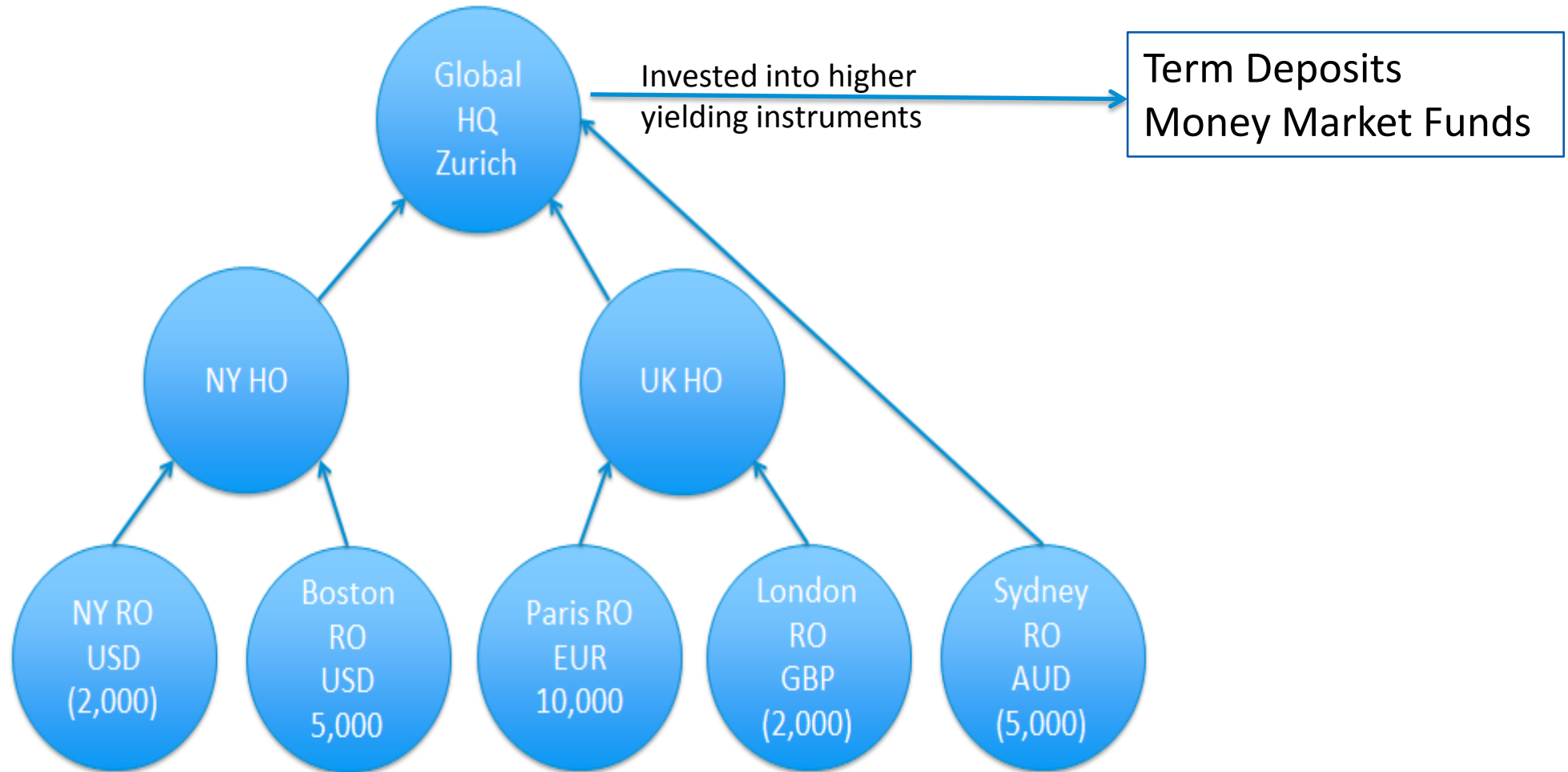


Investment Sweeps

What is Investment Sweeps?

- Investment Sweeps is a solution which automatically transfers surplus funds into higher yielding investment vehicles to effectively manage liquidity and provide optimal returns
- Funds can be transferred to
 - Term Deposits
 - Money Market Funds (MMFs)
- System supports several useful functions such as:
 - Making automatic investments from accounts / pool / drain account group
 - Automatic withdrawals / redemptions in case of shortfall
 - Setting up priorities between more than one investment options
 - Setting up limits to control exposure to single instrument etc.
 - Related functionalities such as dividend, rebate, stop loss, tax, reconciliation etc.
- Investment Sweeps thus leverages the existing capability of LMS to provide a value added service to the customer

Investment Sweeps



Time Deposit

- User can set up multiple deposit products of different combinations of unit size, tenor, min / max deposit amounts etc.
- The actual deposit is set up outside LMS
- LMS handles sweeping of funds into, or withdrawal from the TD
- Appropriate accounting entries are generated and sent to the external system from LMS

Code*	TIDE	Description*	TIDE
Currency*	SKR	Time Deposit Calendar*	SWDCAL
Institution Type*	Own Bank ▼	Time Zone#	
Cut-offtime(HH:MM)#	Select_ : Select_ ▼	Run PeriodTime(HH:MM)#	Select_ : Select_ ▼
Unit Size*	1.000	Tenor*	7 WEEKS ▼
Effective Date*	11/09/2007	End Date	
Minimum Deposit Amount*	1.000	Maximum Deposit Amount	9999999999.000
Multiples Of*	1.000	Breakage Method	LIFO ▼
Partial Withdrawal	<input type="checkbox"/>	Redemption	Liquidate Tot ▼

MMF concepts

- MMFs are highly liquid, highly safe investment instruments very popular among institutional investors for parking cash surpluses
- They are designed as Mutual Funds which invest on behalf of its investors
- MMFs create **Portfolios** for each investor, allot **Units** and declare **NAV** (Net Asset Value) of their schemes
- MMFs may declare **Dividends** which are paid out to the investors, or re-invested back into the scheme
- Investor returns in MMF accrue through increase in NAV or Dividend received in cash or as units
- LMS supports two types of NAV methods – **VNAV** (Variable NAV) and **CNAV** (Constant NAV)

MMF concepts

- The following entities are involved in MMF investments:
 - The Fund house
 - The client investment account
 - The client's folio with the fund
 - The Product Master account
- The process of setting up a MMF instruction is as follows:



Omnibus Account

- Omnibus Account is an intermediary account through which the investment is routed to the fund
- The fund is blind to the identity of the actual investors
- Bank maintains a record of individual investor contributions and performs all associated actions such as tracking of positions, dividend calculations, reconciliation of holdings etc.

Bank			Fund X	
Customer	Investment	Omnibus collection	Investment	Investor
A	10000	23000	23000	Bank
B	5000			
C	8000			

Direct Investment

- Bank remits individual investor's contribution directly to the fund
- Folio is opened in the name of the individual investor
- No onus on the bank to track individual contribution

Bank			Fund X	
Customer	Investment	Direct collection	Investment	Investor
A	10000	→ 10000	→ 10000	A
B	5000	→ 5000	→ 5000	B
C	8000	→ 8000	→ 8000	C

Trade Placement

- Trade Placement refers to making the actual investment in the Fund
- LMS supports three methods of Trade Placement
 - Automated (File based)
 - SWIFT (MT502 – Trade Placement
MT509 – Acknowledgement
MT515 – Trade Confirmation)
 - Manual
- The method of trade placement is defined at the Fund level and cannot be changed
- Trade is placed for each Omnibus Account or GL – Investor combination
- For Omnibus Accounts, it is possible to net off Buy & Sell orders and place a trade for the net amount. This is defined at the Omnibus Account level

Trade Placement Mode*	Select__
	<div> <div>Select</div> <div>Automated - SWIFT</div> <div>Automated - File Based</div> <div>Manual Trade Placement</div> </div>

Trade Placement

- When the sweep is executed, system calculates the sweep amount & generates the Trade
- For CNAV funds, holdings are updated on Trade Placement as the NAV is known
- For VNAV funds, NAV is not known at the time of generating the trade
- VNAV Processing
 - System uses latest available NAV during execution of sweep instructions
 - Change in NAV results in update of initially calculated units/amount
 - While subscribing, the amount is fixed and the number of units purchased is dependent on the NAV
 - Holdings are updated on Trade Confirmation
 - For redemption, the number of units to be redeemed are fixed while the redemption amount is dependent on the NAV – adjustment entries generated

Trade Date

- Trade Date Calculation is based on the “Fund Settlement Method” selected at the instruction level
 - Same Day Same Day
 - Account debited the same day, trade placed the same day
 - Not supported for EOD transactions
 - Same Day Next Day
 - Account debited the same day, trade placed the next day
 - Next Day Next Day
 - Account debited the next day, trade placed the next day
- In all cases, accounting entries are generated simultaneously but the value dates differ

Fund Settlement Method#	Select__
	Select
	Same Day Same Day
	Same Day Next Day
	Next Day Next Day

Investment Limits

- The Minimum and Maximum amount that can be invested in the fund in one transaction can be specified
- Client Holding Limits can be specified to limit the maximum amount that can be held by one customer at any given point of time. This can be
 - Absolute limit
 - Percentage of Assets Under Management (AUM)
- Daily Investment Limit can be specified to limit the amount that can be invested by each customer on any given day
- Limits are always tracked separately for Omnibus account and Direct Investment
- If limits are breached, the investment amount will get truncated to the maximum permissible amount under the limit

Redemption Gates

- Redemption Gates are restrictions that the fund may impose on redemptions
- Two types of Redemption Gates
 - Complete Gate
 - This means a complete ban on redemption in a specified period
 - User can capture the Start Date & End Date of the period in the Fund screen
 - Partial Gate
 - Fund may impose partial gate on redemptions per investor
 - These may be of the following types
 - Daily Redemption Limits
 - % of shareholder's holdings
 - % of funds outstanding units

Gate on Redemption	Partial gate ▼	Redemption Limit#	Select_ ▼	
Number of Outstanding Shares#		Charge on Redemption (%)	Select	
Redemption Gate Start Date#		Redemption Gate End Date	Percentage of Holding	
			Percentage of Fund Outstanding Share	
			Daily Redemption Limit	

Break the Buck

- Investor can define a minimum acceptable NAV of the fund below which he does not intend to stay invested
- Break the Buck NAV will be maintained at the Investment Instruction level
- When Fund NAV is input, system checks whether Break the Buck NAV is violated
- If yes, system marks such investments as 'ended' by updating the current date as instruction End Date
- System triggers full redemption of the relevant holdings at the BOD next day

Dividend Processing

- The Fund may declare daily dividend rate for each fund at the end of each day
- The dividend factor is applied on the holdings to calculate daily dividend for each investing account
- Settlement happens on a periodic basis
- Dividend Processing in LMS involves three steps
 - Dividend Accrual
 - Can be received through a processing feed or entered manually every day
 - Dividend Distribution
 - Posting cycle is defined at the fund level
 - Option is selected at Omnibus level or at Instruction level
 - There are two options
 - Re-invest
 - Payout
 - Dividend Reconciliation (for Omnibus only)
 - Holding Reconciliation & Dividend Accrued Reconciliation

Dividend Accrual - Example

- Currency Decimals = 2, Carry Forward decimals = 4, Posting Date = 30 April

Date	Trade	MMF Holding	Dividend Factor	Daily Dividend	Dividend with previous Carry Forward	Final Daily Dividend	Carry Forward
24/04/2010	0	0	0.000087981	0.000000	0.000000	0.00	0.000000
25/04/2010	1000000	1000000	0.000086805	86.805000	86.805000	86.80	0.005000
26/04/2010	25689500	26689500	0.000093457	2494.320602	2494.325602	2494.32	0.005602
27/04/2010	-2343435	24346065	0.000089712	2184.134183	2184.139785	2184.13	0.009785
28/04/2010	0	24346065	0.000089712	2184.134183	2184.143968	2184.14	0.003968
29/04/2010	0	24346065	0.000089712	2184.134183	2184.138151	2184.13	0.008151
30/04/2010	5678000	30024065	0.000089883	2698.653034	2698.661186	2698.66	0.000000
01/05/2010	-4684685	25339380	0.000092345	2339.965046	2339.965046	2339.96	0.005046
02/05/2010	-6446846	18892534	0.000098989	1870.153048	1870.158094	1870.15	0.008094

Cash buffer on redemption

- Cash buffer feature allows customer to pad up the redemption amount to take care of a dip in NAV on the day of redemption
- Buffer is maintained as a % & calculated on the redemption amount
- Buffer is added to the redemption amount before sending the redemption request to the fund
- Buffer is maintained in the Investment options tab at the instructions level

<u>Redemption Constraints</u>			
Auto Trigger Redemption below NAV	<input type="checkbox"/>		
Minimum Acceptable NAV#	<input type="text"/>	Cash Buffer for Redemption (%)	<input type="text" value="3"/>
Minimum Redemption Amount	<input type="text" value="1000"/>	Maximum Redemption Amount	<input type="text"/>

Charge on Redemption

- Sometimes, funds may apply a charge on redemption
- Charge is maintained as a % & levied on the redemption amount (including buffer if any)
- Charge is debited separately to the account which is credited with the redemption amount

Investment/Redemption Parameters

Unit Decimals *	<input type="text" value="2"/>	Rounding Logic	Method of! ▼
Min Investment Amount *	<input type="text" value="1"/>	Max Investment Amount	<input type="text"/>
Client Holding Limit	Select__ ▼ <input type="text"/>	Daily Investment Limit	<input type="text"/>
Consolidate Buy/Sell	<input type="checkbox"/>	Multiples Of *	<input type="text" value="5"/>
Gate on Redemption	Select__ ▼	Redemption Limit#	Select__
Number of Outstanding Shares#	<input type="text"/>	Charge on Redemption (%)	<input type="text"/>
Redemption Gate Start Date#	<input type="text"/>	Redemption Gate End Date	<input type="text"/>
Investment Suspension Start Date	<input type="text"/>	Investment Suspension End Date	<input type="text"/>

Rebate

- Rebate is a discount on fund management fee given by the fund to select customers
- Rebate is calculated on the holdings & added to the holdings i.e. re-invested back into the fund
- Rebate handling process:
 - Calculate Rebate Amount = (No. of Units held X Rebate Rate)
 - No. of units to be re-invested = (Rebate amount / latest NAV)
 - Add these units to the existing holdings to get the new holding
- Rebate is paid at pre-defined frequency maintained as Rebate Posting Cycle at the fund level
- Rebate rate is maintained at the Omnibus account level



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