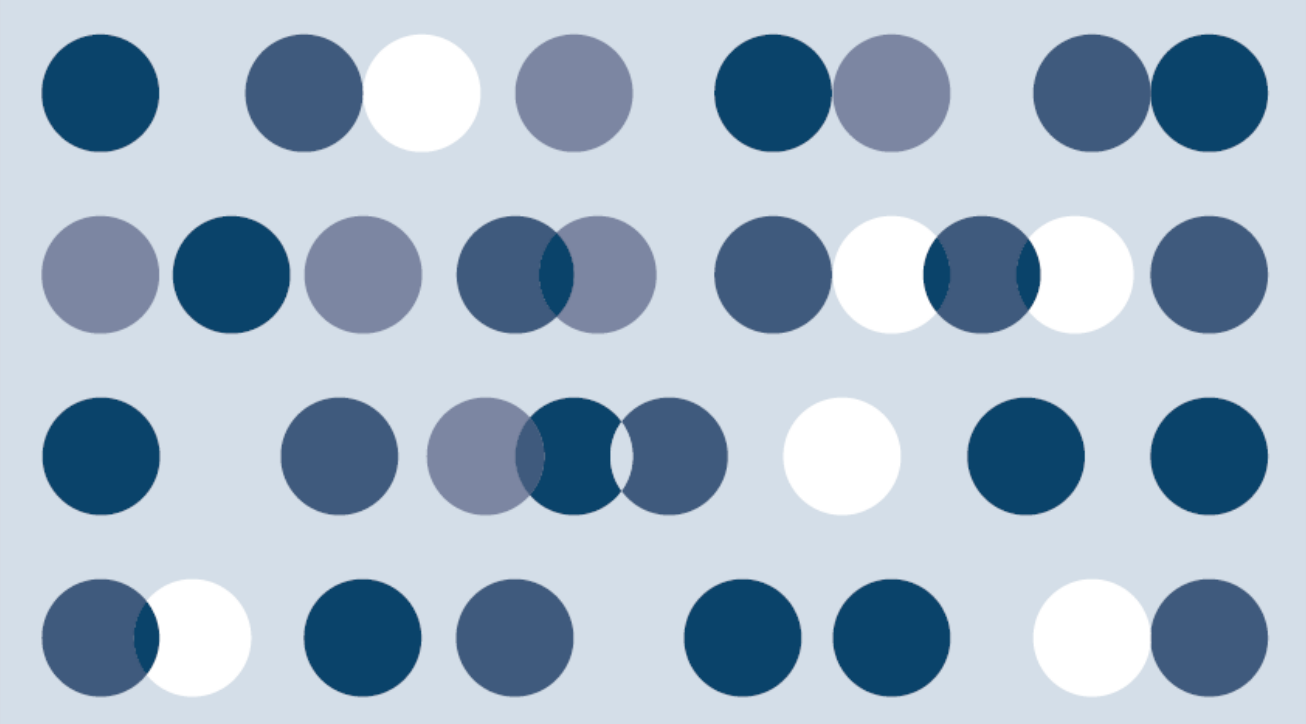
April 2020

OTC CLEARING HONG KONG LIMITED

OTC ACCOUNT SERVICES INFORMATION SYSTEM ("OASIS) WEB PORTAL USER MANUAL
PART IV – OASIS MARGIN SIMULATOR PORTAL



Disclaimer

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Amendment Log

Updated Date	Document / Section	Description
November, 2014	Part IV	- Revise possible error message for invalid log in.
April 2015	Part IV	- Revise field names shown in user interface - Include simulation for margin requirement in respect of Client Clearing
April 2015	Part VI	- Revise and additional supporting values
October 2016	Part VI	- Include Trade Blotter for CCS
April 2020	Part VI	- Add section of Failure of Margin Simulator Portal

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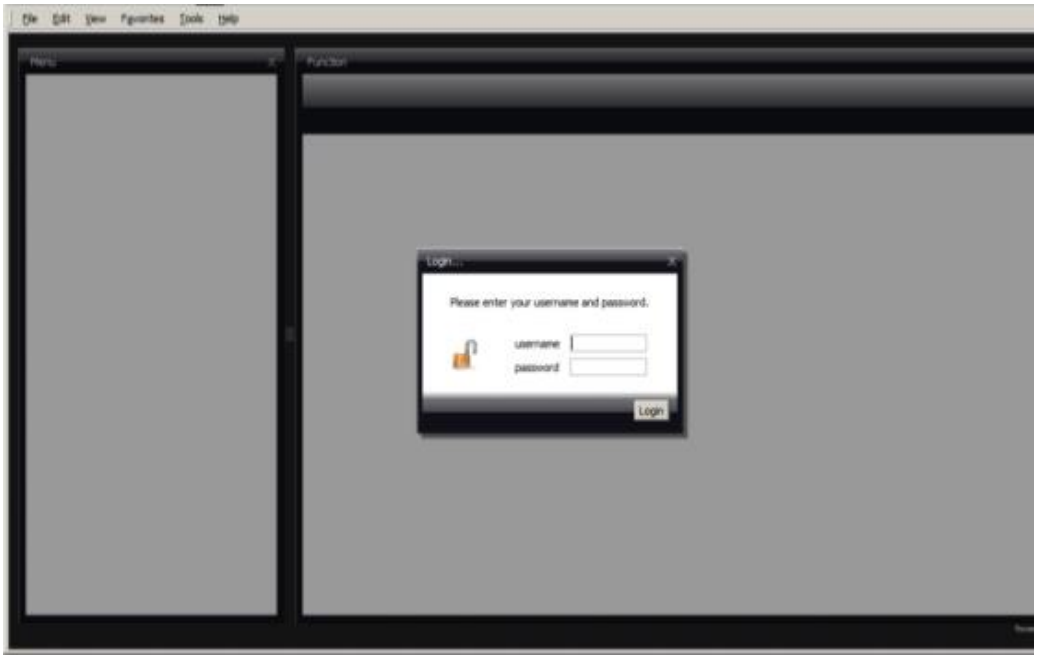
1. Getting Started

1.1. Logon and Logoff

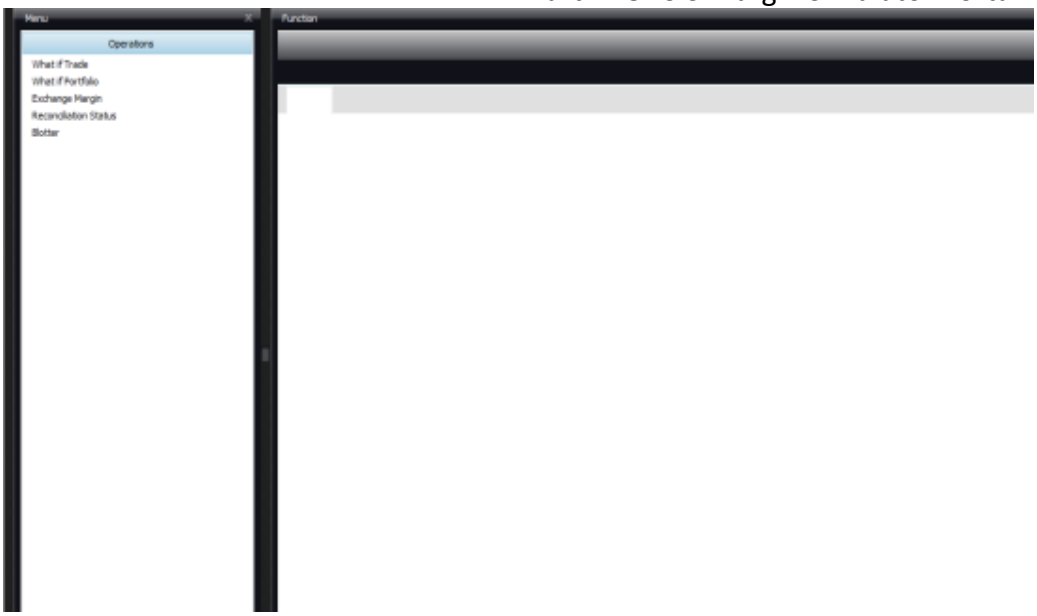
1.1.1. Logon

The logon process is similar to the Collateral Management Portal. The logon URL of the what-if margin simulator is https://whatif.otcclearinghk.com/recon-services.

Here is the logon screen, the User ID and password are the same as that of the Collateral Management Portal:



Successful logon screen:



First Time Logon

The logon credentials of OASIS Collateral Management Portal and Margin Simulator are the same. OASIS users can only change the password on the Collateral Management Portal. Any change to the password will take effect immediately on the Collateral Management Portal but **one day later for the Margin Simulator.**

Password Expiration

Please refer to Section 1.2 of Part III.

Problem Logon

The following error message will be displayed in the Portal for invalid login.

Error Message at login	Descriptions / Actions
Login unsuccessful – Bad credentials	The password entered does not match with the corresponding User ID. OASIS user need to input a correct combination of user ID and password.
Login unsuccessful – [User_name] is not authorized	The user ID provided does not exist
Login unsuccessful – Exception getting the user details for user	

Failure of Margin Simulator Portal

In the event of Margin Simulator Portal failure, user should attempt to re-login Margin Simulator Portal. If the problem persists, user can contact the hotline in Part I section 1.

2. Interface Operation

OASIS Margin Simulator Graphical User Interface ("GUI") allows clearing members to estimate What-if Trade/Portfolio margin requirement and view cleared trades as of the previous business day.

After logging on to OASIS Margin Simulator, the home page displays the 6 following main functions on the Operations panel:

a) What if Trade
b) What if Portfolio
c) Exchange Margin (not applicable)
d) Reconciliation Status (not applicable)
e) Blotter

The details of each of the above functions are set out in the following sections.

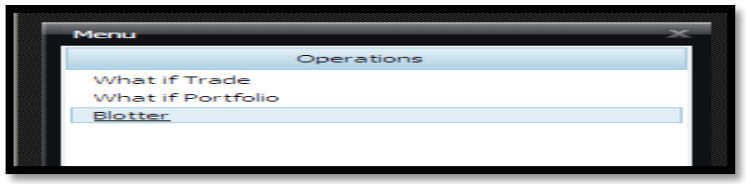
2.1. Cleared Trade Blotter

2.1.1. Descriptions

The trade blotter shows all the cleared trades of the Clearing Member as of the previous end-of-day (EOD).

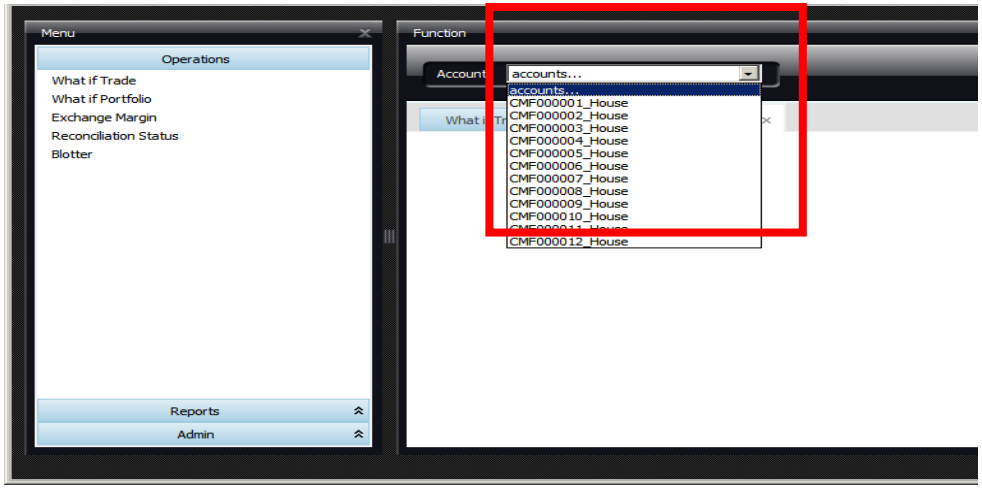
2.1.2. How to Use (Step by Step)

1. Select **Blotter**



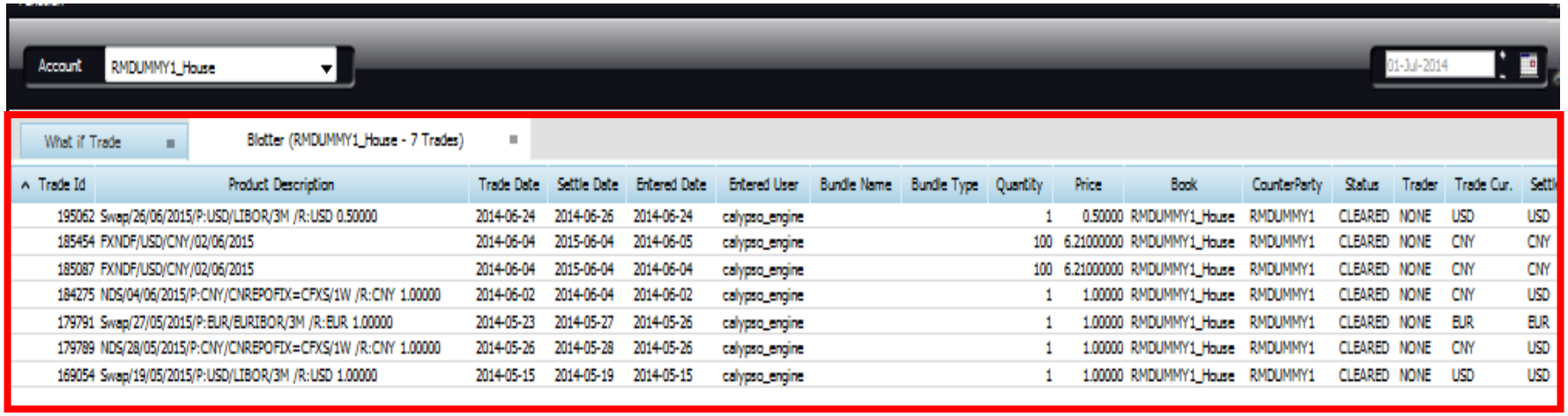
2. Select the account from the **Account** drop down box for which you wish to view the cleared trades. (Note: this is demo screenshot and in

reality each Clearing Member can only view its own house accounts and client accounts.)



3. Once the account selection has been made, the system will load the trade as shown in the illustration below. Each account captures the

cleared trades as of at the previous EOD.



Trade Id	Product Description	Trade Date	Settle Date	Entered Date	Entered User	Bundle Name	Bundle Type	Quantity	Price	Book	CounterParty	Status	Trader	Trade Cur.	Settl
195062	Swap/26/06/2015/P:USD/LIBOR/3M /R:USD 0.50000	2014-06-24	2014-06-26	2014-06-24	calypso_engine			1	0.50000	RMDUMMY1_House	RMDUMMY1	CLEARED	NONE	USD	USD
185454	FXNDF/USD/CNY/02/06/2015	2014-06-04	2015-06-04	2014-06-05	calypso_engine			100	6.21000000	RMDUMMY1_House	RMDUMMY1	CLEARED	NONE	CNY	CNY
185087	FXNDF/USD/CNY/02/06/2015	2014-06-04	2015-06-04	2014-06-04	calypso_engine			100	6.21000000	RMDUMMY1_House	RMDUMMY1	CLEARED	NONE	CNY	CNY
184275	NDS/04/06/2015/P:CNY/CNREPOFIX=CFXS/1W /R:CNY 1.00000	2014-06-02	2014-06-04	2014-06-02	calypso_engine			1	1.00000	RMDUMMY1_House	RMDUMMY1	CLEARED	NONE	CNY	USD
179791	Swap/27/05/2015/P:EUR/EURIBOR/3M /R:EUR 1.00000	2014-05-23	2014-05-27	2014-05-26	calypso_engine			1	1.00000	RMDUMMY1_House	RMDUMMY1	CLEARED	NONE	EUR	EUR
179789	NDS/28/05/2015/P:CNY/CNREPOFIX=CFXS/1W /R:CNY 1.00000	2014-05-26	2014-05-28	2014-05-26	calypso_engine			1	1.00000	RMDUMMY1_House	RMDUMMY1	CLEARED	NONE	CNY	USD
169054	Swap/19/05/2015/P:USD/LIBOR/3M /R:USD 1.00000	2014-05-15	2014-05-19	2014-05-15	calypso_engine			1	1.00000	RMDUMMY1_House	RMDUMMY1	CLEARED	NONE	USD	USD

Field descriptions for an **IRS/CCS** in the blotter:

Field	Descriptions
Trade Id	Trade Id assigned by the OCASS
Product Description	Basic information about the trade Example: Trade Id 195062 which has the following trade descriptions: **Swap/26/06/2015/P:USD/LIBOR/3M/R:USD 0.5** This can be interpreted as follows: A Swap trade maturing on 26/06/2015 paying floating rate based on 3 month LIBOR and receiving 0.5 percent fixed rate.
Trade Date	The date the trade become effective
Settle Date	The start date of next coupon accrual period.
Entered Date	The date the trade is received by the OCASS
Entered User	The User who entered the trade
Bundle Name	Not Applicable
Bundle Type	Not Applicable
Quantity	Trade Unit – for IRS trade the quantity is always 1.
Price	Fixed Swap Rate i.e. contract rate
Book	The account in which the cleared trade is.
Counterparty	The name of Clearing Member or client used in the OCASS.
Status	The current trade status in the OCASS. A status of: “CLEARED”: cleared by OTC Clear “NONE”: what-if trade “DECLEARED”: trades that have been de-cleared
Trader	Not Applicable
Trade Cur.	Contract currency of the Swap
Settle Cur.	The currency used to settle the cash flow of the trade

Similarly, **NDF** trades are displayed in the same fashion. Each account captures the cleared trades of the Clearing Member as of at the previous EOD.

Field descriptions for a **NDF** in the blotter:

Field	Descriptions
Trade Id	Trade Id assigned by the OCASS
External Reference	MarketWire, DS Match or HKTR-MC trade reference
Product Description	Basic information about the trade Example: Trade Id 185454 which has the following trade descriptions: FXNDF/USD/CNY/02/06/2015 This can be interpreted as follows: A USD/CNY trade with rate reset date on 02/06/2015.
Trade Date	The date the trade become effective
Settle Date	The date the settlement of the trade.
Entered Date	The date the trade is received by the OTC Clearing System
Entered User	The User who entered the trade
Bundle Name	Not Applicable
Bundle Type	Not Applicable
Quantity	Trade Unit – For NDF the quantity reflects notional of primary currency (USD).
Price	Contract rate of the NDF

Book	The account in which the cleared trade is.
Counterparty	The name of Clearing Member or client in the OCASS.
Status	The current trade status in the clearing system. A status of: “CLEAR”: cleared by OTC Clear “NONE”: what-if trade “De-Cleared”: trades that have been de-cleared
Trader	Not Applicable
Trade Cur.	The secondary currency of the NDF.
Settle Cur.	Same as Trade Cur.

2.2. What-if Trade

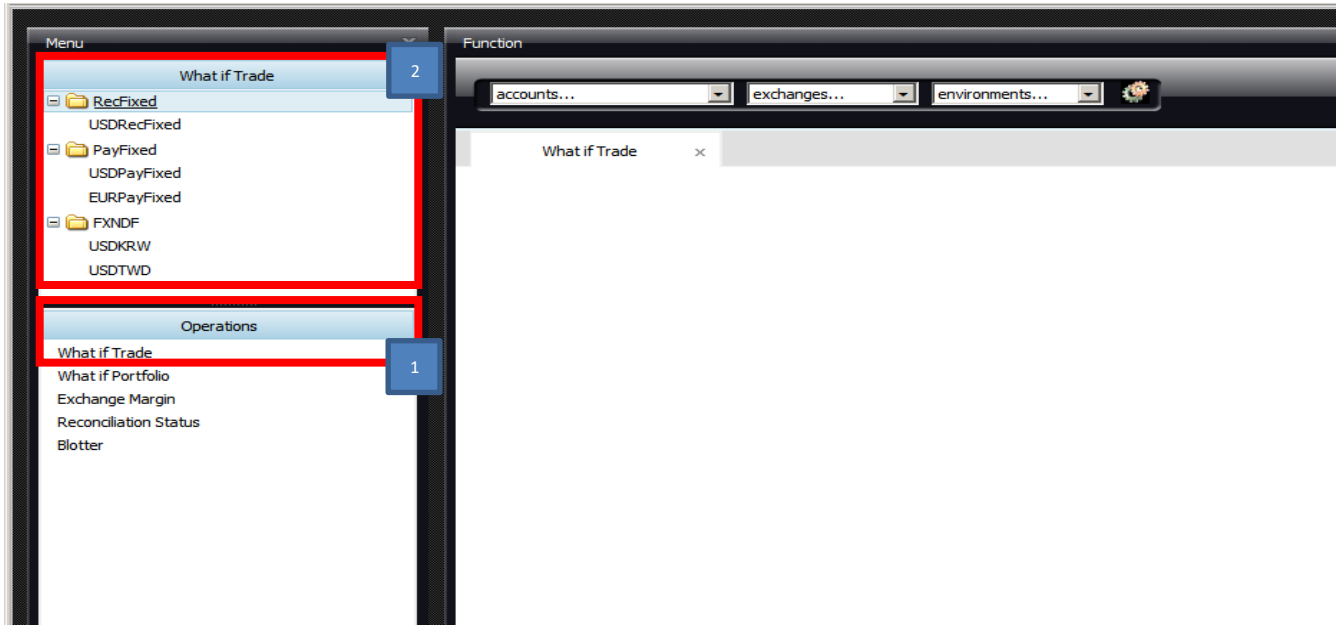
2.2.1. Function Descriptions

To simulate the incremental margin requirement of 1 new trade for chosen position account.

2.2.2. IRS What-If Trade – How to Use (Step by Step)

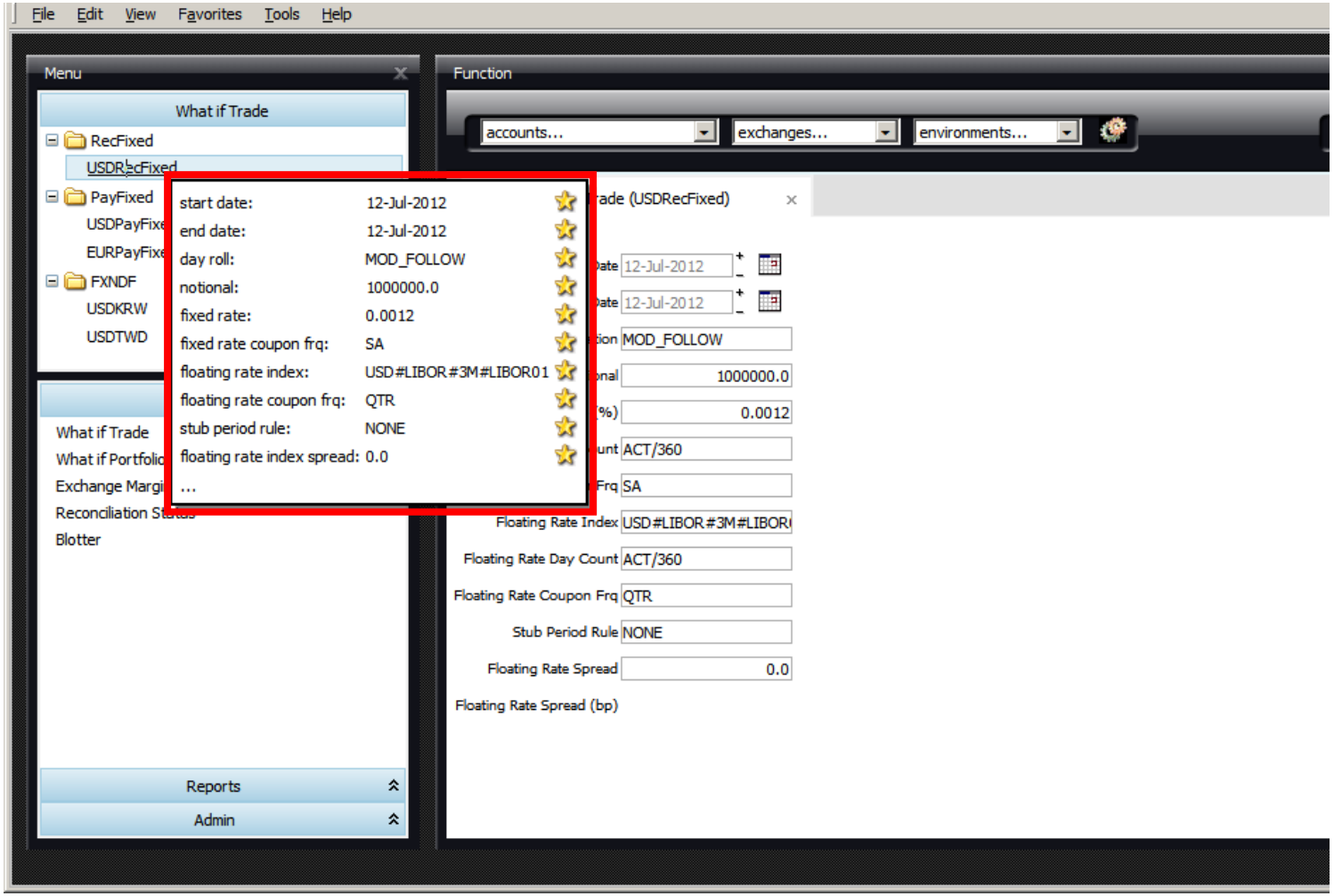
1. Click **What-if Trade** in the operations panel (frame #1). The panel will expand and display the trade templates available (frame #2) to the user. The templates specify the currency and direction of the trade(s) for which the incremental margin requirement is to be simulated. Please note that if user(s) want to simulate margin requirement of pay fix and receive float IRS trade, “RecFixed” template should be

chosen as “RecFixed” means OTC Clear receive fix rate and pay floating rate.



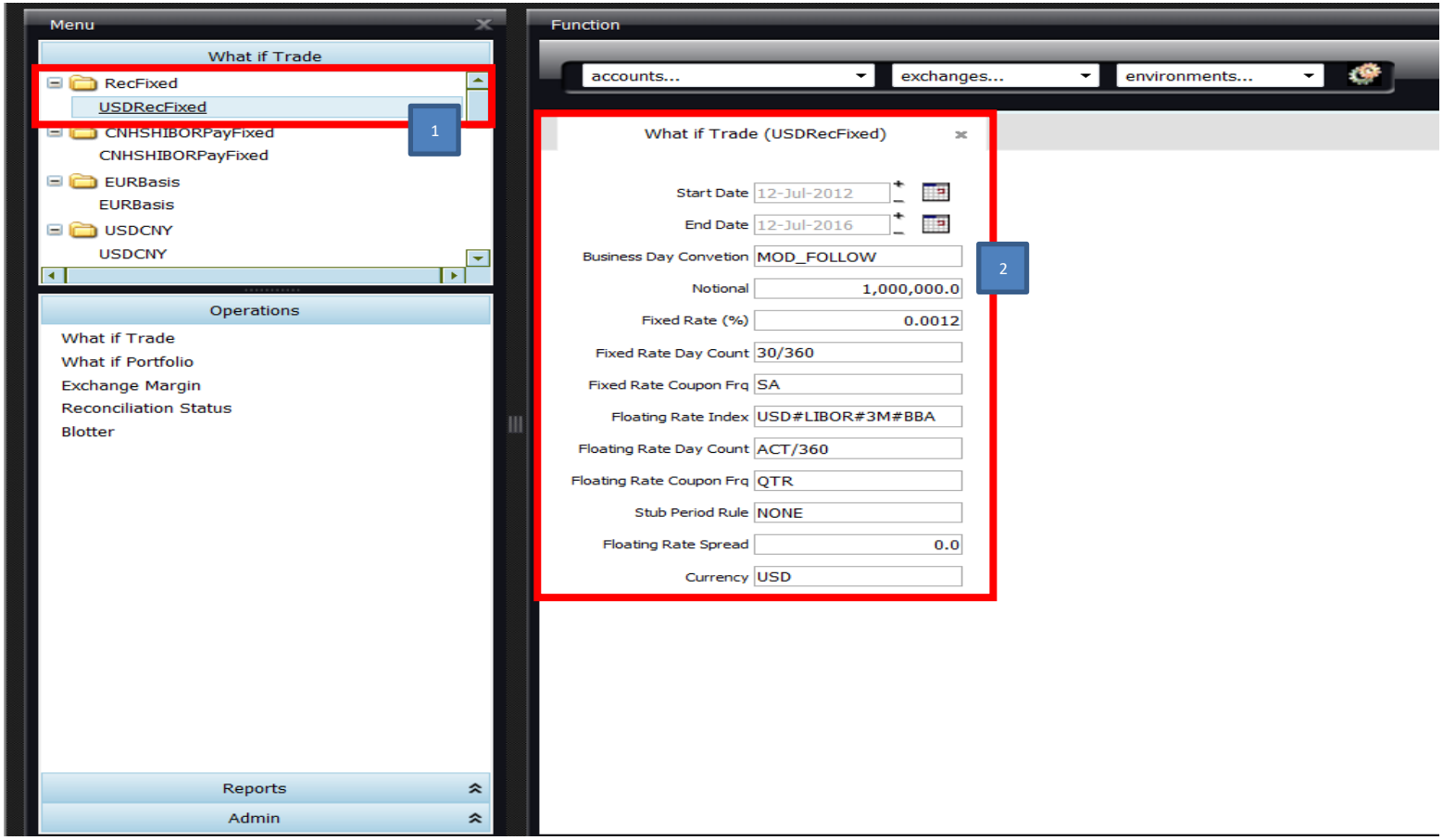
2. **Quick view:** User(s) can park the mouse pointer on the template name to have a quick view on template information. The attributes

shown with a yellow star in the quick view are available input fields.



3. Select the appropriate template (frame #1) to simulate margin requirement of the What-if trade. Input relevant information/data in the

fields (frame #2)[1]. All fields are mandatory.

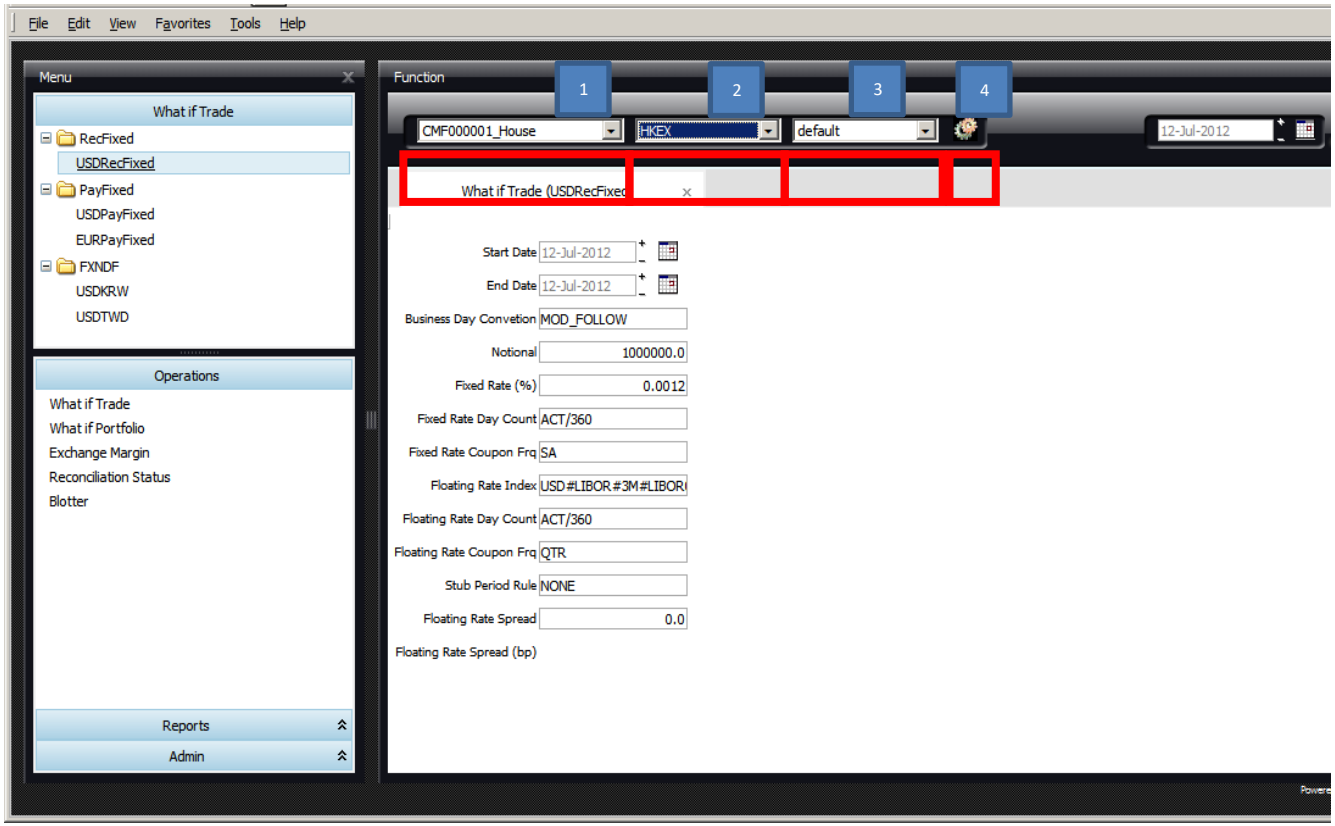


[1] Please see OTC Account Services Information System (”OASIS”) Web Portal User Manual –Part V for the detailed information

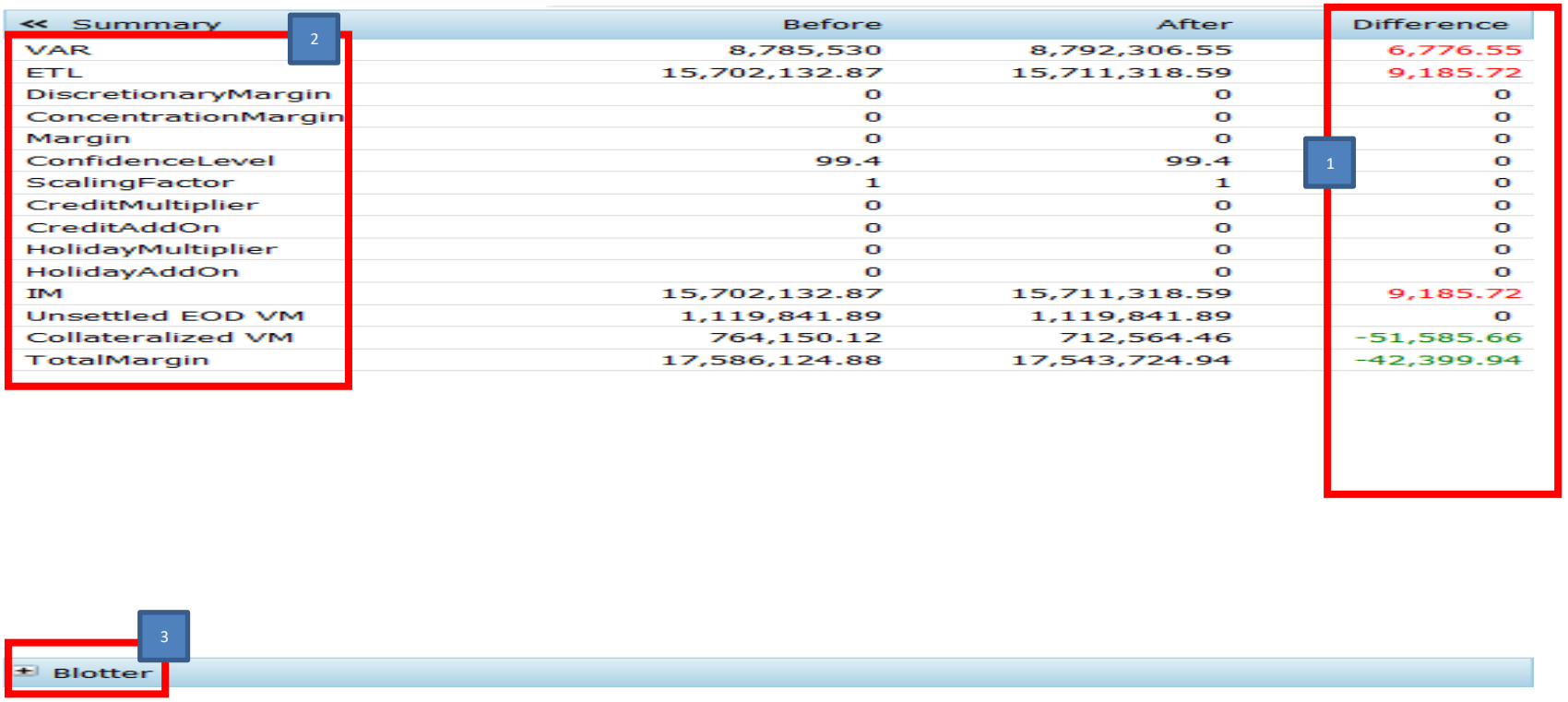
4. Select the account in which the new trade will be included from “accounts” drop down menu (frame #1)
5. Select “HKEx” from “exchanges” dropdown menu (frame #2)
6. Select “OFFICIAL” from “environments” drop down menu (frame #3)
7. Click the launch report icon to request an incremental margin check for the new trade (frame #4)

Gentle Reminder:

Please make sure the correct margin date is selected. The margin date should be the previous business day on which the margin report has been generated.


File Edit View Favorites Tools Help
Menu
What if Trade
RecFixed
USDRecFixed
PayFixed
USDPayFixed
EURPayFixed
FXNDF
USDKRW
USDTWD
Operations
What if Trade
What if Portfolio
Exchange Margin
Reconciliation Status
Blotter
Reports
Admin
Function
1
2
3
4
CMF000001_House
HKEX
default
12-Jul-2012
What if Trade (USDRecFixed
Start Date 12-Jul-2012
End Date 12-Jul-2012
Business Day Convetion MOD_FOLLOW
Notional 1000000.0
Fixed Rate (%) 0.0012
Fixed Rate Day Count ACT/360
Fixed Rate Coupon Frq SA
Floating Rate Index USD#LIBOR#3M#LIBOR
Floating Rate Day Count ACT/360
Floating Rate Coupon Frq QTR
Stub Period Rule NONE
Floating Rate Spread 0.0
Floating Rate Spread (bp)

The report will take some time[2] to generate. Once the calculations is completed, the simulation report will be displayed on the function screen. An illustration of the margin report is shown below:



Summary	Before	After	Difference
VAR	8,785,530	8,792,306.55	6,776.55
ETL	15,702,132.87	15,711,318.59	9,185.72
DiscretionaryMargin	0	0	0
ConcentrationMargin	0	0	0
Margin	0	0	0
ConfidenceLevel	99.4	99.4	0
ScalingFactor	1	1	0
CreditMultiplier	0	0	0
CreditAddOn	0	0	0
HolidayMultiplier	0	0	0
HolidayAddOn	0	0	0
IM	15,702,132.87	15,711,318.59	9,185.72
Unsettled EOD VM	1,119,841.89	1,119,841.89	0
Collateralized VM	764,150.12	712,564.46	-51,585.66
TotalMargin	17,586,124.88	17,543,724.94	-42,399.94

The report shows the differences in margin requirement of the portfolio before and after the simulated trade is included (frame #1). The difference is color coded:

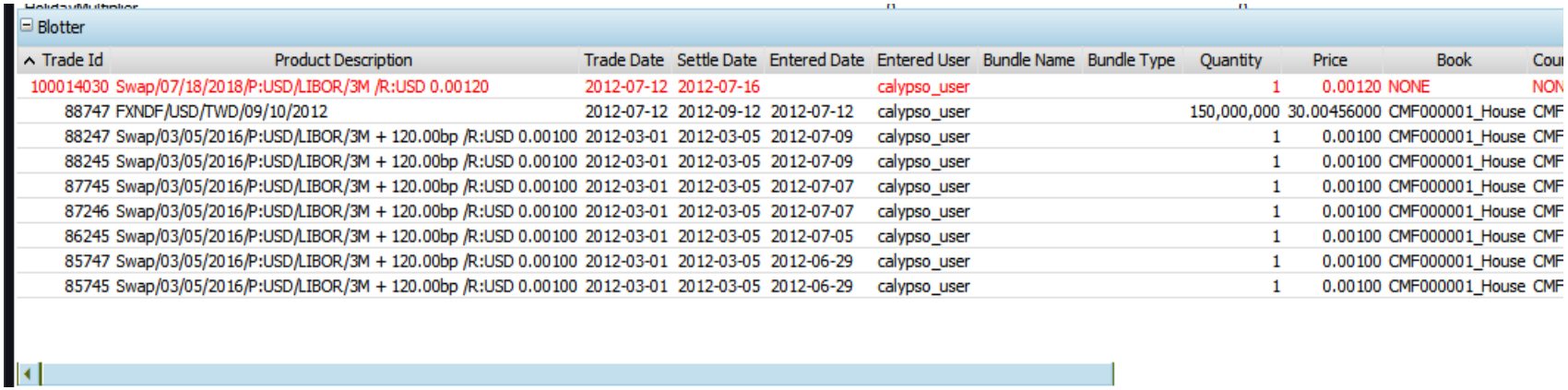
Red: increase in margin requirement after adding this simulated trade

[2] The time for completing margin simulation will usually be less than 1 minute but is subject to factors such as connectivity condition, existing portfolio size, etc.

Green: decrease in margin requirement after adding this simulated trade

User(s) can refer MRCleared report layout in the OASIS report usage guide for detailed description of each field in the summary (frame #1). Please note that the only difference between client and house account is the holding period assumption used for margin simulation i.e. 7 days for client account while 5 days for house account.

The user can then click the **Blotter** icon highlighted at the lower left corner of above screenshot (frame #3) to show the trade blotter information. The simulated trade is shown on the top of the blotter (see below).



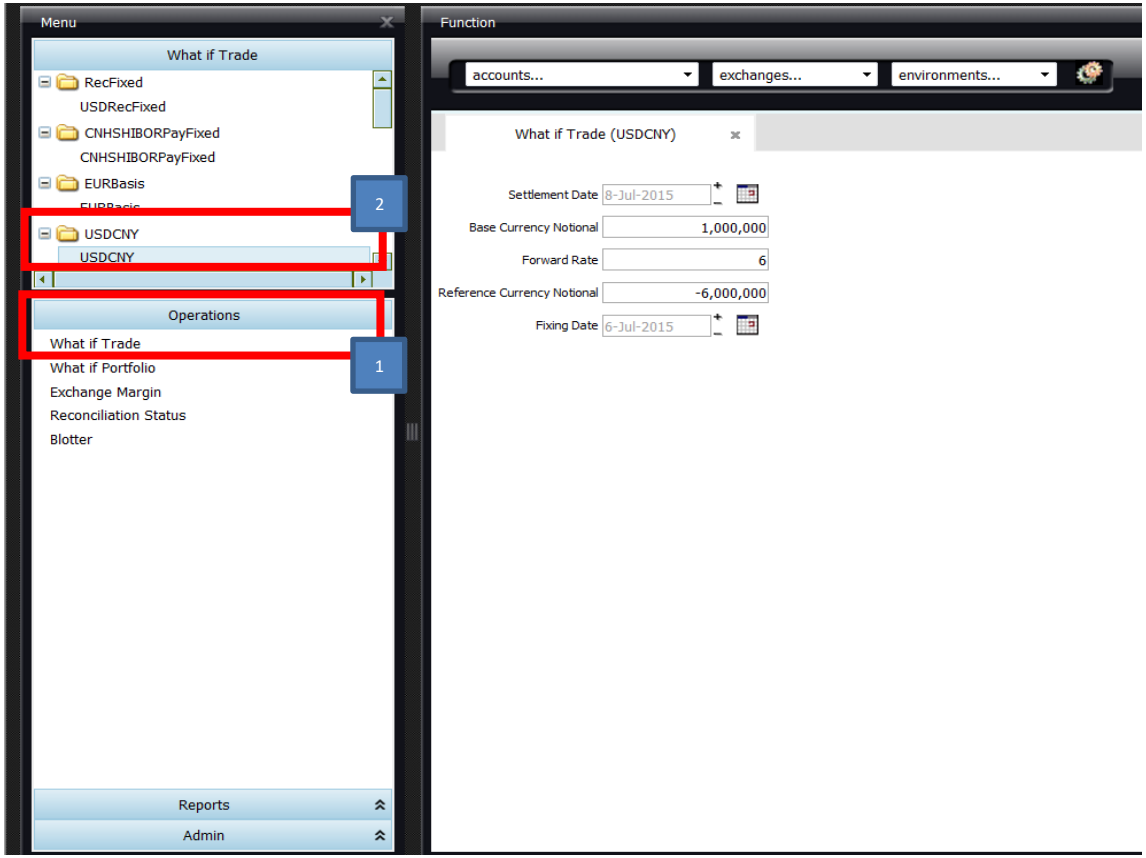
Blotter

Trade Id	Product Description	Trade Date	Settle Date	Entered Date	Entered User	Bundle Name	Bundle Type	Quantity	Price	Book	Cou
100014030	Swap/07/18/2018/P:USD/LIBOR/3M /R:USD 0.00120	2012-07-12	2012-07-16		calypso_user			1	0.00120	NONE	NON
88747	FXNDF/USD/TWD/09/10/2012	2012-07-12	2012-09-12	2012-07-12	calypso_user			150,000,000	30.00456000	CMF000001_House	CMF
88247	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-09	calypso_user			1	0.00100	CMF000001_House	CMF
88245	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-09	calypso_user			1	0.00100	CMF000001_House	CMF
87745	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-07	calypso_user			1	0.00100	CMF000001_House	CMF
87246	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-07	calypso_user			1	0.00100	CMF000001_House	CMF
86245	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-05	calypso_user			1	0.00100	CMF000001_House	CMF
85747	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-06-29	calypso_user			1	0.00100	CMF000001_House	CMF
85745	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-06-29	calypso_user			1	0.00100	CMF000001_House	CMF

2.2.3. FX NDF What-If Trade – How to Use (Step by Step)

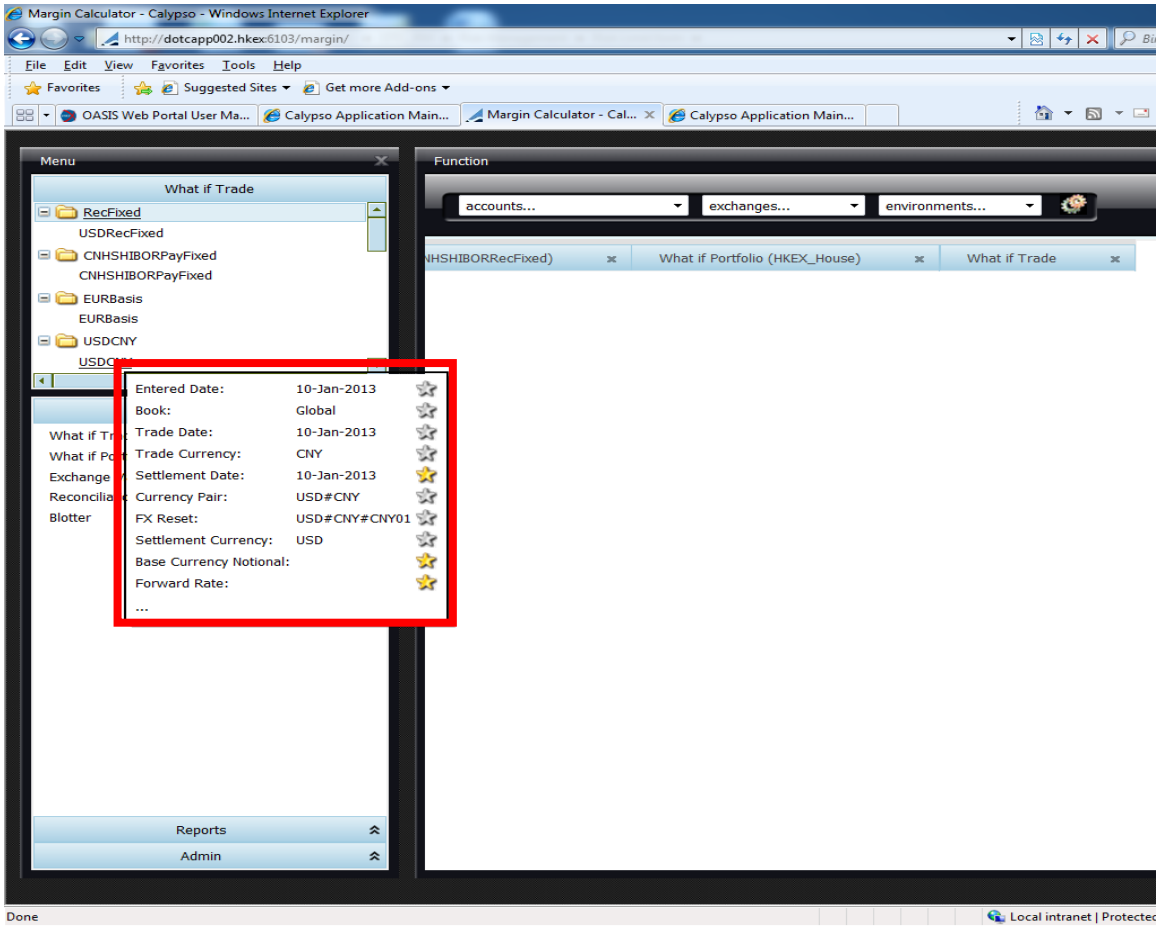
1. Click **What-if Trade** from the operations panel (frame #1). The panel will expand and display the trade templates available (frame #2) to the current user. The templates specify the currency and direction of the trade(s) for which the incremental margin requirement is to be

simulated.



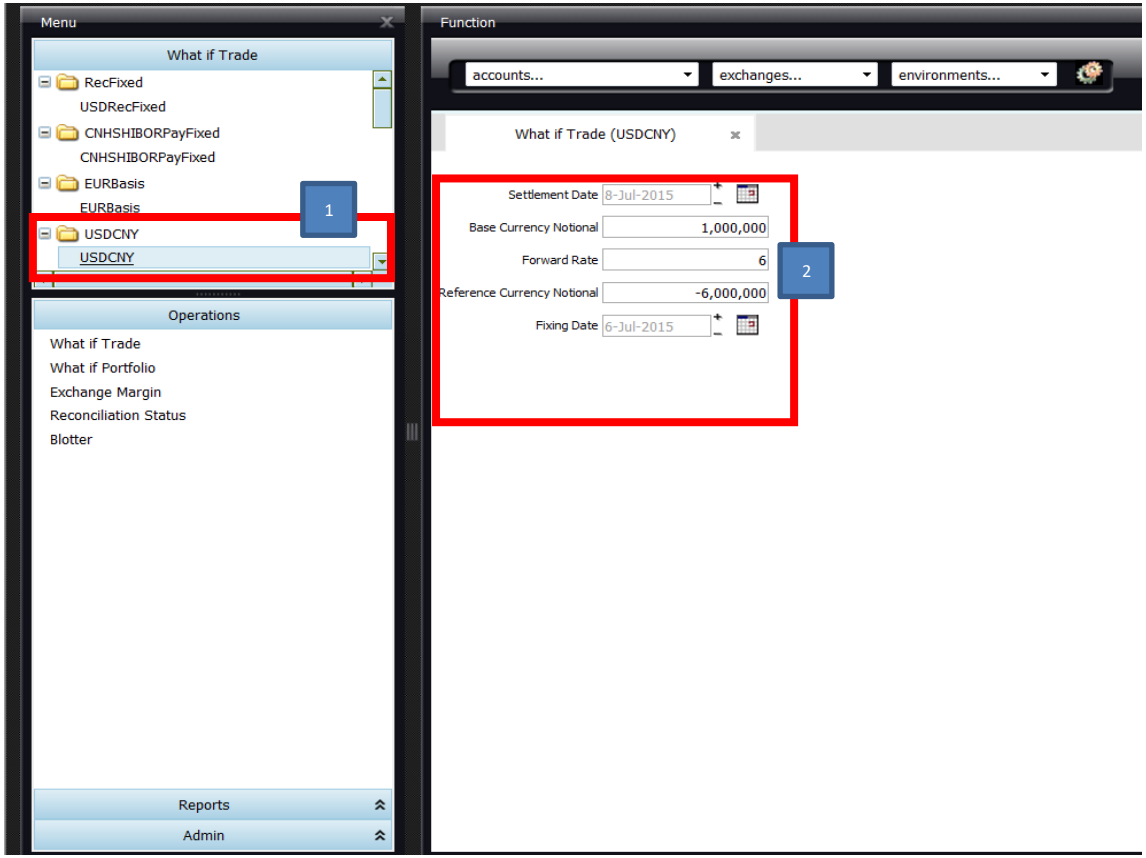
2. **Quick view:** User(s) can park the mouse pointer on the template name to have a quick view on template information. The attributes

shown with a yellow star in the quick view are available input fields.



3. Select the appropriate template (frame #1) to simulate margin requirement of the What-if trade. Input relevant information/data in the

fields (frame #2)[3]. All fields are mandatory. Please note that if user(s) want to simulate margin requirement of short position (sell USD and buy secondary currency), user(s) has to input positive figure in base currency notional and negative figure in reference currency notional (see screenshot below).

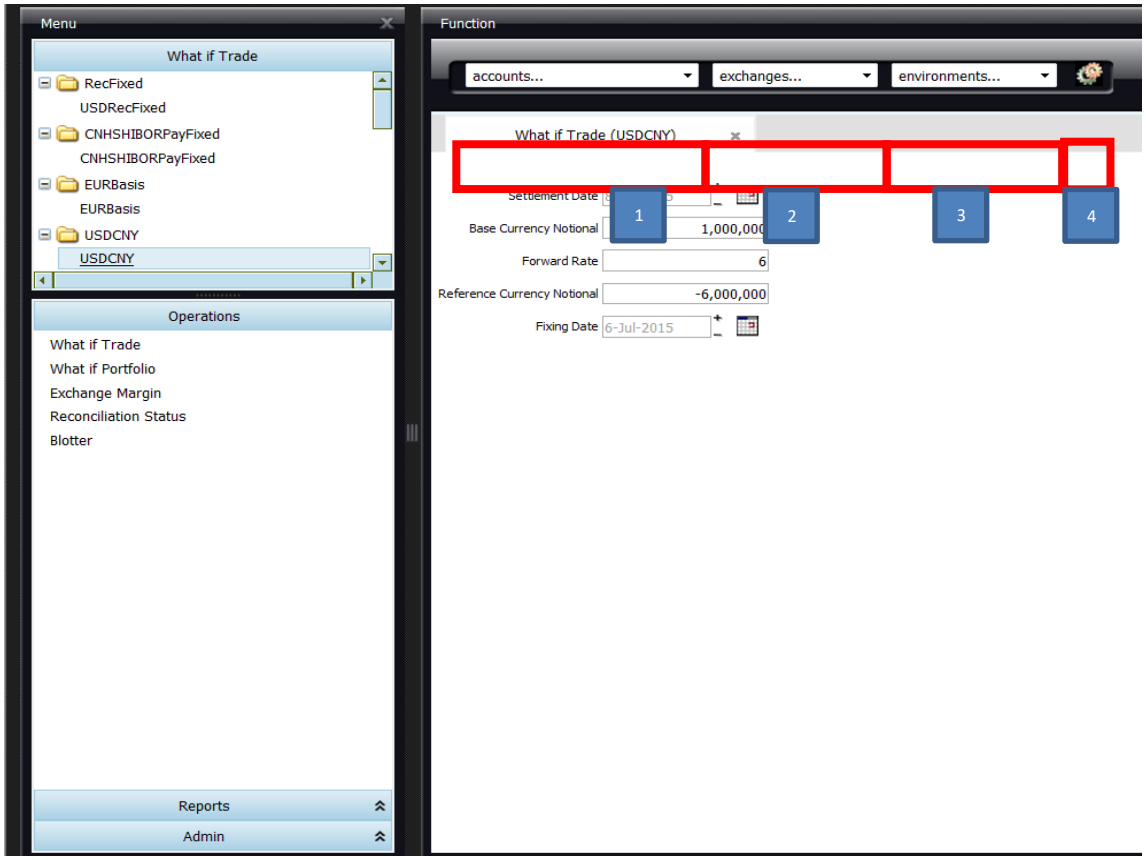


[3] Please see OTC Account Services Information System ("OASIS") Web Portal User Manual –Part V for the detailed information of each field.

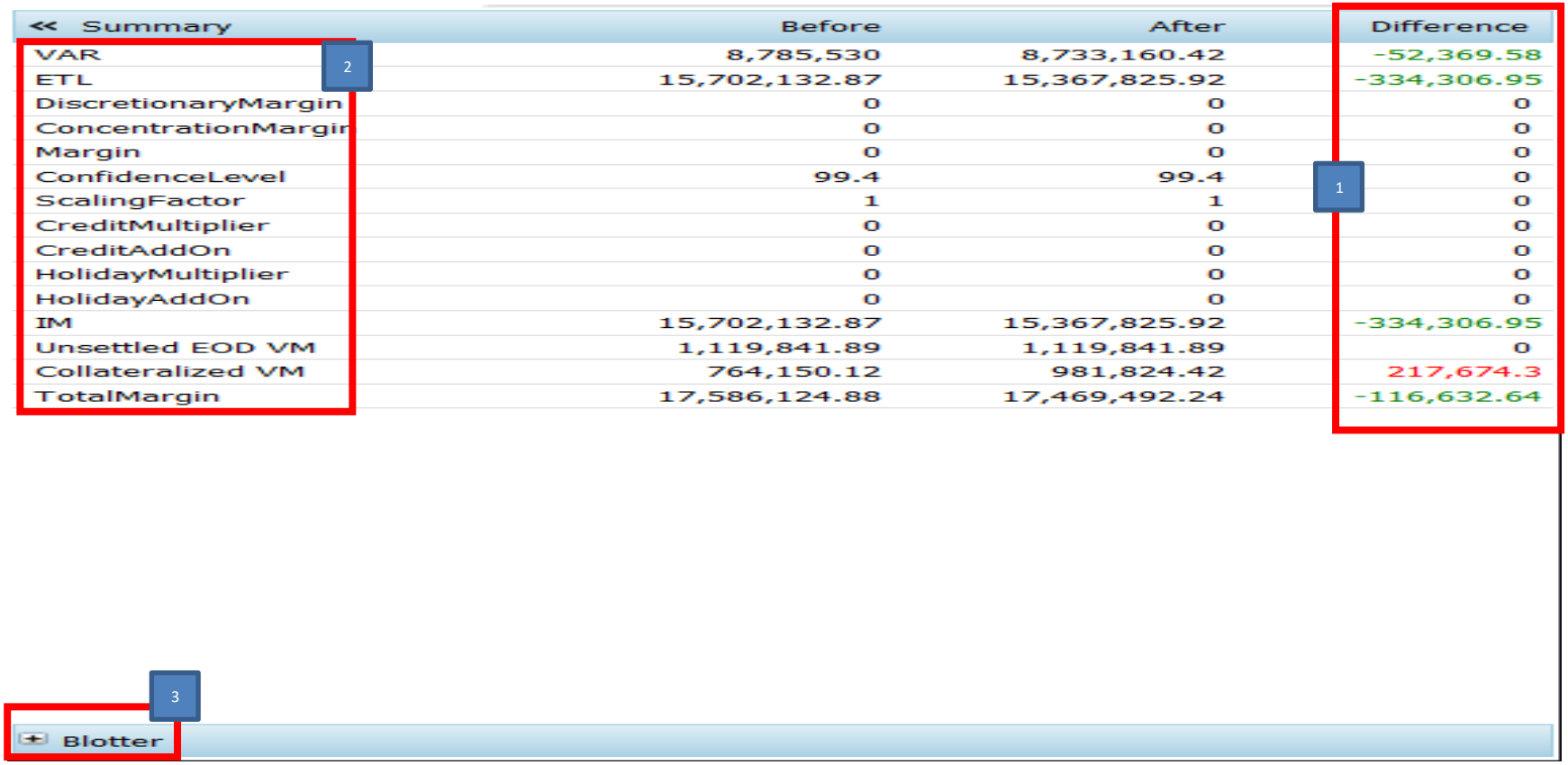
4. Select the account which the new trade will be included from “accounts” drop down menu
5. Select “HKEx” from “exchanges” dropdown menu
6. Select “OFFICIAL” from “environments” drop down menu
7. Click the launch report icon to request an incremental margin check for the new trade

Gentle Reminder:

When using margin simulator, please make sure that the correct margin date is selected. The margin date should be the previous business day on which the margin report has been generated.



The report will take some time[4] to generate. Once the calculations is completed, the simulation report will be displayed on the function screen. As is the case with IRS What-If Trade, the report shows the differences in margin requirement (frame #1) of the portfolio before and after the new trade is included. The difference is color coded:



Summary	Before	After	Difference
VAR	8,785,530	8,733,160.42	-52,369.58
ETL	15,702,132.87	15,367,825.92	-334,306.95
DiscretionaryMargin	0	0	0
ConcentrationMargin	0	0	0
Margin	0	0	0
ConfidenceLevel	99.4	99.4	0
ScalingFactor	1	1	0
CreditMultiplier	0	0	0
CreditAddOn	0	0	0
HolidayMultiplier	0	0	0
HolidayAddOn	0	0	0
IM	15,702,132.87	15,367,825.92	-334,306.95
Unsettled EOD VM	1,119,841.89	1,119,841.89	0
Collateralized VM	764,150.12	981,824.42	217,674.3
TotalMargin	17,586,124.88	17,469,492.24	-116,632.64

[4] See footnote 2.

Red: increase in margin requirement after adding this simulated trade

Green: decrease in margin requirement after adding this simulated trade.

User(s) can refer MRCleared report layout in the OASIS report usage guide for detailed description of each field in the summary (frame #2). Please note that the only difference between client and house account is the holding period assumption used for margin simulation i.e. 7 days for client account while 5 days for house account.

The user can then click the **Blotter** (frame #3) to view the trade blotter information.

2.3. What-If Portfolio

2.3.1. Function Descriptions

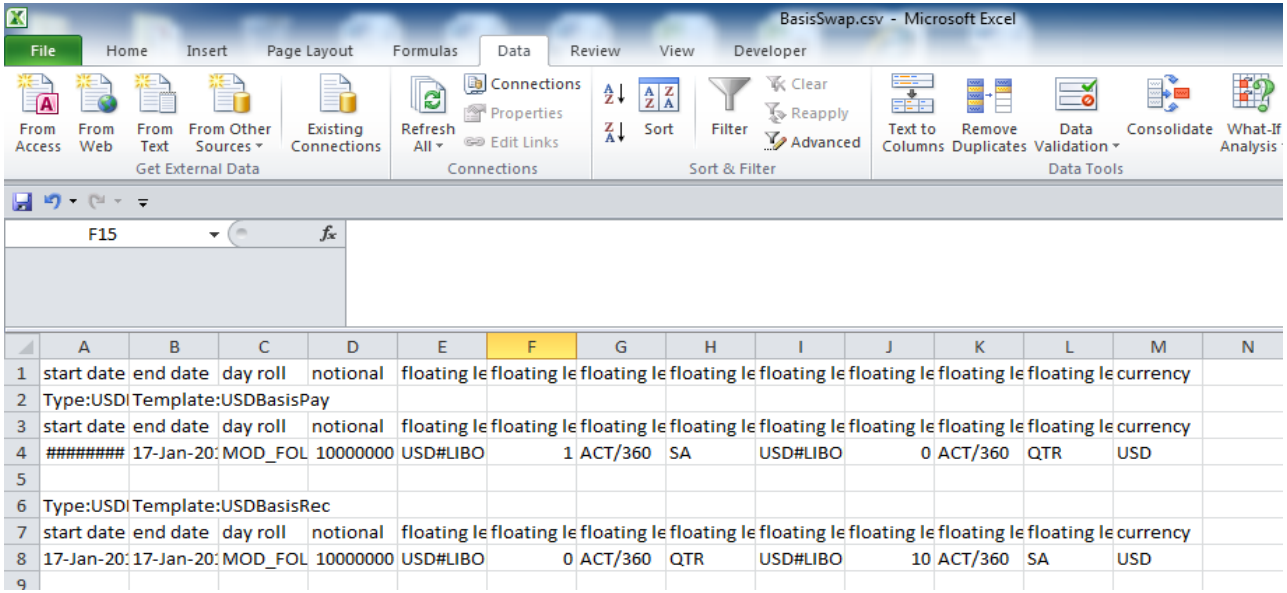
Compared with What-If trade which allows user to upload trade manually one by one, What-If portfolio function allows the user to calculate the incremental margin requirement by adding more than one trade to an existing or a new portfolio in one go.

To use this functionality a **CSV** file containing trade details and in specific format must be used. The following steps show the procedures to upload the file.

For the detailed file template and specifications to generate a CSV file for your portfolio, please refer to Part V, Appendix 1.

2.3.2. What-If Portfolio – How to Use (Step by Step)

1. Open a CSV sample file provided by OTC Clear to create a customized portfolio of trades

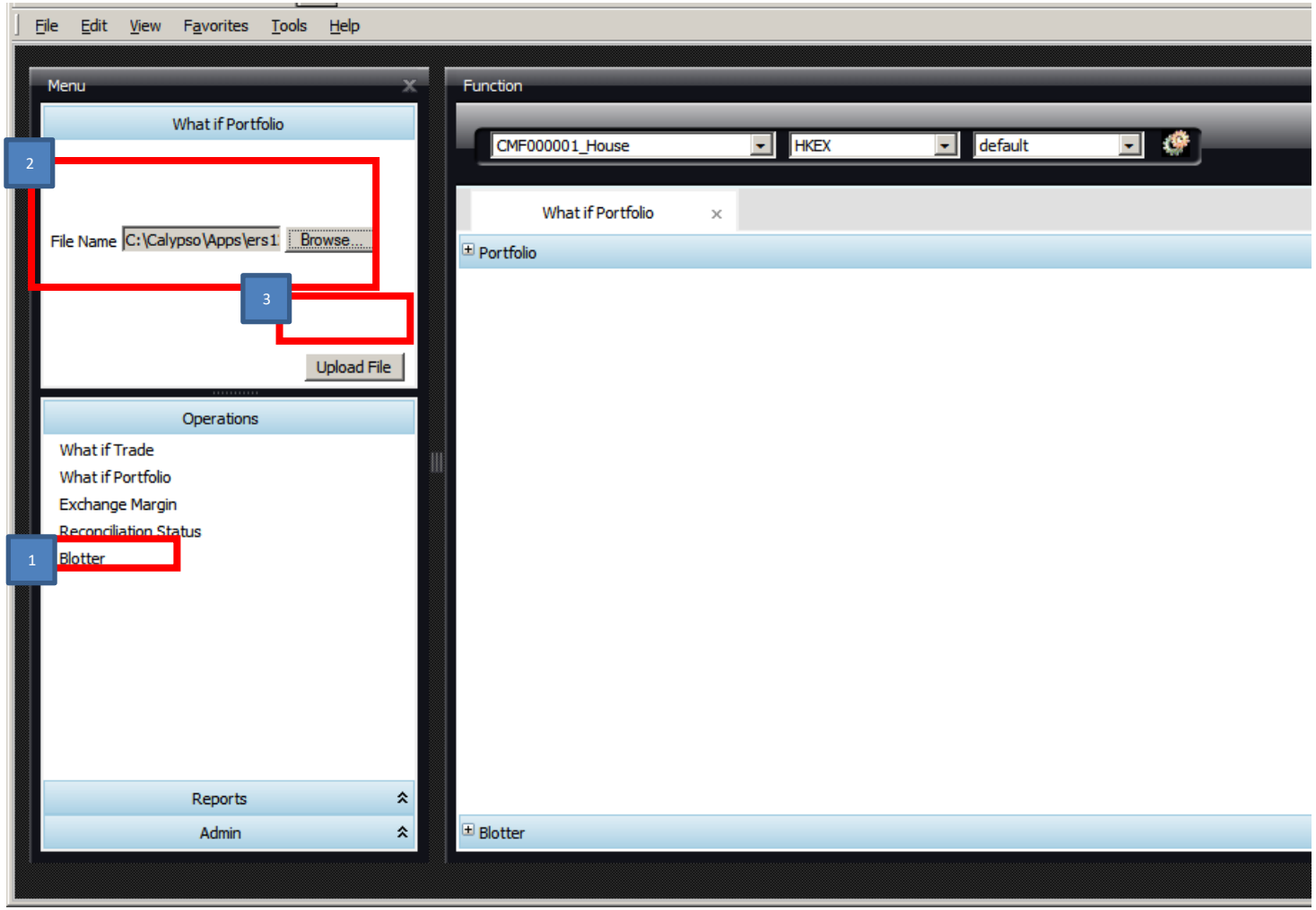


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	start date	end date	day roll	notional	floating le	floating le	floating le	floating le	floating le	floating le	floating le	floating le	currency	
2	Type:USDI	Template:USDBasisPay												
3	start date	end date	day roll	notional	floating le	floating le	floating le	floating le	floating le	floating le	floating le	floating le	currency	
4	########	17-Jan-20:	MOD_FOL	10000000	USD#LIBO	1	ACT/360	SA	USD#LIBO	0	ACT/360	QTR	USD	
5														
6	Type:USDI	Template:USDBasisRec												
7	start date	end date	day roll	notional	floating le	floating le	floating le	floating le	floating le	floating le	floating le	floating le	currency	
8	17-Jan-20:	17-Jan-20:	MOD_FOL	10000000	USD#LIBO	0	ACT/360	QTR	USD#LIBO	10	ACT/360	SA	USD	
9														

When creating a CSV file for what-if portfolio, user(s) can either refer sample trades in the csv file provided by OTC Clear or refer to Part V, Appendix 1. Specifically, user(s) should follow the rules.

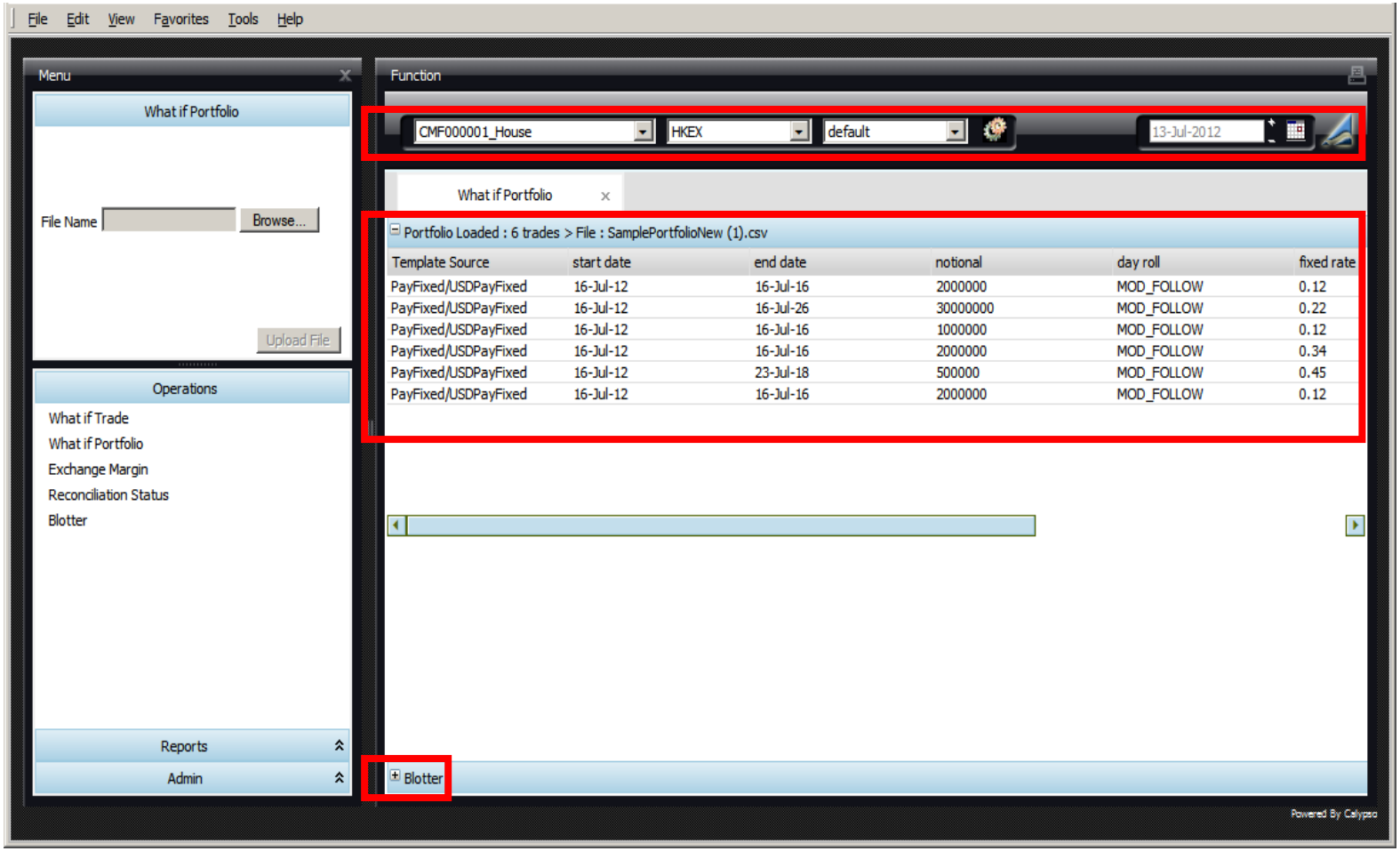
2. Select the **What-if Portfolio** function (frame #1) on the Operations panel and import the CSV file by clicking the **Browse** button (frame

#2) and **Upload File** button (frame #3)



3. Trades uploaded from the CSV file will be displayed on GUI. Select the account for which you would like to simulate the incremental margin from “accounts”, select “HKEx” for “exchanges” and “official” for “environments” and then click launch report. The analysis will take a few minutes to process. A summary report will be populated on the What-If Margin screen. You can also view the old/new trades in the

portfolio using the **Blotter** option.



4. The view of the old/new trades in the portfolio using the **Blotter** option:

HKEX
香港交易所

Blotter

Trade Id	Product Description	Trade Date	Settle Date	Entered Date	Entered User	Bundle Name	Bundle Type	Quantity	Price	Book	Co
100014526	Swap/07/18/2018/P:USD 0.12000 /R:USD/LIBOR/3M + 80.00bp	2012-07-11	2012-07-13		calypso_user			1	0.12000		
100014525	Swap/07/18/2018/P:USD 0.12000 /R:USD/LIBOR/3M + 340.00bp	2012-07-11	2012-07-13		calypso_user			1	0.12000		
100014524	Swap/07/18/2023/P:USD 0.34000 /R:USD/LIBOR/3M + 30.00bp	2012-07-11	2012-07-13		calypso_user			1	0.34000		
100014523	Swap/07/18/2018/P:USD 0.12000 /R:USD/LIBOR/3M + 70.00bp	2012-07-11	2012-07-13		calypso_user			1	0.12000		
100014522	Swap/07/18/2023/P:USD 0.08000 /R:USD/LIBOR/3M + 20.00bp	2012-07-11	2012-07-13		calypso_user			1	0.08000		
100014521	Swap/07/18/2016/P:USD 0.50000 /R:USD/LIBOR/3M + 340.00bp	2012-07-11	2012-07-13		calypso_user			1	0.50000		
100014520	Swap/07/18/2018/P:USD 0.12000 /R:USD/LIBOR/3M + 10.00bp	2012-07-11	2012-07-13		calypso_user			1	0.12000		
88747	FXNDF/USD/TWD/09/10/2012	2012-07-12	2012-09-12	2012-07-12	calypso_user			150,000,000	30.00456000	CMF000001_House	CM
88247	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-09	calypso_user			1	0.00100	CMF000001_House	CM
88245	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-09	calypso_user			1	0.00100	CMF000001_House	CM
87745	Swap/03/05/2016/P:USD/LIBOR/3M + 120.00bp /R:USD 0.00100	2012-03-01	2012-03-05	2012-07-07	calypso_user			1	0.00100	CMF000001_House	CM