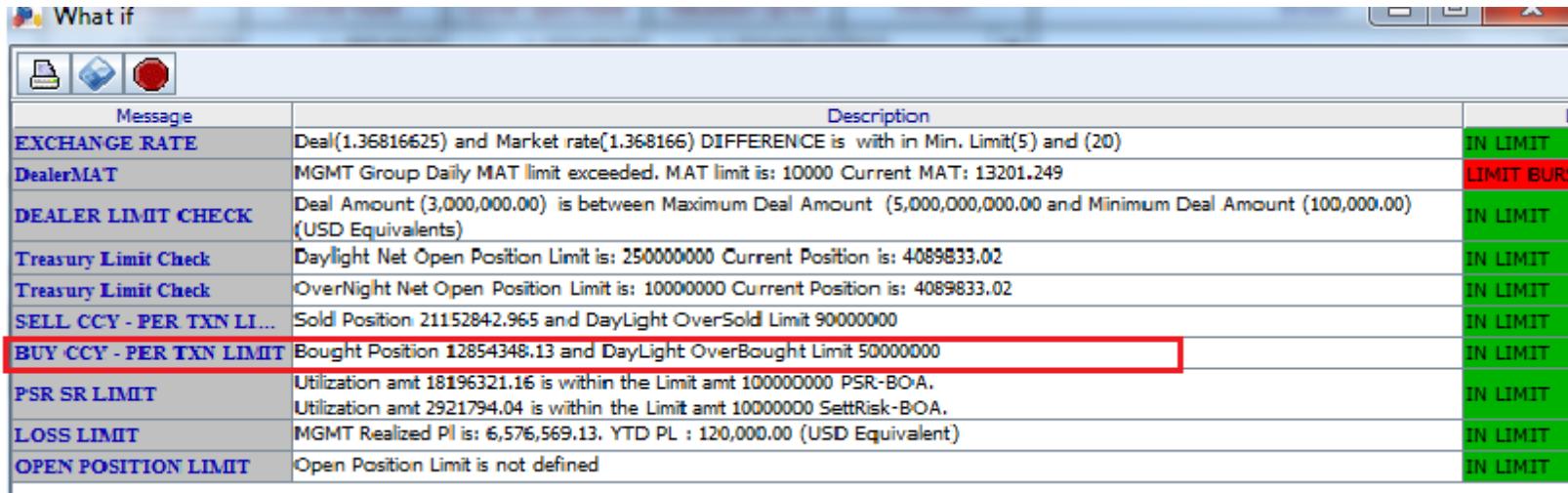
**For Example:** When an FX deal is booked with USD as BUY currency and GBP as Sell currency then the Buy Currency Per Transaction limits can be shown in below What-If Screen calculate like



The screenshot shows a software interface titled "Deal Capture with Settlement- Intellect Foreign Exchange Front Office". The main window has a toolbar with "File", "Actions", "Tools", and "Templates" menus, along with buttons for "Clear", "Save", "Delete", "Release", "S&Release", "What if", and "MODEL BANK". Below the toolbar, there are tabs: "Outright", "Swap Deal", "Settlement", and "L2Settlement". The "Settlement" tab is selected. The main area contains a large table with the following data:

Product	Counterparty	Buy	Sell	Buy USD	Sell GBP				
FORWARD	BANK OF AMERICA	USD	GBP	3,000,000.00	2,192,715.98				
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation Sp Rt	FX Port	Broker	Brokerage		
19-Oct-2017	1.36816625	1.36816625	1.33316625	1.33316625	FXLD				
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Amount	Commission Ra...	Other B2B Legs
		12-Oct-2017	10-Oct-2017 11:08						Other Details
Remarks				Customer Info					

What if



Message	Description	L
<b>EXCHANGE RATE</b>	Deal(1.36816625) and Market rate(1.368166) DIFFERENCE is with in Min. Limit(5) and (20)	IN LIMIT
<b>DealerMAT</b>	MGMT Group Daily MAT limit exceeded. MAT limit is: 10000 Current MAT: 13201.249	LIMIT BURS
<b>DEALER LIMIT CHECK</b>	Deal Amount (3,000,000.00) is between Maximum Deal Amount (5,000,000,000.00 and Minimum Deal Amount (100,000.00) (USD Equivalents)	IN LIMIT
Treasury Limit Check	Daylight Net Open Position Limit is: 250000000 Current Position is: 4089833.02	IN LIMIT
Treasury Limit Check	OverNight Net Open Position Limit is: 10000000 Current Position is: 4089833.02	IN LIMIT
SELL CCY - PER TXN LI...	Sold Position 21152842.965 and DayLight OverSold Limit 90000000	IN LIMIT
<b>BUY CCY - PER TXN LIMIT</b>	Bought Position 12854348.13 and DayLight OverBought Limit 50000000	IN LIMIT
PSR SR LIMIT	Utilization amt 18196321.16 is within the Limit amt 100000000 PSR-BOA. Utilization amt 2921794.04 is within the Limit amt 10000000 SettRisk-BOA.	IN LIMIT
LOSS LIMIT	MGMT Realized PL is: 6,576,569.13. YTD PL : 120,000.00 (USD Equivalent)	IN LIMIT
OPEN POSITION LIMIT	Open Position Limit is not defined	IN LIMIT

#### 5.1.2.4.3.4 Sell CCY- Per Txn Limit

After deal got booked, system calculates the Sell currency amount in USD and adding to the existing Sold Position and then compares to the defined limit amount. If the calculated Sell Position goes beyond the allowed limit then that will be shown as part of [Pre-Trade or What-IF Analysis](#) and an override/error message is displayed based on the configuration. See below screenshot for same.

**For Example:** When an FX deal is booked with USD as BUY currency and GBP as Sell currency then the Sell Currency Per Transaction limits can be shown in below What-If Screen

Deal Capture with Settlement- Intellect Foreign Exchange Front Office

**File Actions Tools Templates**

**Outright Swap Deal Settlement L2Settlement**

Product		Counterparty		Buy		Sell		Buy USD		Sell GBP	
FORWARD	BANK OF AMERICA	USD	GBP					3,000,000.00		2,192,715.98	
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation Sp Rt	FX Port		Broker		Brokerage		
19-Oct-2017	1.36816625	1.36816625	1.33316625	1.33316625	FXLD						
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Amount	Commission Ra...	Other B2B Legs		
		12-Oct-2017	10-Oct-2017 11:08						Other Details		
Remarks					Customer Info						
<b>LOSS LIMIT</b> <small>Amount required for a position to be considered a loss position.</small>											
<b>OPEN POSITION LIMIT</b> <small>Open Position Limit is not defined</small> <b>IN LIMIT</b>											

### 5.1.2.5 Open Position Limit

<< Need to Update>>

#### 5.1.2.5.1 Screen Layout & Setup

**Navigation path:** Intellect™ One Treasury >> Setup >> Risk Management >> **Limit Definition & Limit Values.**

#### 5.1.2.5.2 Description

- Prerequisites
  - Currency
  - Entity List

Limit Setup Process is similar as defined in [5.1.2.1.1 Screen Path & Setup](#). While defining, limit type should be defined as Portfolio limit with applicable entity parameters.

**For Example:** Consider Following scenarios, while booking a new deal in the system, [Pre-Trade Analysis](#) has been done to verify the Portfolio limit check

##### Scenario 1: (Within the Limit)

### 5.1.2.6 Loss Limit

<< Need to Update>>

#### 5.1.2.6.1 Screen Layout & Setup

**Navigation path:** Intellect™ One Treasury >> Setup >> Risk Management >> **Limit Definition & Limit Values.**

#### 5.1.2.6.2 Description

➤ Prerequisites

- Currency
- Entity List
- BPS
- Product
- Customer
- Security

Limit Setup Process is similar as defined in [5.1.2.1.1 Screen Path & Setup](#). While defining, limit type should be defined as trading limit with applicable entity parameters.

**For Example:** Consider Following scenarios, while booking a new deal in the system, [Pre-Trade Analysis](#) has been done to verify the Portfolio limit check

**Scenario 1: (Within the Limit)**

## 5.1.2.7 Pre Settlement Risk (PSR) Limit

### 5.1.2.7.1 Screen Layout & Setup

**Navigation path:** Intellect™ One Treasury >> Setup >> Risk Management >> **Limit Definition & Limit Values.**

<p><b>Limit details - Windows Internet Explorer provided by Intellect Design Arena Ltd</b></p> <p>http://10.10.7.9:7789/LimitEvent.do?Event=Limit_ListView&amp;ListAction=CHECKERACTION&amp;%24%24ReqId=10649&amp;%24%24QueueName=PENDING&amp;ListTyp</p> <p><b>Limit Definition</b></p> <table border="1"> <tr> <td>Limit Category *</td> <td>PreSettlement Risk</td> <td>Limit Type Code *</td> <td>PS_LMT</td> </tr> <tr> <td>Limit Currency *</td> <td>USD</td> <td>Limit Description *</td> <td>PS_FI_LMT</td> </tr> <tr> <td>Check For *</td> <td><input checked="" type="radio"/> Gross <input type="radio"/> Inflow <input type="radio"/> Outflow <input type="radio"/> Net</td> <td>Limit Option *</td> <td><input checked="" type="radio"/> Ceiling <input type="radio"/> Floor</td> </tr> <tr> <td>Period *</td> <td><input checked="" type="radio"/> Both <input type="radio"/> Daylight <input type="radio"/> Overnight</td> <td>Error Required #</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Verification Required</td> <td><input type="checkbox"/></td> <td>Override Required #</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Limit Amount Option *</td> <td><input type="radio"/> Percent <input checked="" type="radio"/> Amount</td> <td>Calculation Method</td> <td>MLIV</td> </tr> </table> <p><b>Entity List</b></p> <table border="1"> <thead> <tr> <th colspan="2">Entity List</th> <th colspan="2">* Entities Selected</th> </tr> </thead> <tbody> <tr> <td>BPS</td> <td>&gt;&gt;</td> <td>LIABNUM</td> <td></td> </tr> <tr> <td>BROKER</td> <td>&gt;</td> <td></td> <td></td> </tr> <tr> <td>COUNTRY</td> <td>&lt;</td> <td></td> <td></td> </tr> <tr> <td>CURRENCY</td> <td>&lt;&lt;</td> <td></td> <td></td> </tr> <tr> <td>DEALER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>ISSUER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>LIABNUM</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PRODUCT</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PRODUCT_TYPE</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SECURITY</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Authorize</b>   <b>Reject</b>   <b>Rework</b>   <b>Close</b></p>	Limit Category *	PreSettlement Risk	Limit Type Code *	PS_LMT	Limit Currency *	USD	Limit Description *	PS_FI_LMT	Check For *	<input checked="" type="radio"/> Gross <input type="radio"/> Inflow <input type="radio"/> Outflow <input type="radio"/> Net	Limit Option *	<input checked="" type="radio"/> Ceiling <input type="radio"/> Floor	Period *	<input checked="" type="radio"/> Both <input type="radio"/> Daylight <input type="radio"/> Overnight	Error Required #	<input type="checkbox"/>	Verification Required	<input type="checkbox"/>	Override Required #	<input checked="" type="checkbox"/>	Limit Amount Option *	<input type="radio"/> Percent <input checked="" type="radio"/> Amount	Calculation Method	MLIV	Entity List		* Entities Selected		BPS	>>	LIABNUM		BROKER	>			COUNTRY	<			CURRENCY	<<			DEALER				ISSUER				LIABNUM				PRODUCT				PRODUCT_TYPE				SECURITY				<p><b>LimitValues details - Windows Internet Explorer provided by Intellect Design Arena Ltd</b></p> <p>http://10.10.7.9:7789/LimitValuesEvent.do?Event=LimitValues_ListView&amp;ListAction=CHECKERACTION&amp;%24%24ReqId=10650&amp;%24%24QueueName=PEND</p> <p><b>Limit Values</b></p> <table border="1"> <tr> <td>Limit Type Code *</td> <td>PS_LMT</td> <td>Limit Code *</td> <td>PSR_FIS</td> </tr> <tr> <td>Limit Amount *</td> <td>100,000.00</td> <td>Limit Percentage *</td> <td>100</td> </tr> <tr> <td>Earmark Amount</td> <td>0.00</td> <td>Limit Applied on *</td> <td></td> </tr> <tr> <td>Effective Date *</td> <td>16/09/2015</td> <td>Expiry Date *</td> <td>16/09/2019</td> </tr> <tr> <td>Utilization Amount *</td> <td>0.00</td> <td></td> <td></td> </tr> <tr> <td>Liability Number *</td> <td>50034</td> <td></td> <td></td> </tr> </table> <p style="text-align: center;"><b>Authorize</b>   <b>Reject</b>   <b>Rework</b>   <b>Close</b></p>	Limit Type Code *	PS_LMT	Limit Code *	PSR_FIS	Limit Amount *	100,000.00	Limit Percentage *	100	Earmark Amount	0.00	Limit Applied on *		Effective Date *	16/09/2015	Expiry Date *	16/09/2019	Utilization Amount *	0.00			Liability Number *	50034		
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ISSUER																																																																																													
LIABNUM																																																																																													
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Limit Amount *	100,000.00	Limit Percentage *	100																																																																																										
Earmark Amount	0.00	Limit Applied on *																																																																																											
Effective Date *	16/09/2015	Expiry Date *	16/09/2019																																																																																										
Utilization Amount *	0.00																																																																																												
Liability Number *	50034																																																																																												

### 5.1.2.7.2 Description

➤ Prerequisites

- Limit Currency
- Entity List
- Liability Number(Customer)

Limit Setup Process is similar as defined in [5.1.2.1.1 Screen Path & Setup](#). While defining, limit type should be defined as Pre-Settlement Risk limit with applicable entity parameters.

Pre-Settlement Limit Values is computed by the system during deal entry before settlement. Pre-settlement Risk value is sum of two components

- CMTM(Current Marked to Market value)
- MLIV(Maximum Likely Increase in value)

$$\text{So, PSR} = \text{CMTM} + \text{MLIV}$$

System calculates PSR values based upon the calculation method defined in limit definition screen. Calculation Method can be Total Exposure or MLIV.

Please Refer to the [Appendix](#) for PSR Calculations.

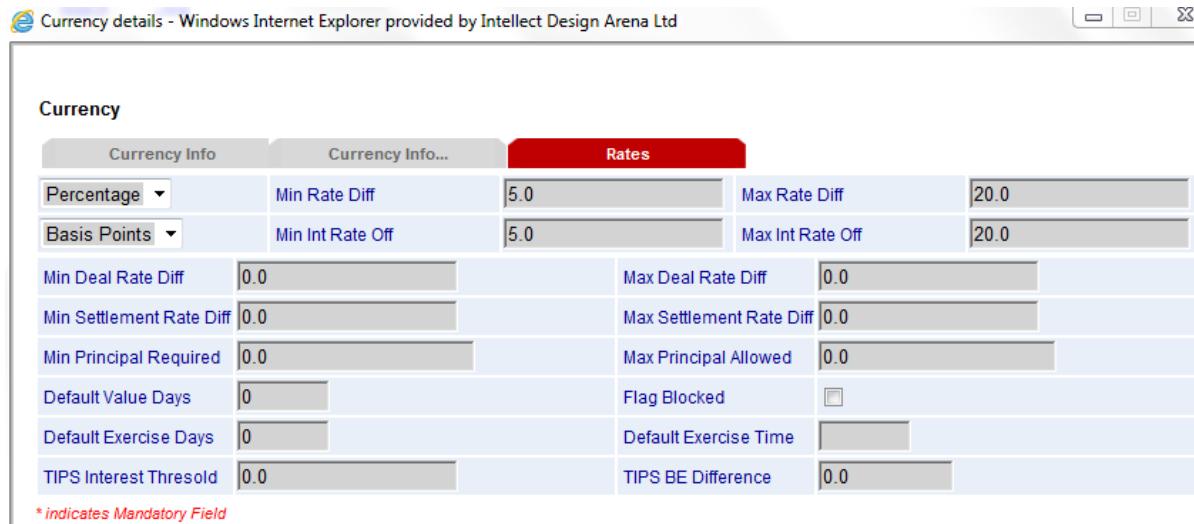
## 5.2 Business Checks

### 5.2.1 Rate Reasonability Check

During deal entry process Rate reasonability check (RRC) is performed for ensuring that the exchange rate is within a defined range or not. The main purpose of this Limit is to check the difference between the Market rate and Treasury rate which again will compare with Min Rate Diff and Max Rate Diff. This Min Rate Diff and Max Rate Diff will be maintained at **Currency Level**.

#### 5.2.1.1 Screen Layout and Setup

**Navigation Path:** Intellect One Treasury >> Setup >> Currency>>



Currency Info		Currency Info...		Rates	
Percentage		Min Rate Diff	5.0	Max Rate Diff	20.0
Basis Points		Min Int Rate Off	5.0	Max Int Rate Off	20.0
Min Deal Rate Diff	0.0			Max Deal Rate Diff	0.0
Min Settlement Rate Diff	0.0			Max Settlement Rate Diff	0.0
Min Principal Required	0.0			Max Principal Allowed	0.0
Default Value Days	0			Flag Blocked	<input type="checkbox"/>
Default Exercise Days	0			Default Exercise Time	
TIPS Interest Thresold	0.0			TIPS BE Difference	0.0

\* indicates Mandatory Field

### 5.2.1.2 Description

#### ➤ Prerequisites

To Enable RRC Check in the application, following configuration should be done

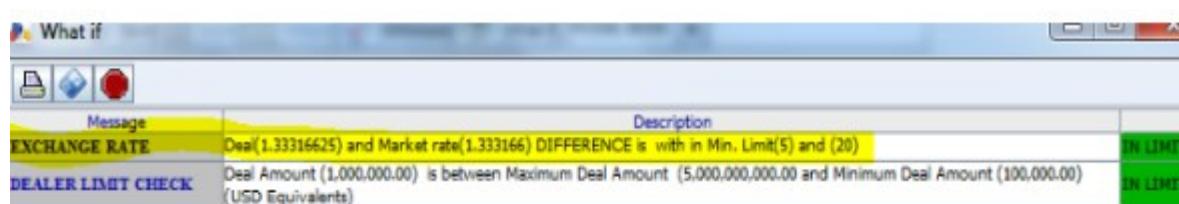
- ① In [Product Master](#) >> Add/Modify Overrides section, Both Override and Deal Verification check boxes should be marked as YES for Rate reasonability check.
- ② In [Internal Info Maintenance](#) >> Parameter Name (CHECKREUTER\_RRC) should be marked as 'ONLINE' mode.

#### ➤ Calculation

**For Example:** The rate reasonability for exchange rate of an FX deal in the system is computed as , the deal rate is **1.33316625** and Market Rate is computed as **1.333166** .See the screenshot for same.

The main purpose of this Limit is to check the difference between the Market rate and Treasury rate which again will compare with Min Rate Diff and Max Rate Diff. This Min Rate Diff and Max Rate Diff will be maintained at **Currency Level**.

Outright Swap Deal Settlement L2Settlement								
Product	Counterparty		Buy	Sell	Buy USD		Sell GBP	
SPOT	BANK OF AMERICA		USD	GBP		1,000,000.00		750,094.00
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation Sp Rt	FX Port	Broker		Brokerage
29-Sep-2017	1.33316625	1.33316625	1.33316625	1.33316625				
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Amount	Commission Ra...
		29-Sep-2017	27-Sep-2017 18:02					Other B2B Legs
								Other Details



## 5.3 What-IF Analysis

What- IF is used to see the effect of booking an intended deal without actually booking it in the system. It acts as a decision making tool for the dealers. What-IF Screen checks for

- Deal Data and various limits applicable for the deal based upon entered data
- Non-input of any mandatory field data to book a deal

### 5.3.1 Screen Layout

**Navigation Path:** Intellect™ One Treasury >>Foreign Exchange >> Front Office>> Deal Capture >>What-IF Screen.

Refer [Limit Checks](#) for Screenshots.

### 5.3.2 Description

- Prerequisites
  - Limit Definition and Values

S. No.	Field	Descriptions	Remarks
1	Message	This field will display the type of Check.	Checks defined like Various Limits and validations
2.	Description	Description of the check	Details related to Limits and Business Checks.

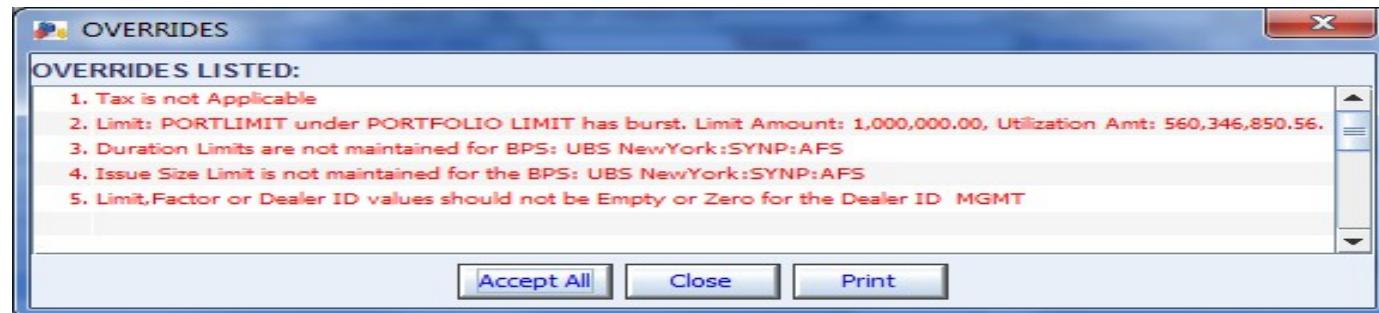
3.	Limit	Whether the check defined is within the limit or it is breaching the limit	Colour Codes are used here.
----	-------	--	-----------------------------

## 5.4 Overrides (Soft Checks)

Intellect™ One Treasury Application supports configuration of Soft checks (Overrides) in the system at product level which will be used at the time of trade booking to check the impact. Dealer can accept and book the deal in case of overrides.

### 5.4.1 Screen Layout

**Navigation Path:** Intellect™ One Treasury >> Fixed Income >> Front Office >> Deal Capture >> Save/Authorization >> Overrides (Soft Check)



### 5.4.2 Description

➤ **Prerequisites**

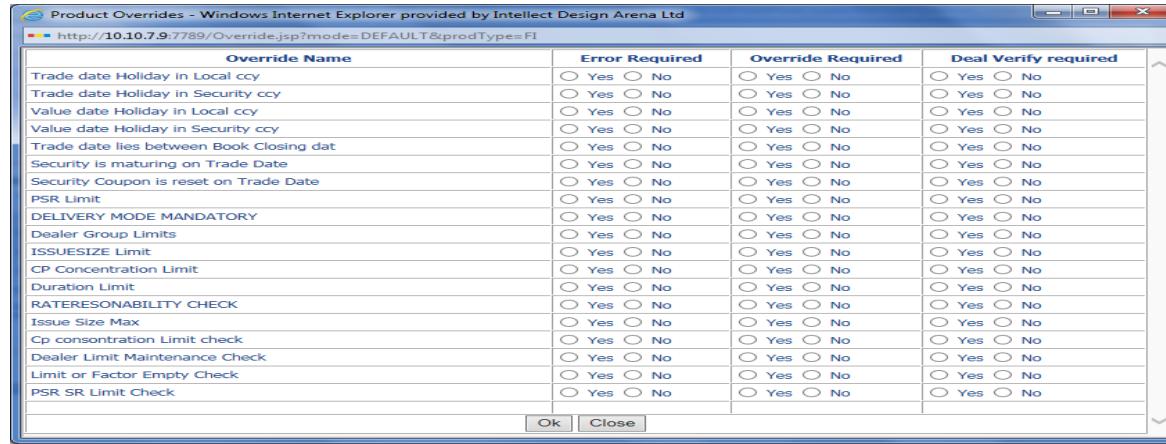
- Limit Breach or any exception for which Override check is defined.

In One Treasury application, Overrides are configured in Setup Screens at product level under below path.

**Navigation Path:** Intellect™ One Treasury >> Setup >> Start Up >> Product >> Create New/Modify >> Add/Modify Overrides.

Overrides are also configured for limit validations/checks at limit definition level.

- **Navigation Path:** Intellect™ One Treasury>> Setup >> Risk Management Limit Definition>>Create New/Modify >> Add/Modify Overrides.



Override Name	Error Required	Override Required	Deal Verify required
Trade date Holiday in Local ccy	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Trade date Holiday in Security ccy	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Value date Holiday in Local ccy	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Value date Holiday in Security ccy	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Trade date lies between Book Closing dat	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Security is maturing on Trade Date	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Security Coupon is reset on Trade Date	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
PSR Limit	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
DELIVERY MODE MANDATORY	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Dealer Group Limits	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
ISSUESIZE Limit	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
CP Concentration Limit	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Duration Limit	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
RATERESONABILITY CHECK	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Issue Size Max	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Cp consntration Limit check	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Dealer Limit Maintenance Check	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Limit or Factor Empty Check	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
PSR SR Limit Check	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

#### 5.4.3 Actions

S.No.	Action Button	Action Performed	Application Behaviour
1	Print	Printing of the Overrides messages	Application will print the details.
2	Accept All	Accepting the Overrides Messages	After Acceptance deal can be booked.
3	Close	Close the pop-up	Closing of Overrides Pop-up

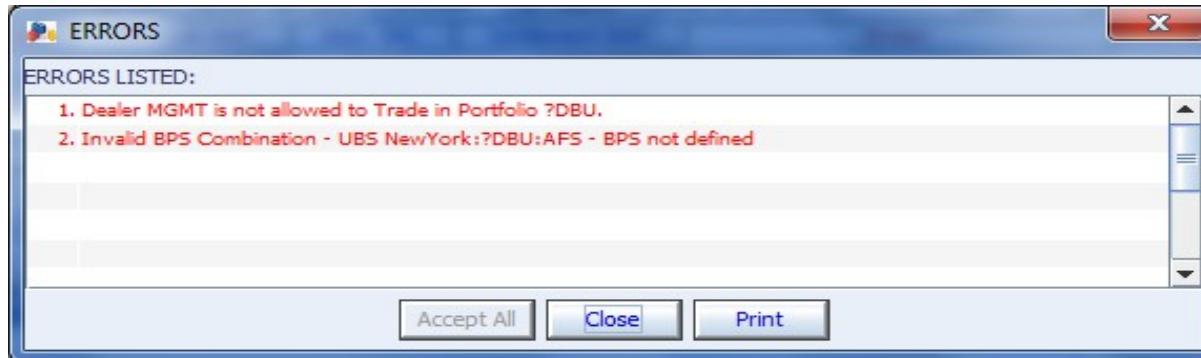
#### 5.5 Error (Hard Checks)

Intellect™ One Treasury Application supports configuration of Hard checks (Errors) in the system at product level which will be used at the time of trade booking to check the impact. In case of Errors, Dealer cannot accept it and won't be able to book the deal in case of errors.

Errors also will be thrown in case of non-input of data for mandatory fields.

### 5.5.1 Screen Layout

**Navigation Path:** Intellect™ One Treasury >> Fixed Income >> Front Office>> Deal Capture >>Save/Authorization>>Errors (Hard Check)



### 5.5.2 Description

➤ **Prerequisites**

- Limit Breach or any exception/field Validations for which Error check is defined or selected.

In Intellect™ One Treasury Errors (Hard Checks) are configured in similar manner as of Overrides configuration. Refer to [Section 5.4.3](#) for More Detail.

### 5.5.3 Actions

S.No.	Action Button	Action Performed	Application Behavior
1	Print	Printing of the Error messages	Application will print the details.
2	Accept All	Accepting the Error Messages(Disabled here)	After Acceptance deal can be booked(Disabled here)
3	Close	Close the pop-up	Closing of Error Pop-Up

## 6.0 Back Office Deal Management

Intellect™ One Treasury Foreign Exchange Back Office module support various aspects of deal verification/enrichment and authorization for the booked deals. Back Office process also includes Settlement and confirmation of the deals. It also provides transmission of financial instructions through swift alliance. Following are some prominent features of FX BO Module which is available in the system.

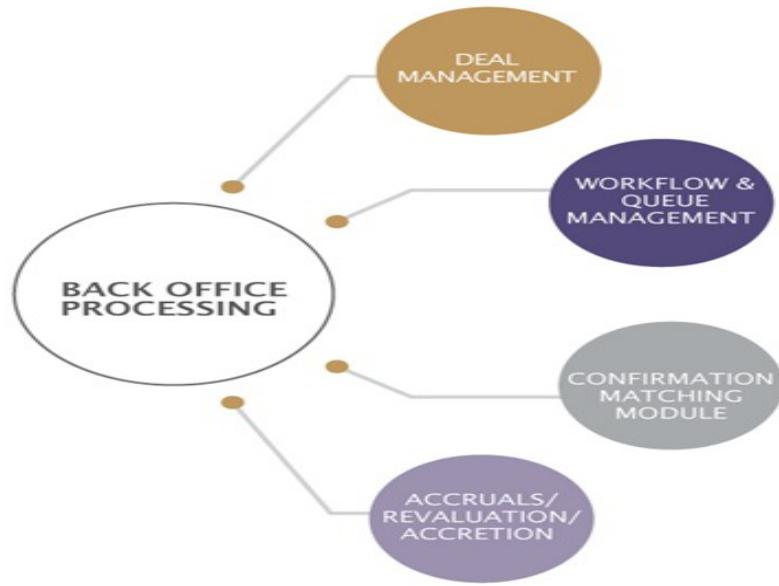


Figure: Back Office Functionality

## 6.1 Deal Enrichment Process

Deal Enrichment Screen is used to verify details for FO Authorized deals (Outright as well Swap) followed by settlement and confirmation of the deals.

### 6.1.1 Enrichment of Outright Deal

#### 6.1.1.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Back Office >> Deal Enrichment

Deal Enrichment- Intellect Foreign Exchange Back Office ( MODEL BANK 10-Oct-2017 )

**File All Actions Tools**

**Clear Save SendBack Delete Auth MODEL BANK 1EC1727900021**

**Outright Swap Deal Settlement L2Settlement**

Product		Counterparty		Buy		Sell		Buy Amount		Sell Amount	
FORWARD	BANK OF AMERICA	EUR		GBP				1,000,000.00		902,464.85	
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation S...	FX Port		Broker		Brokerage		
10-Nov-2017	1.10807640	1.10807640	1.12264529	1.12264529	FXWC						
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Am...	Commissio...	Other B2B Legs		
		10-Oct-2017	06-Oct-2017 11:38:02			TRSY			Other Details		
Charges		Messages			Liquidation						
<input type="radio"/> Our	<input type="radio"/> Benef	<input type="radio"/> Shared	<input checked="" type="checkbox"/> Paym...	<input checked="" type="checkbox"/> Recei...	<input checked="" type="checkbox"/> Conf...	<input checked="" type="checkbox"/> Cove...	<input checked="" type="checkbox"/> Auto Liq	<input type="radio"/> Manu...			
Show Messages		Payment	Receive	Confirm	Cover						
Remarks						Customer Info					

Deal Enrichment- Intellect Foreign Exchange Back Office ( MODEL BANK 10-Oct-2017 )

Settlement									
Account Desc	Flag Acc Sold	Acc. Sold	RCN Sold	Amount	Pay To	Intermediary	Recv. Corresp.	Acc. Benef	+ - Modify
Nostro	4102911120	GBP NOSTRO ...	4544	902464.85	A:BARCGB22XXX				

Account Desc	Flag Acc Bght	Acc. Bght	RCN Bght	Amount	+ - Modify	GetSSIValu...
Nostro	4102911133	EUR NOSTRO-...	4544	1000000		

Internal Accounts	RCN
Contingent Bght	
Contingent Sold	
Reval/Exch GL	
Intr Acc	

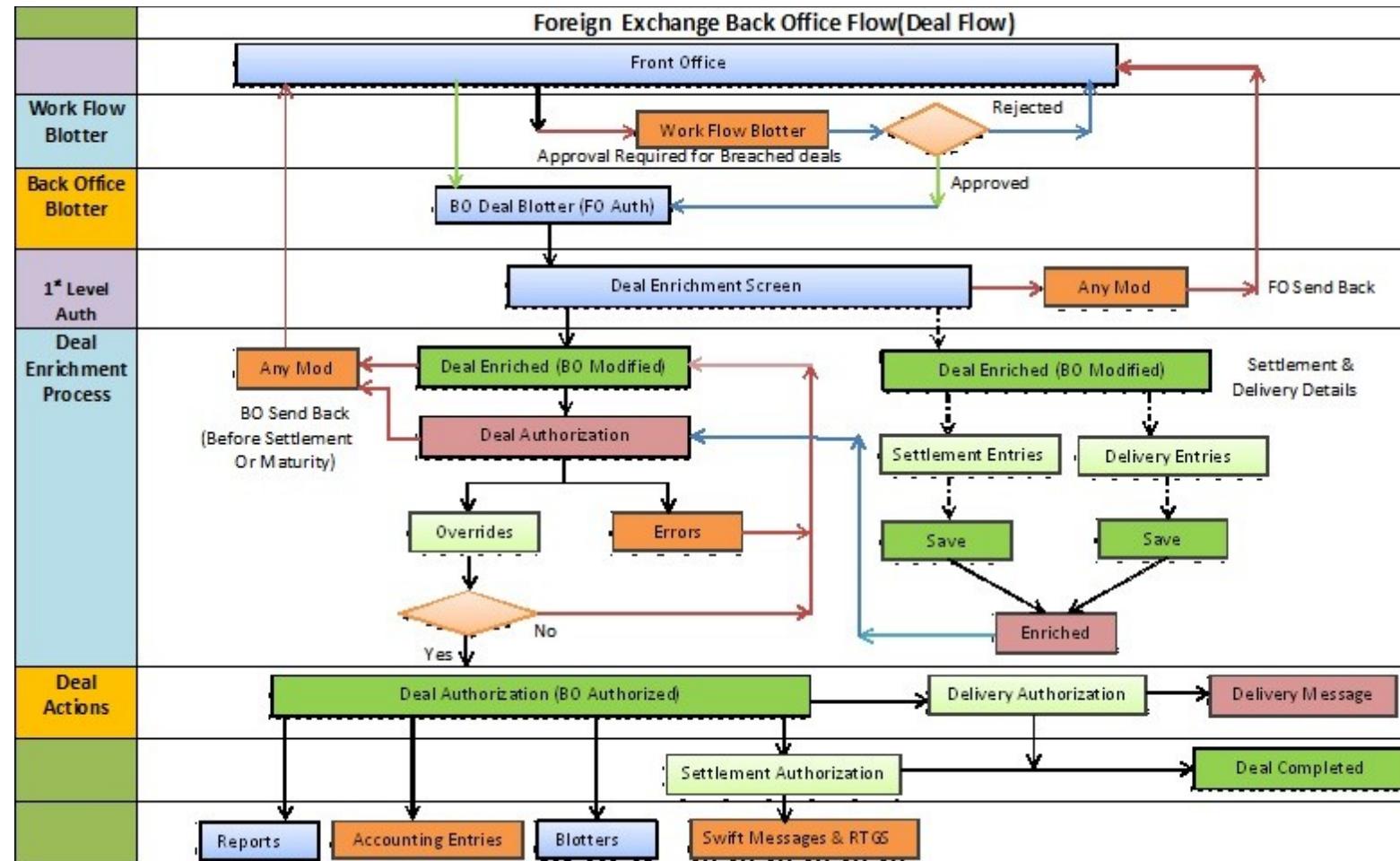
**Confirmation**

Status	Confirmed	User	INTELLECTBO
Date Conf...	06-Oct-2017 11:40:36		
Manual ...			

INTELLECTFO      BANK OF AMERICA      Status : BO AUTH Ver : 2

Figure: Deal enrichment screen having Settlement and confirmation details

### 6.1.1.2 Process Flows



### 6.1.1.3 Process Description

- Prerequisites
  - Deal should be Front Office Authorised
  - [Standard Settlement Configuration](#)
  - [Accounting Configuration](#)
  - [SWIFT Messages Configuration](#)

#### 6.1.1.3.1 Deal Enrichment

- To start the enrichment of the deal in Back Office, the deal should be authorized in Front Office.
- Enrichment began with verification of deals. In Deal tab, almost all the fields are disabled for modification except BO .
- In case of wrong data or some mismatch, User revert the deal to Front Office by using SENDBACK feature.
- If all the data's entered is correct, User enriched the deal (BO 1<sup>st</sup> level Authorization). Deal Status is BO\_MODIFIED.

#### 6.1.1.3.2 Settlement Enrichment

Intellect™ One Treasury Foreign Exchange Module won't allow BO authorization until Confirmation and Settlement details is enriched.

- Pay To, Counterparty Account, Settlement account flag details to be entered in order to enrich the settlement section. Refer to [Static Data Setup](#) for more details.
- Field Values Counterparty, settlement amount, settlement mode ,Nostro Account and date would be auto populated and non-editable sections based upon deal values.
- Based upon selection of transaction messages, SWIFT message previews can be viewed in settlement section.
- For more details on settlement authorization Refer to [Section](#) settlement authorization.

#### 6.1.1.3.4 Confirmation Enrichment

To confirm a deal this screen is used. Deals which yet to be confirmed are shown in confirmation queue. Details such as Confirmation status date and remarks are filled.

- Based upon details entered, preview of confirmation message can be viewed.

**P.S:** There is no need for Confirmation authorization as it will be taken care during deal authorization step.

### 1.1.2 Deal Authorization

#### 1.1.2.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Back Office >> Deal Enrichment Screen.

Kindly refer to the [section](#) for screenshot.

#### 6.1.2.1 Description

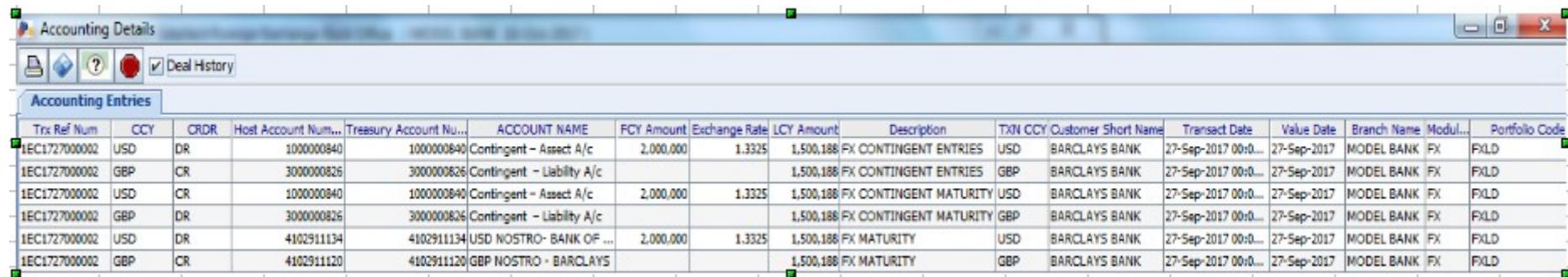
- Pre-requisites
  - Deal should be enriched (settlement and Confirmation) condition
  - BO authorizer is different from the maker
- After Confirmation and settlement enrichment the deal will be available for Back office authorization. On authorizing the deal, confirmation message MT 300 is generated. Based upon accounting configurations in the system, relevant entries are passed.

### 6.1.3 Accounting Entries

In Intellect™ One Treasury, once the deal is back office authorized configured entries will get generated. Following are the events whose corresponding entries are mentioned in attached excel.

S. No.	Deal Events	Description	Reference
1.	Trade Date Entries	After book the any FX Deal, System would generate the Contingent entries with GL Accounts	
2.	Revaluation Entries	<ul style="list-style-type: none"> <li>o Above Market Price</li> <li>o Below Market Price</li> </ul>	
3.	Settlement Date Entries	On Value date ,Maturity entries will get generate to Nostro Accounts of Sell and Buy Legs	
4.	P&L Entries	<ul style="list-style-type: none"> <li>o Loss Entries on Value Date</li> <li>o Profit Entries on Value Date</li> </ul>	

Following is the Screen shot of accounting entries for SPOT Deal:



Following is the Screen shot of accounting entries for Forward Deal:

Accounting Details														
    <input checked="" type="checkbox"/> Deal History														
Accounting Entries														
Trx Ref Num	CCY	CRDR	Host Account Nu...	Treasury Account ...	ACCOUNT NAME	FCY Amount	Exchange Rate	LCY Amount	Description	TXN CCY	Customer Short Name	Transact Date	Value Date	Branch Name
IEC1727100011	GBP	CR	3000000826	3000000826	Contingent - Liability A/c			6,552	FX CONTINGENT ENTRIES	GBP	DEUTSCHE BANK	28-Sep-2017 00:00...	28-Sep-2017	MODEL BANK
IEC1727100011	JPY	DR	1000000392	1000000392	Contingent - Asset A/c	1,000,000	148.66369375	6,552	FX CONTINGENT ENTRIES	JPY	DEUTSCHE BANK	28-Sep-2017 00:00...	28-Sep-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			0.13	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	28-Sep-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			0.13	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	28-Sep-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			25	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	29-Sep-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			25	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	29-Sep-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			74.75	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	03-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			74.75	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	03-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			149.4	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	04-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			149.4	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	04-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			174.35	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	05-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			174.35	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	05-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			159.06	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	06-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			159.06	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	06-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			159.06	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	06-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			159.06	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	06-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111111826	1111111826	Unrealized profits on FWD...			159.06	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	06-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	1111115826	1111115826	P/L Exchange profit/loss o...			159.06	FX REVALUATION ENTRIES	GBP	DEUTSCHE BANK	06-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	JPY	CR	1000000392	1000000392	Contingent - Asset A/c	1,000,000	148.66369375	6,552	FX CONTINGENT MATURITY	JPY	DEUTSCHE BANK	09-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	DR	3000000826	3000000826	Contingent - Liability A/c			6,552	FX CONTINGENT MATURITY	GBP	DEUTSCHE BANK	09-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	JPY	DR	4102911131	4102911131	JPY NOSTRO - BANK OF J...	1,000,000	148.66369375	6,552	FX MATURITY	JPY	DEUTSCHE BANK	09-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	4102911120	4102911120	GBP NOSTRO - BARCLAYS			6,552	FX MATURITY	GBP	DEUTSCHE BANK	09-Oct-2017 00:00...	09-Oct-2017	MODEL BANK
IEC1727100011	GBP	CR	63617371826	63617371826	Gain/Losses from FCY Tra...			6,552	FX MATURITY	GBP	DEUTSCHE BANK	09-Oct-2017 00:00...	09-Oct-2017	MODEL BANK

### 6.1.5 Settlement Authorization

This is done in settlement tab for the deals which are pending for authorization in settlement queue.

- Based upon selected message types for any deal like Payment, cover, receive and Fund Transfer is previewed and generated from the system which is sent to custodian.

S. No.	Message Type	Description	MT type
1.	Payment	Payment Messages	MT202 – Banks MT103- Individuals
2.	Receive	Confirmation Message	MT210
3.	Cover Pay Message	It is used to order the movement of funds to the beneficiary institution via another Intermediary Bank	MT202- Financial Institutions
4.	Funds Transfer		MT 200

- Intellect™ One Treasury Foreign Exchange module supports both manual and auto settlement. System has option to mark the settlement status as to be settled, settled, stop settlement or to defer settlement.
- After verifying the settlement details of the deal, logged in user authorizes the deal.
- Following are the Impacts of Settlement Authorization
  - Dealer Limits reset.
  - In case of Manual Settlement, settlement entries are generated and deal marked as settled.

- Position Blotter gets updated on authorization.
- Auto Settlement: Intellect One Treasury Foreign Exchange Module checks for BO Authorized deals which are yet to be settled during EOD. Deals with Value date as current business date will be picked for auto settlement.
- Settlement Entries (Refer to [6.1.3 Accounting Entries](#))

### 6.1.6 Deal Amendment

Intellect One Treasury supports amendment of the deal details prior to the settlement. To modify/amend the deals, system supports Send Back functionality to send the deals into FO for modification. System requires reason for send back of any deal. Deal details except settlement, delivery cannot be amended in back office. System reverses all the accounting entries and the new set of entries are passed for the new deal details.

**Deal Enrichment- Intellect Foreign Exchange Back Office ( MODEL BANK 10-Oct-2017 )**

Deal Details											
Product		Counterparty		Buy		Sell		Buy Amount		Sell Amount	
FORWARD	BANK OF AMERICA	EUR	GBP	2,000,000.00	1,787,098.76						
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation S...	FX Port	Broker	Brokerage				
06-Oct-2017	1.11913233	1.11913233	1.12264529	1.12264529	FXLD						
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Am...	Commission...	Other B2B Legs		
		29-Sep-2017	27-Sep-2017 19:48:33			TRSY			Other Details		
Charges		Messages				Liquidation					
<input type="radio"/> Our <input type="radio"/> Benef <input type="radio"/> Shared <input checked="" type="checkbox"/> Paym... <input checked="" type="checkbox"/> Recei... <input checked="" type="checkbox"/> Conf... <input checked="" type="checkbox"/> Cove... <input checked="" type="checkbox"/> Auto Liq <input type="radio"/> Manu...											
Show Messages		Payment	Receive	Confirm	Cover						
Remarks BO SendBack Reason Code : OTHER BO SendBack Remarks : Modi						Customer Info					
INTELLECTFO		BANK OF AMERICA				Status : BO SENDBACK Ver : 2					

### 6.1.7 BO User Actions

S. No	Status	User Actions	Revised Status	Subsequent Action(s)
	FO Authorized	Send Back	FO Send Back	FO Save , FO Cancellation, FO Modify
	FO AUTHORIZED	BO 1 <sup>st</sup> level Save	BO_MODIFIED	BO AUTH,SENDBACK
	BO Modified or BO Enriched(Before Settlement)	Send Back	BO Send Back	FO Save , FO Cancellation, FO Modify
	BO Authorized (Before Settlement	Send Back	BO Send Back	FO Cancel(Reversal Auth)

### 6.1.9 Swift Messages

Intellect One Treasury supports configuration and creation of swift messages .See below excel sheet for the swift messages supported in the system.

## 7.0 Reports

Intellect™ One Treasury generates all the important reports related to Foreign Exchange module. As part of reporting functionality, System generates online as well EOD reports based upon configuration. Following are the list of important reports along with its description.

S. No	Report Category	Report Name	Report Description
		<b><i>FX Deal Slip</i></b>	
		<b><i>Rebate Control List</i></b>	
		<b><i>Reval Control List</i></b>	
		<b><i>Dealer Currency Blotter</i></b>	
		<b><i>FX Contract Retrieval</i></b>	
		<b><i>Rebate P/L Detail</i></b>	
		<b><i>Activity Journal</i></b>	
		<b><i>NPV Report</i></b>	
		<b><i>NPV P/L Detail</i></b>	
		<b><i>Audit Trail Report</i></b>	
		<b><i>Limit Utilization Report</i></b>	

**P.S:** Reports are customizable and based upon business requirement it can be modified.

## 8.0 Interfaces

Intellect™ One Treasury Foreign Exchange Module supports following interfaces for pricing, rates and trades.

S. No	Category	Interface Name	Description
1.	Market Rates	Bloomberg	

## 9.0 Utility Features

Intellect™ One Treasury provides and supports wide range of utility features across all the modules. Some of them are as follows

- Blotters
  - Deal Blotter
  - Position Blotter
  - Deal Query
- Deal Compare
- On Behalf functionality
- Concurrent Audit
- Deal Slip
- User Console

## 9.1 Blotters

It is an excel look like GUI to view the various details of deals such as positions and other important attributes. Hyperlink

### 9.1.1 Deal Blotter

Deal blotter displays the list of all the deals done today or for a selected time period based on the user preferences.

#### 9.1.1.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange>> Front Office/Back Office>> Deal Blotter

Deal Blotter- Intellect Foreign Exchange Back Office												
Profile		View		Desk			Branch			Portfolio		CCY
FX_MGMT		All deals		[MGMT]			[MODEL BANK]			[FXLD, FXWC, LQDT]		[GBP, AUD, AMD, RUB, KGS, ...]
Status	Deal Status	Deal No	Beneficiar...	Booking Status	Bought Acc	Product Code	Product T...	Branch Num	Ccy Bought	Ccy Sold	Broker C...	Customer
BO ENRICH	1EC1728300041			Contingent	4102911123	FX 201	FX	1	INR	USD		BANK OF NEWYORK
BO AUTH	1EC1728300020			Contingent	4102911133	FX 202	FX	1	EUR	USD		BANK OF ENGLAND
BO AUTH	1EC1728300019			Contingent	4102911134	FX 202	FX	1	USD	GBP		BANK OF NEWYORK
BO AUTH	1EC1727900021			Contingent	4102911133	FX 201	FX	1	EUR	GBP		BANK OF AMERICA
FO AUTH	1EC1727900020			UnAuth	4102000034	FX 201	FX	1	USD	INR		BANK OF JAPAN
FO AUTH	1EC1727900019			UnAuth	4102000034	FX 201	FX	1	USD	INR		BANK OF AMERICA
BO AUTH	1EC1727900018L2			Contingent	4102911122	FX 501	FX	1	GBP	USD		BNP PARIBAS
BO AUTH	1EC1727900018L1			Contingent	4102000034	FX 401	FX	1	USD	GBP		BNP PARIBAS
BO ENRICH	1EC1727900017L2			Contingent	4102911122	FX 501	FX	1	GBP	EUR		BNP PARIBAS
BO ENRICH	1EC1727900017L1			Contingent	4102911133	FX 301	FX	1	EUR	GBP		BNP PARIBAS
FO AUTH	1EC1727900015L2			UnAuth	4102911123	FX 501	FX	1	INR	USD		BANK OF AMERICA
FO AUTH	1EC1727900015L1			UnAuth	4102000034	FX 301	FX	1	USD	INR		BANK OF AMERICA
FO AUTH	1EC1727900014L2			UnAuth	4102911123	FX 501	FX	1	INR	USD		BANK OF AMERICA
FO AUTH	1EC1727900014L1			UnAuth	4102000034	FX 401	FX	1	USD	INR		BANK OF AMERICA
BO AUTH	1EC1727900013L2			Contingent	4102911122	FX 501	FX	1	GBP	EUR		BNP PARIBAS
BO AUTH	1EC1727900013L1			Matured	4102911133	FX 301	FX	1	EUR	GBP		BNP PARIBAS
FO NEW	1EC1727900010			UnAuth	4102000034	FX 201	FX	1	USD	INR		BANK OF AMERICA
FO NEW	1EC1727900009			UnAuth	4102000034	FX 201	FX	1	USD	INR		BANK OF AMERICA
FO AUTH	1EC1727900008			UnAuth	4102000034	FX 201	FX	1	USD	INR		BANK OF AMERICA

### 9.1.1.2 Description

➤ **Prerequisites**

- Deals available in the system
- User Preferences

All the attributes of the deal displayed in deal blotter and it gets updated as soon as the deal is booked. So, Intellect™ One Treasury Deal Blotters are updated on a real time basis. In case of Repo and Reverse Repo deal, the two legs of the deal are populated separately with the same Deal No. By double clicking a particular deal, a deal can be fetched from Deal Blotter onto the Deal Capture Screen for any further action.

### 9.1.2 Position Blotter

#### 9.1.2.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Front Office>>Position Blotter

Position Blotter- Intellect Foreign Exchange Back Office																	
		Last Refreshed: 10-Oct-2017															
Profile		Desk										Branch					
ALL		[MGMT]										[MODEL BANK]					
LCY Balance		NOP(USD)															
9- GBP	0.00	(3,626,015.00)	(9,432,000.22)	(9,432,000.22)	(12,568,140.29)	(9,432,000.22)	(9,492,771.79)	(12,649,118.41)	(9,492,771.79)	(12,568,140.29)	(9,492,771.79)	(12,649,118.41)	(1.33)	3,708,627.84	(1,113,144.15)	(1.00)	2,510,74
6- TRSY	0.00	(3,626,015.00)	(9,432,000.22)	(9,432,000.22)	(12,568,140.29)	(9,432,000.22)	(9,492,771.79)	(12,649,118.41)	(9,492,771.79)	(12,568,140.29)	(9,492,771.79)	(12,649,118.41)	(1.33)	3,708,627.84	(1,113,144.15)	(1.00)	2,510,74
9- AUD	0.00	0.00	1,141,013.14	2,000,000.00	1,520,400.00	1,140,910.00	2,000,000.00	1,520,400.00	1,140,910.00	1,520,400.00	1,141,013.14	1,520,400.00	(0.76)	0.00	0.00	(1.75)	(4,000,00)
6- TRSY	0.00	0.00	1,141,013.14	2,000,000.00	1,520,400.00	1,140,910.00	2,000,000.00	1,520,400.00	1,140,910.00	1,520,400.00	1,141,013.14	1,520,400.00	(0.76)	0.00	0.00	(1.75)	(4,000,00)
9- JPY	0.00	0.00	13,453.18	2,000,000.00	17,926.37	13,452.00	2,000,000.00	17,926.37	15,192.80	17,926.37	13,453.18	17,926.37	(111.57)	0.00	0.00	(148.66)	(3,000,00)
6- TRSY	0.00	0.00	13,453.18	2,000,000.00	17,926.37	13,452.00	2,000,000.00	17,926.37	15,192.80	17,926.37	13,453.18	17,926.37	(111.57)	0.00	0.00	(148.66)	(3,000,00)
9- INR	5,000,000.00	0.00	126,143.71	11,000,000.00	168,086.49	126,049.00	(316,539,595.16)	(4,836,911.72)	(3,626,296.20)	168,086.49	(3,629,952.51)	(4,836,911.72)	(65.44)	1,000,000.00	(5,000,000.00)	(87.20)	257,100.36
6- TRSY	5,000,000.00	0.00	126,143.71	11,000,000.00	168,086.49	126,049.00	(316,539,595.16)	(4,836,911.72)	(3,626,296.20)	168,086.49	(3,629,952.51)	(4,836,911.72)	(65.44)	1,000,000.00	(5,000,000.00)	(87.20)	257,100.36
9- USD	0.00	(76,358.29)	1,878,114.09	2,502,587.02	2,502,587.02	2,052,688.00	7,502,587.02	7,502,587.02	5,864,063.97	2,502,587.02	5,630,459.30	7,502,587.02	(1.00)	1,076,358.29	(2,459,100.12)	(1.33)	(7,038,01)
6- TRSY	0.00	(76,358.29)	1,878,114.09	2,502,587.02	2,502,587.02	2,052,688.00	7,502,587.02	7,502,587.02	5,864,063.97	2,502,587.02	5,630,459.30	7,502,587.02	(1.00)	1,076,358.29	(2,459,100.12)	(1.33)	(7,038,01)

### 9.1.2.2 Description

➤ **Prerequisites**

- Deals available in the system
- User Preferences

### 9.13 Cash Flow Blotter

Intellect™ One Treasury Cash Flow Blotter shows/displays the Cash flows w.r.t to the Currency for which deals are available in the system.

#### 9.1.3.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange>>Front Office>>Cash Flow



#### 9.1.3.2 Description

➤ **Prerequisites**

- Settled Deal

- User Preferences

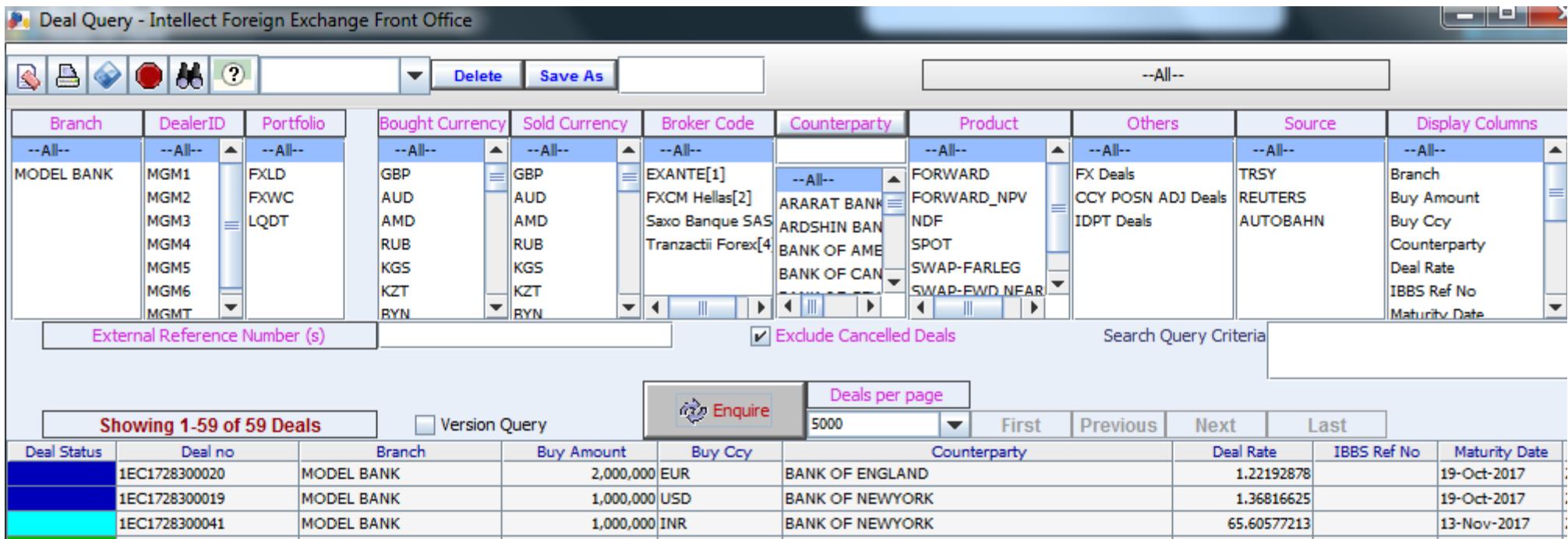
Cash Flow Blotters gets updated as soon as the deal is booked.

### 9.1.4 Deal Query

Intellect™ One Treasury has deal query screen to search for all the Foreign Exchange deals booked in the application.

#### 9.1.4.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Front Office/Back Office >> Deal Query



Deal Status	Deal no	Branch	Buy Amount	Buy Ccy	Counterparty	Deal Rate	IBBS Ref No	Maturity Date
	1EC1728300020	MODEL BANK	2,000,000	EUR	BANK OF ENGLAND	1.22192878		19-Oct-2017
	1EC1728300019	MODEL BANK	1,000,000	USD	BANK OF NEWYORK	1.36816625		19-Oct-2017
	1EC1728300041	MODEL BANK	1,000,000	INR	BANK OF NEWYORK	65.60577213		13-Nov-2017

#### 9.1.4.2 Description

- Prerequisites

- Deals should be available in the system
- User Preferences

Deal Query is a very powerful tool as it provides an option to use operators such as AND/ OR for filtering criteria's and used for various reporting and analysis purposes.

### 9.1.5 Features of Blotters

- Intellect™ One Treasury Blotters have some common features which are
  - User Preferences
  - Spooling and Printing of Blotter data
  - Sorting and Column Arrangements
  - Help
  - Refresh

## 9.3 Concurrent Audit

Intellect One Treasury application have concurrent audit feature to verify the deal details, Reuters conversation and counterparty confirmation in a single screen.

### 9.3.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Back Office >> Deal Enrichment>>Tools>>Concurrent Audit

<<Screenshot will be attached >>

### 9.3.2 Description

#### ➤ Prerequisites

- Swift Messages
- Reuters Conversation
- Deal Authorized in Back Office

Concurrent Audit screen highlights the matched and unmatched data between deal details and counterparty confirmation messages.

## 9.4 On Behalf of Functionality

### 9.4.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> *Foreign Exchange* >> Front Office >> Deal Capture

























Deal Capture with Settlement- Intellect Foreign Exchange Front Office

Outright Swap Deal Settlement L2Settlement									
Product	Counterparty		Buy		Sell		Buy USD		Sell GBP
FORWARD	BANK OF AMERICA		USD	GBP			1,000,000.00		730,905.33
Value Date	Deal Rate	Cover Rate	Cover Spot Rate	Valuation Sp Rt	FX Port		Broker	Brokerage	
19-Oct-2017	1.36816625	1.36816625	1.33316625	1.33316625	FXLD				
Tax Code	Split Val. Dt	Spot Date	Trx Date	Fixing Date	Fixing Rate	Source	Profit Amount	Commission Ra...	Other B2B Leas
		12-Oct-2017	10-Oct-2017 17:50						Other Details
Remarks					Customer Info				
Purpose					Portfolio Description				
CURRENT ACCOUNT					FX LIQUIDITY PORTFOLIO				
Transfer Type	To Branch	To Dealer		To Portfolio					
<input type="button" value="INTELLECTFO"/> BOCHECKER FOMAKER INTELLECTBO <b>INTELLECTFO</b>									

## 9.4.2 Description

### ➤ Prerequisites

- Deals
- Right to Access/Entitlements

This feature provides an option to the user for booking a deal on behalf or on account of another dealer in the system.

## 9.5 Deal Compare

Intellect™ One Treasury has deal compare feature for comparing the deal with its previous version(s).

### 9.5.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Front/Back Office >> Deal Capture >> Tools >> Deal Compare

	Version - 2	Version - 1
Deal No	1EC1727600004	1EC1727600004
Deal Date	03-Oct-2017	03-Oct-2017
Dealer Id	MGMT	MGMT
Branch Name	MODEL BANK	MODEL BANK
Product Name	FORWARD_NPV	FORWARD_NPV
BuyCurrency	JPY	JPY
SellCurrency	GBP	GBP
Customer Name	DEUTSCHE BANK	DEUTSCHE BANK
Portfolio Code	FXLD	FXLD
Buy Amount	1,000,000	1,000,000
Sell Amount	6,552	6,552
Deal Rate	152.61947012	152.61947012
Spot Rate	148.66666702	148.66666702
Treasury Rate	152.61947012	152.61947012
Coverspotrate	148.66666702	148.66666702
Trans Date	03-Oct-2017	03-Oct-2017
Value Date		
Maturity date	12-Oct-2017	12-Oct-2017
Broker Name		
Brokerage		
Taxcode		
Purpose	BO AUTH	FO AUTH
FOMaker Id	INTELLECTBO	INTELLECTBO
FOMake Date	03-Oct-2017	03-Oct-2017
FOChecker Id	INTELLECTBO	INTELLECTBO
FOCheck Date	03-Oct-2017	03-Oct-2017
BOMaker Id	INTELLECTBO	
BOMake Date	03-Oct-2017	

## 9.5.2 Description

### ➤ Prerequisites

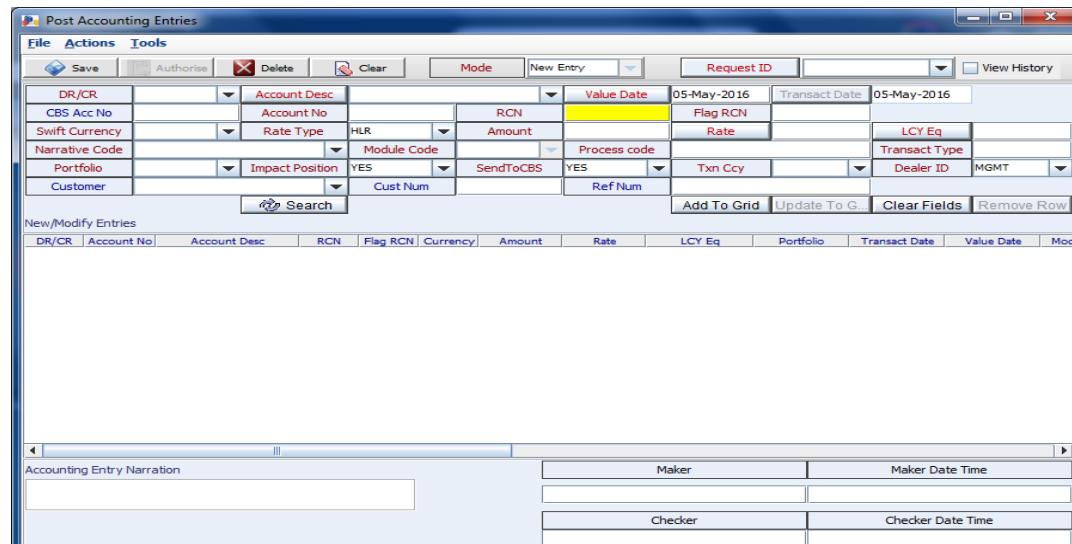
- Deal is available and any modification has been done

Deal Compare feature is available across all modules and helps in identifying the modification done on the deal with its original or modified state. It will display all versions under which deal has gone and unmatched data is highlighted. In case of no modification, no history found message will be displayed.

## 9.6 Voucher Summary (Post Accounting Entries)

### 9.6.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Back Office >> Post Accounting Entries (Voucher Summary)



The screenshot shows the 'Post Accounting Entries' window. At the top, there's a toolbar with 'Save', 'Authorise', 'Delete', 'Clear', 'Mode', 'New Entry', 'Request ID', and 'View History'. Below the toolbar is a grid of input fields. The columns include DR/CR, Account Desc, Account No, RCN, Value Date, Flag RCN, Transact Date, CBS Acc No, Swift Currency, Rate Type, HLR, Amount, Rate, LCY Eq, Narrative Code, Module Code, Process code, Transact Type, Portfolio, Impact Position, YES, SendToCBS, YES, Txn Ccy, Dealer ID, MGMT, Customer, Cust Num, Ref Num, and a row of buttons: Add To Grid, Update To G, Clear Fields, Remove Row. Below the grid is a section for 'New/Modify Entries' with a table of columns: DR/CR, Account No, Account Desc, RCN, Flag RCN, Currency, Amount, Rate, LCY Eq, Portfolio, Transact Date, Value Date, and Mod. At the bottom, there's a narration field labeled 'Accounting Entry Narration' and two date/time fields: 'Maker Date Time' and 'Checker Date Time'.

## 9.6.2 Description

➤ **Prerequisites**

- BO Authorized deals

Voucher Summary screen is used to post Adhoc Accounting entries. This screen is used for manual adjustments with respect to account balances or to pass any accounting entries. System also provides the option of sending these accounting to Core Accounting system.

## 9.7 Deal Slip

Deal slip feature is used to generate deal tickets for the booked deals in the system.

### 9.7.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Front/Back Office >> Deal Capture/Enrichment>>Tools>>Deal Slip

### 9.7.2 Description

➤ **Prerequisites**

- Deals booked in the system

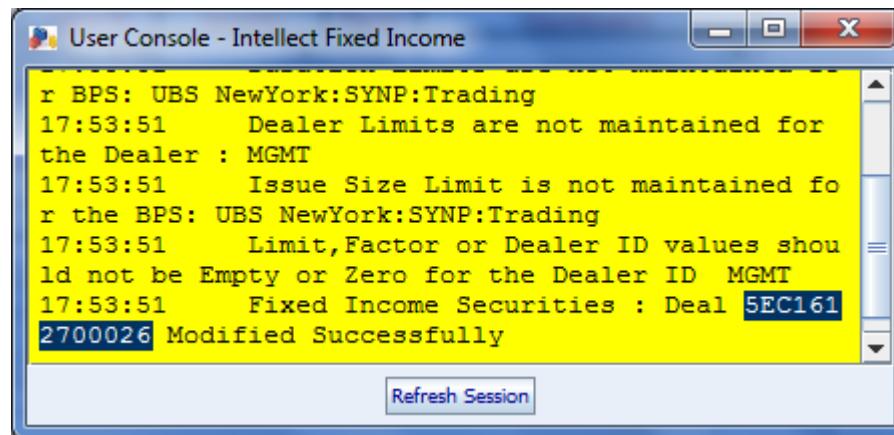
This feature is available across all the modules. System provides option to print the deal tickets also.

## 9.8 User Console

This utility feature is used to record the action performed on the deal such as (save, modify, delete etc.), deal overrides, warnings, exceptions and alerts in the system during the session.

### 9.8.1 Screen Path & Layout

**Navigation Path:** Intellect™ One Treasury >> Foreign Exchange >> Front/Back Office >> User Console



### 9.8.2 Description

- **Prerequisites**

- Any Action on the deal
- Overrides
- Exceptions/Warnings

User Console acts an auditing tool also as it keep the log book for any actions. User console window will be launched automatically after logging in the system. All business impacting the actions performed by a dealer is written to the console with the timestamp.

## 10.0 Appendix

### 10.1 Computation Logic & Formulas

#### 10.1 .1 Net Open Position (NOP)

NOP can be computed in two ways. Based on the value of **CALC\_NOP\_AS\_NETPOSN** parameter maintained in **tb\_internal\_info**, net open position is computed.

(i) If the value of CALC\_NOP\_AS\_NETPOSN = 'N' Then

NOP is the maximum value among the NPV of Bought amount in USD and NPV of Sold amount in USD.

(ii) If the value of CALC\_NOP\_AS\_NETPOSN = 'Y' Then

NOP is the difference between the NPV of Bought amount in USD and NPV of Sold amount in USD.

--> Profit will be computed by comparing the market rate with the deal rate. Calculate the profit separately for each of the leg and add to arrive at the profit for the deal.

#### For Example:

**Dealer: MGMT**

**Limits maintained**

Day Light Limit : 10 Mio USD , Over Night Limit 5 Mio USD

MAT Daily Limit : 1000 USD , MAT MTD Limit: 5000 USD

**Current Dealer Position**

Current Dealer NOP : 6.8 Mio USD

Daily MAT P/L : 2,800 USD (profit)

MTD MAT P/L : 3800 USD (profit)

<b>BUY Currency</b>	<b>Sell Currency</b>	<b>Exchange Rate</b>	
1Mio USD	45 Mio INR	1 USD = 45 INR	Current Market Rate: 1 USD = 43 INR

NPV BGHT USD AMOUNT: 1Mio (USD)

NPV SOLD USD AMOUNT: 999999.32 (USD)

Bght P/L : 0 (As there is no revaluation for USD )

Sold P/L : (Deal Time USD equiv.) – (Market USD equiv)

P/L = 1Mio – (45Mio/43) = - 46511.63 USD (loss)

Total P/L because of the deal = Bght P/I + Sold P/L

= 0 – 46511.63 USD

= -46511.63

If the Non EXP currency is USD, the bght leg NOP amount is 0. If the parameter for calculating the NOP is set to Y, then it is the difference of bght and sold NPV amounts

NOP because of the deal = (bght NPV amount) + (sold NPV amount)

= 0 – 999999.32 (here for sold amount the sign is negative)

= -999999.32

### **NOP Comparison**

If the EOD\_FLAG is not 1, then it should be day light limit comparison

Latest NOP of the dealer = Current NOP of dealer + NOP because of the deal

= 6.8 Mio + (-999999.32)

= 5800000.68 USD

This is less than the maintained NOP of the dealer which is 10 Mio, so no issues

### **MAT Limit comparison**

Latest Daily MAT Limit dealer = Current MAT limit of the dealer + Total P/L because of the deal

Latest Daily MAT Limit dealer = 1000 – 46511.63

= -45,511.63 USD    \*\*\**This is bursting the MAT daily limit*

Latest MTD MAT limit of the dealer = Current MTD MAT limits of the dealer + Total P/L because of the deal

Latest MTD MAT limit of the dealer = 5000 – 46511.63

= -41,511.63 USD    \*\*\**This is bursting the MAT daily limit*

So this dealer is making more loss compared to what his loss limit is. So, the dealer will get an error/override message for breaching the MAT MTD limit.

## 10.2 Field Definitions

### 10.2.1 Field Definitions for Outright Deal Screen

Following are the list of some important fields along with its definitions used in Deal Capture Screen.

Sl. No.	Field Names	Field Description	Data Type	Mandatory	Remarks
1.	Deal ID	This field will display Treasury Deal ID or reference number	VARCHAR2		
2.	Product	It lists down the products supported by Outright Foreign Exchange. -Type of Product: Cash, Tom, Spot, Forward and NDF	VARCHAR2	M	
3.	Value date	This is the day on which the trade gets matured/Settled.	Date	M	
4.	Customer	It captures Counter Party with whom the deal is trade.	VARCHAR2	M	
5.	Buy Currency	It captures the currency that is bought to trade.	NUMBER	M	

6.	Sell Currency	It captures currency that is sold to trade.	NUMBER	M	
7.	Buy Amount	It captures the bought amount. This amount can be entered or auto computed by system based on sell amount and rate.	NUMBER	M	
8.	Sell Amount	It captures the sold amount. This amount can be entered or auto computed by system based on buy amount and rate.	NUMBER	M	
9.	Deal Rate	<p>It captures the exchange rate between the bought currency and the Sold currency. If two of the there (Buy amount, Sell amount and deal rate) then remaining one is computed by the system and User can also override the rate manually.</p> <p>These are also captured live by connecting through interfaces</p>	NUMBER	M	
10.	Cover Rate	<p>This is the rate at which a bank covers its position. Difference between this rate and deal rate gives us notional P&amp;L.</p> <p>User can also override the rate manually</p>	NUMBER	M	
11.	Spot Rate	In case of Spot Deal this field is disabled and equal to the Deal. In case of Forward deal this field is enabled, this together with the forward swap points will give the forward deal rate.	NUMBER	M	

		User can also override the rate manually			
12.	Cover Spot Rate	In case of Spot Deal this rate is equal to the Cover Rate. In case of Forward deal this includes the Spot Rate with Forward Swap point.  User can override the rate manually.	NUMBER	O	
13.	Broker	User can select the broker through whom the deal is made. The drop down shows all brokers maintained.	VARCHAR2	O	
14.	FX Port	This field captures the portfolio in which the deal is to be booked. This is a drop down that lists module wise portfolios in the chosen branch and depending on the access rights of the dealer maintained in portfolio Maintenance.	VARCHAR2	O	
15.	Spot Date	It is defaulted to the spot date of the branch. The number of days configured is maintained.	Date	M	
16.	Trx Date	This field captures the transaction date of the deal. By default this date is set to the current application date and system time.	Date	M	
17.	Dealer	Shows the dealer id of the User who enters a deal	VARCHAR2	M	

## 10.2.2 Field Definitions for Other Details

<b>Sl. No.</b>	<b>Field Names</b>	<b>Field Description</b>	<b>Data Type</b>	<b>Mandatory</b>	<b>Remarks</b>
1.	Deal Spot Rate	The prices at which the currencies can be bought and sold. It also shows the conversion rate with respect to USD.	NUMBER		
2.	Swap Points	This is the difference between Spot rates and Forward Rate. This can be positive or negative.	NUMBER	M	
3.	Forward Rate	The rate at which the currencies can be bought and sold in future.	NUMBER	M	
4.	Cover Spot Rate	It is current market spot rate available to cover its position.	NUMBER	M	
5.	Cover Points	This is the difference between Cover forward rate and Cover spot rate.	NUMBER	M	
6.	Cover Forward Rate	It is the current market forward rate that banks maintains to cover its position .	NUMBER	M	

7.	LCY Equivalent	This field shows the conversion amount of the deal with respect to the Local currency .	NUMBER	M	
8.	Spread	<p>It is the difference between the bought currency and sold currency. It is calculated as , if a commodity currency is bought</p> <p>Spread = Cover Rate – Exchange Rate</p> <p>Else Spread = Exchange Rate – Cover Rate</p>	NUMBER	M	
9.	Spread P/L in LCY	It shows the spread amount in terms of LCY equivalent	NUMBER	M	
10.	Spread P/L in USD	It shows the spread amount in terms of USD	NUMBER	M	
11.	FX P/L IN Lcy	<p>This is calculated for Forward deals &amp; when revl type is Straight Line. P/L occurs due to the swap points of the deal.</p> <p>FX P/L can be converted to local currency by using the mid rate between PL Currency and the local currency.</p>	NUMBER	M	
12.	Eff Int Rate	Effective interest rate is calculated by the system based on the LCY amount, Period, FX P/L LCYamt	NUMBER	O	

13.	Commission in LCY	This field captures the Commission amount applicable for the deal.	NUMBER	O	
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### 10.2.3 Field Definitions for Deal Settlement

Sl. No.	Field Names	Field Description	Data Type	Mandatory	Remarks
1.	Account Desc	Account Description for the Sold currency account.	VARCHAR2		
2.	Flag Acc Sold	The column used to get the type of Sell Account  For Nostro Flg Account is :‘N’ GL account flg account is :‘G’	VARCHAR2	M	
3.	Acc Sold	The Nostro / GL account number of the counterparty for sell currency.	VARCHAR2	M	
4.	RCN Sold	Responsibility Center Number of the Point of Sale.	VARCHAR2	M	
5.	Amount	Sold Settlement amount	NUMBER	M	
6.	Pay To	The BICCODE of the counterparty to whom the payment is to be made. This will be used for generating the swift	VARCHAR2	M	

		message.			
7.	Flag Acc Bght	The column used to get the type of Bght Account  For Nostro flg Account is : 'N'  GL account flg account is : 'G'	VARCHAR2	M	
8.	Acc Bght	The Nostro / GL account number of the bank for Buy currency	VARCHAR2	M	
9.	RCN Bght	Responsibility Center Number of point of sale.	VARCHAR2	M	
10.	Amount	Buy Settlement Amount	NUMBER	M	
11.	+	It is used to maintain more than one settlement accounts. For eg. 100 is to be settled across two accounts, Account A1 will be settled 30 and Account A2 with 70	VARCHAR2	M	
12.	-	It is used to delete the settlement details.  To capture the modified entries.	VARCHAR2	O	
13.	Modify		VARCHAR2	O	

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**Conditional Mandatory Fields:**

Sl. No.	Field Names	Field Description	Data Type	Mandatory	Remarks
14.	Intermediary	The BICCODE/Account Number of the Intermediary bank of the counterparty. This will be used for generating the swift message.	VARCHAR2	M	
15.	Recv. Corresp	The receiving correspondent BICCODE /Account Number. This will be used for generating the swift message.	VARCHAR2	M	
16.	Acc. Benef	The beneficiary BICCODE/Account Number. This will be used for generating the swift message.	VARCHAR2	M	

## 10.2.4 Field Definitions for Swap Deal

**Following are the list of some important fields along with its definitions used in Swap Deal Capture Screen.**

S. No.	Field Names	Field Description	Data Type	Mandatory	Remarks
1)	Near leg Buy Amount	This field indicates the first leg amount to be bought from the counter party .	NUMBER	M	
2)	Near leg Sell Amount	System will automatically calculate the first leg Sell amount that the counter party is agreed to pay on first leg value date	NUMBER	M	
3)	Near Leg Value Date	It is the date on which first leg of the contract will get settled. The date is defaulted based on currency holidays maintained. They consider the currency holidays and display the working days accordingly..	NUMBER	O	
4)	Near Leg Deal Rate	It is the exchange rate at which the near leg is being done. if a system is configured with external systems like Bloomberg or Reuters or any other system then this rate is captured from these source .	NUMBER	M	
5)	Near Leg Deal Spot	This is the first leg spot rate available in the market on the Spot Date. If a system is configured with external systems	NUMBER	M	

	Rate	like Bloomberg or Reuters or any other system then this rate is captured from these sources.			
6)	Near Leg FX Port	This field captures the portfolio in which the near leg of the deal is to be made.	NUMBER		
7)	Far Leg Buy Amount	This field captures the buy amount from the counter party in case the near leg was a sell deal ,then this far leg buy amount will same as near leg sell amount.	NUMBER	M	
8)	Far Leg Sell Amount	This field captures the sell amount from the counter party in case the near leg was a buy deal, then this far leg sell amount will same as near leg buy amount.	NUMBER	M	
9)	Far Leg Value Date	It is the date on which first leg of the contract will get settled.	NUMBER	O	
10)	Far Leg Deal Rate	It is the exchange rate at which the Far leg is being done. This Rate is captured by adding forward points to deal rate based on Far leg value date. These rates are maintained in the system.	NUMBER	O	

11)	Far Leg Deal Spot Date	This is the Far leg spot rate, available in the market on the Spot Date.	NUMBER	O	
12)	Far Leg FX Port	This field captures the portfolio in which the Far leg of the deal is to be made. These are maintained in the initial data.	NUMBER		
13)	L1 Cover Rate	This is the rate at which a bank covers its position based on which notional P&L on the 1st leg will be arrived. This rate is derived by adding cover spread to the market rate, cover spread will be maintained against a branch and currency and hence for all customers dealing in a given branch and currency the cover rate will tend to be the same.	NUMBER		
14)	L1 Cover Spot Rate	In case first leg value date is Spot date, this rate is equal to the Cover Rate,  In case where first leg value date is Forward date this includes the Leg 1 Cover Spot Rate+ Forward swap point also.	NUMBER		
15)	L2 Cover Rate	This is the rate at which a bank covers its L2 position.	NUMBER		

16)	L2 Cover Spot Rate	In case second leg value date is forward date, this rate is equal to the L2 Cover Rate. In case where first leg value date is Forward date this includes the Leg 2 Cover Spot Rate+ Forward swap point also	NUMBER		
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## 11.0 Glossary

### 11.1 Day Count/Interest Basis

A convention to determine the number of days between two dates and number of days in a year to calculate accrued interest on bonds and other rate dependent securities.

Following are the list of interest basis which are supported in the Intellect One Treasury application

- ① Actual/360
- ① Actual/364
- ① 30/360
- ① 30/365
- ① Actual/365
- ① Actual/Actual
- ① Actual/nActual
- ① 30E/360
- ① 30E/365

### 11.1.1 Description

- **Actual/360:** In this method, each month is treated equally and year is assumed to be 360 days.
- **Actual/364:** In this method also, each month is treated equally and year is assumed to be for 364 days.
- **30/360:** Number of days calculated as  $Y(2) - Y(1)*360 + M(2)-M(1)*30 + D(2)-D(1)$   
Y, M and D denote Year, Month and Days respectively and Number of days in a month taken as 30 and year is assumed to be of 360 days.
- **30/365:** Number of days is calculated exactly the same way as 30/360 basis explained above while year is assumed to be of 365 days.
- **Actual/360:** In this method, actual number of days between two given dates will be taken and year is assumed to be of 360 days.
- **Actual/365:** In this method, actual number of days between two given dates will be taken and year is assumed to be of 365 days.
- **Actual/Actual:** In this method, actual number elapsed between the two days are divided by the actual number of days in a year. For Example for leap year the denominator would be 366
- **Actual/nActual:** This is similar to Actual/Actual, only difference being, the rate is first derived based on the coupon frequency and then the actual days for a coupon period and the no. of basis days become the same making the coupon amount uniform across such coupon periods irrespective of actual no. of days falling in any period. For example, as per **Actual/Actual**, the coupon for a half year having 182 days shall be different from the other half year having 183 days in it. Whereas under **Actual/nActual**, both the coupons for such periods having 182 & 183 days respectively would be same.
- **30E/360 :** In this method, the number of elapsed days is calculated on the basis of a year of 360 days with 12 30-day months, subject to the following rules:
  - If either the first date or last date of the payment period falls on the 31st of a month, that date will be changed to the 30th.
  - If the last day of the payment period falls on the last day of February, the month of February will not be extended to a 30-day month. Rather, the actual number of days in February will be used.
  - The day count factor is calculated as the number of elapsed days divided by 360.
- **30E/365:** This method is similar to 30E/360 method with a slight change in denominator value. Instead of 360, basis of year is assumed to be 365 days.