

Nasdaq Calypso ETD Clearing Setup Guide

Version 16.1 – Version 18

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Document History

Revision	Published	Summary of Changes
1.0	April 2018	First edition for version 7.0.3
2.0	November 2018	Second edition - Updated for version 8.0.1.
3.0	April 2019	Third edition - Updated for version 8.2.1.
4.0	July 2019	Fourth edition - Updated for version 8.3.0.
5.0	September 2019	Fifth edition - Updated for version 16.1 monthly release – Added environment property XFER_PL_ON_CLOSE_TRADE.
6.0	November 2019	Sixth edition - Updated for version 16.1 monthly release – Added environment property ETD_SHOW_FILTER_PANEL.
7.0	February 2020	Seventh edition - Updated for version 16.1 monthly release – Added movement types "Balance NFA" and "Movements NFA".
8.0	April 2020	Eighth edition for version 8.6.1.
9.0	May 2020	Ninth edition for version 8.6.4.
10.0	June 2020	Tenth edition for version 8.6.6.
11.0	July 2020	Edition 11 for version 8.6.9.
12.0	November 2020	Edition 12 for version 8.8.1.
13.0	December 2020	Edition 13 for version 8.9.1.
14.0	April 2021	Edition 14 for version 8.12.1
15.0	June 2021	Edition 15 for version 8.15.0 – Added GCM, CGM reports
16.0	August 2021	Edition 16 for version 8.16.1.



Revision	Published	Summary of Changes
17.0	October 2021	Edition 17 for version 8.19.1.
18.0	December 2021	Edition 18 - As of the 16.1 November 2021 MR, the Clearing Module no longer has its own version number. It is an internal module.
19.0	February 2022	Edition 19 – Added domain value Clearing.OverrideETDSettlementLag to ProcessingConfig domain.
20.0	March 2022	Edition 20 – Added Position Change Submission (PCS) Report, Parent / Child relationships import.
21.0	October 2022	Edition 21 – Added Future Expiry Closeout trades settle date setting.
22.0	December 2022	Edition 22 – Updates for monthly release.
		As of 16.1 Nov MR and 17.0 Dec MR, the CCP trade keyword is no longer defined as a legal entity but is defined as a string – See Trade Keyword Configuration for details.
23.0	April 2023	Edition 23 – Updates for monthly release.
24.0	August 2023	Edition 24 – Updated for monthly release.
		New attributes in scheduled task CLEARING_VM_CALC – Domain value TDClearing.VM.CTLevel is no longer used.
25.0	December 2023	Edition 25 – Added Default Client and CounterParty Account Setup for Interfaces. Added Remove Zero Padding Configuration.
26.0	January 2024	Added ETD Multi Region
27.0	March 2024	Added ETD Clearing Multi region B2B Trade Support
28.0	April 2024	Edition 26 - Updates for monthly release.
		Added value ETDClearing.GenerateCashForInterestBearing in domain ProcessingConfig.
29.0	June 2024	Added Interest Bearing functionality in Statements.
30.0	August 2024	Added Switch sign on Client Statement and OCC Exchange CFTC Reporting
31.0	October 2024	Fee Definition, Uploading Multiple Clients / Counterparties, Templates and Client Account Configuration sections updated.
		Scheduled Task Clearing Account Statement section updated.
32.0	March 2025	Updates for version 18 monthly release – Added scheduled task EOD_FUTURES_MARKING to record daily value changes.
		ETD Clearing processes and reports have been moved to the Calypso ETD Clearing Processes and Reports User Guide.
33.0	April 2025	Updates for version 18 monthly release:Added InterEntityTradeType trade keyword.



Revision	Published	Summary of Changes	
		 Updated Uploading Multiple Clients / Counterparties Added Managing Clearing Transfers for Daily Realized MTM Contracts 	

This document describes the setup of Calypso to process exchange-traded derivatives (ETD) clearing activity for clearing brokers on their behalf or on behalf of their clients.

(1) [NOTE: The Calypso License to use this Calypso Integration Module does not include a license for any third-party data services to which this module can interface. Clients are responsible for contracting with the appropriate third-party data service(s) prior to using this Calypso Integration Module]

For information on ETD Clearing processes and reports, please refer to the Calypso ETD Clearing Processes and Reports User Guide.



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Installation

The components of the ETD Clearing module are installed as part of the Calypso Installer when you select the "Clearing Member" solution.

🔏 S	etup - Calypso 14.0.0.19.SP2-SNAPSHOT
Se \	elect Components Which components should be installed?
2	Select the components you want to install; clear the components you do not want to install.
	📨 📝 📩 Base Installation (software required for all installations, includes Navigator) 🧕
	🖕 📝 🧔 Solutions (pre-packaged options for installing standard configurations) 🞯
	🥅 📩 Back Office (Additional interfaces and optional modules)
	🔲 📩 Cash FX Trading
	📝 📩 Clearing Member
	🥅 📩 Collateral Management
	📝 📩 Enterprise Risk Services
	🥅 📩 Front Office (Additional interfaces and optional modules)
′ou a	also need to select the interfaces "ATEO LISA middleware" and "FOW Trade D

CMF OTC Clearing – Back office processing – Valuation of open trades – Generation of client statements.

Collateral – Allocation of margin calls.

Data Uploader – Upload of trades received by the ATEO into Calypso.

ATEO LISA Middleware - Import of Listed Derivatives Trades

FOW Trade Data - Import of Listed Derivatives contracts

Please refer to the Calypso Installation Guide for details on the Calypso Installer.

If you are installing a CUP (Calypso Upgrade Package) instead, the instructions are also in the Calypso Installation Guide.

Database Upgrade

When you run Execute SQL as part of your installation, the data files will be already loaded.

Please refer to Calypso Collateral Management release notes for upgrade information, if any.



Overview

Calypso's ETD clearing solution combines Calypso's Back Office, Connectivity and Collateral to offer a complete solution for entities offering ETD clearing services to their internal trading desks as well as to external clients. The primary activities that the clearing member will be relying on Calypso for are:

- The automated creation of standardized Listed Derivatives contracts,
- The use of connectivity and STP workflow to automatically import cleared Listed Derivatives trades into clearing accounts,
- The automatic generation of fees and commissions on incoming trades,
- The calculation of Variation and Initial Margin on open positions
- Management of cash and collateral related to the clearing activities, and
- Generating client statements for their clients to summarize the day's activity.

To support these activities, Calypso provides an interface to ATEO's LISA to import cleared trades. These trades will flow into the system in real-time throughout the day. At the end of the day, the system will process the open positions. The processing results in the generation of Calypso trade objects which will facilitate the settlement of cashflows and contain the valuation of the open positions.

The Collateral Management module will then take over to manage any Margin Calls resulting from the day's activity for each account. This includes not only cashflows related to the cleared trades, but payments made to or from each clearing account as part of routine business.

As a last step, Calypso will aggregate all the information stored in the system from the activity of each account and generate a client statement which will be sent to the account holders as a record of their activity.

2.1 Clearing House and Product Coverage

Calypso's ETD clearing member solution includes "out-of-the-box" support for connectivity and integration with the clearing houses served by ATEO's LISA.

Calypso's ETD clearing member solution supports Futures, Future Option, and ETO trades.

2.2 Realtime Trade Connectivity

Out-of-the-box, the trades are imported in real-time from ATEO's LISA. They can be imported from other sources as needed or they can be manually entered.

The counterparty of the trades is the clearing house or the executing broker.

The trades navigate the Calypso workflow based on their clearing status, using straight-through processing and exceptions monitoring. Once the trades are cleared, they are liquidated as applicable and update the accounts positions.



2.3 EOD Processing

The key aspects of the EOD processing are as follows:

- Management of settlement activity flowing from this processing
- Position Management Trade offsetting and lifecycle activity.
- Import and storage of settlement prices.
- Open positions processing Generation of the variation margin and initial margin requirements related to trade activity and open positions.
- Collateral Management process
- Client Statement Generation
- Roll to next business date.



Before you Begin

Before you begin, you need to define the following reference data.

3.1 Trade Keyword Configuration

The Trade Keyword Config should be set up as follows:

	Z Trade Keyword Config —					
5	o 😫 🖪 🖷 🖩	🗟 🗐 🛨 🔤 🔍 Ty	ype here to filter table content X	ML -		
-	Id	Version	Name	Туре	Domain	Searchable
쁥	68696	0	Client	LegalEntity		\checkmark
	68700	0	ССР	String		\checkmark
	68701	0	ExecutingBroker	LegalEntity		\checkmark
	68702	0	OrderTaker	LegalEntity		\checkmark
	145257	0	ClientAccount	Account		\checkmark
	145258	0	CounterPartyAccount	Account		\checkmark

[NOTE: As of 16.1 Nov MR 22 and 17.0 Dec MR 22, the CCP trade keyword is no longer defined as LegalEntity but is defined as String]

Upon upgrade to 16.1 Nov MR 22 and 17.0 Dec MR 22, Execute SQL automatically changes the CCP trade keyword definition from LegalEntity to String, and updates all ETD trades accordingly.

You need to manually modify any static data filter that contains the CCP trade keyword as an attribute and change it from LegalEntity to String:

3.2 Domain Values

Make sure that the following domain values are specified.

Domain Names	Values
DefaultETDPosSpec	Value = Name of the Position Specification which is configured as per this document. We call it "ETD Pos Spec".
	This domain provides the default Position Specification which is to be used in processes where positions and liquidations are required. The value of this domain should be equal to the name of the Position Specification which uses the Liquidation Aggregation of ClientAccount and CounterPartyAccount.
Liquidation.BookingDateStrategy	Value = Accounting
	Value = LastStatementDate
	Value = POAttribute



Domain Names	Values
ProcessingConfig	See below.
engineParam	Value = LIQUIDATION_CONFIG Value = XFER_NEXT_EVENT Value = XFER_PAST_GENERATION Value = XFER_POS_AGGREGATION_NAME Value = XFER_USE_POS_AGGREGATION_ONLY Refer to section Transfer Engine Value = ACCENGINE_PRDFAM_SELL_POSITION should be set to 'no' for the Accounting Engine Refer to section Accounting Engine
feeDefinitionAttributes	Value = Duplicate Fee Transfer Value = ETD.InventoryBucket Value = MarginCall Value = MarginCall.Category These attributes are used to control the behavior of fees, commissions and technical fees in the system.
feeDefinitionAttributes.ETD.InventoryBucket	Value = Commissions Value = Fees The two allowable Fee Inventory Buckets into which any fee or commission can be assigned.
feeDefinitionAttributes.MarginCall	Value = Account Level Value = Always Value = Never These attributes are used to control the behavior of fee, commissions and technical fees in the system.
liquidationKeyword	Value = ClientAccount Value = CounterPartyAccount
XferPosAggregation	Should be set to = ETD Liq Keys based on the rest of the setup of this user guide Should match the name of the Liquidation/Position Key set to liquidate by Client and Counterparty Accounts The recommended setup is to use the engine param for transfer engine Value = XFER_POS_AGGREGATION_NAME and not that domain



Domain Names	Values
InventoryCashBucketFactory	Value = ETD Activates the ETD inventory buckets.
Clearing.ExternalData.locations Clearing.ExternalData.localCache	External data locations and local cache locations. See Appendix – External Data Locations for details.

Domain "ProcessingConfig"

It allows configuring various features and can have the following values.

Value = ETDClearing.ClearingAccountTransferGeneration

Comment = true

Activates the generation/suppression of transfers as required by the ETD solution.

Value = ETDClearing.GenerateCashForInterestBearing

Comment = true

Interest Bearing entries remain in "Balance Cash Movements" and "Movements Cash Movements".

Setting Comment = false will remove Interest Bearing entries from the "Balance Cash Movements" and "Movements Cash Movements" buckets and add them to custom buckets instead.

Value = ETDClearing.IsActive

Comment = true

Activates additional fields in the Fee Definition and Account Definition.

Value = ETDClearing.SecurityTransferGeneration

Comment = false

Suppress the generation of the SECURITY transfer for an ETD transaction. The clearing solution only uses transfers to reflect the cash impact of transactions. Positions on contracts/products is shown in Position Keeper.

Value = BookingDateManager

Comment = tk.bo.bookingdate.POAttributeStrategy

Ensures Booking Date is used when creating Transfers and Trades

Value = LegacyProductDesc



Comment = false

Activates the custom product description which best suits listed products

Value = LegacyQuoteName

Comment = true Uses the standard (v14) quote name creation

Value = ExchangeNameInProductyDesc

Comment = false

Value = ExchangeNameInQuoteName

Comment = false

Value = ETDClearing.SettlementLag

Default value is true – Setting it to true would be the same as being empty. Setting it to false would disable the lag. This domain allows to work with Settle Date = Trade Date + 1 Bus Day on Future & Options transactions and Clearing Transfer for statement purposes.

Settle Date of transaction is computed by the system adding a default of 1 Business Day lag (using contract exchange calendar).

If a different lag must be used by currency, we refer to the currency attribute ClearingTransferSettleLag.

This attribute can also be defined per Counterparty (CCP or broker) by using the LE Short Name + ClearingTransferLag attribute.

For example, if you have to apply a 2D lag for PLN, except when you clear PLN with BROKER1 (BROKER1 being the shortname of your LE), you will define ClearingTransferSettleLag = 0 for PLN and another PLN attribute BROKER1ClearingTransferSettleLag that would be set to 0.

Value = Clearing.OverrideETDSettlementLag

If Comment = true, the available date is set as the value date for ETD Clearing transfers and non-ETD Clearing transfers.

If Comment = false, for non-ETD Clearing transfers the available date is set as the trade date, and for ETD Clearing transfers the available date is set at the value date.

Value = ETDClearing.VM.UseNativePricers



Default value (if not set) is interpreted as true which means the CLEARING_VM scheduled task is using the standard Calypso pricer (pricers are more demanding in terms of market data but ensures consistency with numbers produced in accounting and TOQ report).

If you want to deactivate this feature, set Comment = false.

Value = ETDClearing.RenameOldETONonSVNContract

Comment = true

In this case, when renaming a contract via a CA transformation, the attribute CAClearingExchangeTicker is set on the old contract.

Value = Clearing.RandomAssignment.IgnoreLongPositions

When Comment = false (default), random assignment is not performed when long and short client positions are available.

When Comment = true, random assignment is performed on short client positions whether long client positions exist or not.

Value = ETDClearing.VM.PastQuoteDays

Comment = <number of business days to look up the market price if today's price is not set for CLEARING_VM_CALC scheduled task>

In case no market price is found, the latest available trade price is used.



3.3 Pricing Environment

You need a pricing environment to price Futures and Options from quotes when using the Calypso native pricers in reports like the Position Keeper, TOQ and Trade Browser.

The calculation of CLEARING_VM through the EOD scheduled task process relies in native Calypso pricers as soon as in the domain ProcessingConfig, the value ETDClearing.VM.UseNativePricers is not added or set to true. When using native pricers, users will have to define all necessary market data (sometimes dummy curves would be needed) but this will ensure consistency with numbers produced in accounting and TOQ report). This is the recommended setup.

When set to false, the CLEARING_VM_CALC scheduled task does not rely on a pricer or pricing environment parameters – its logic is written in the scheduled task to match the market standard valuation and rounding specifications.

, neer coi	ingulation window					
Name	Price Config	Lazy	Refresh			
Parents				Clea	ar	
Comment						
Repp	Credit ABS	Correlation Com	modity Oustom	Trade Level Overri	da	Calibration
Pricers	Discount Cursues	Correlation Com	Custom	Dradust Specific	Andel Darametr	
F Extende	Product ETOEquity	Sub Sub	Type European	✓ Add		
F Extende	Product ETOEquity	Sub Sub Pricer Price ExtendedType	Type European rBlack 1FAnalyticDiscrete	Add Add Remove Pricer	:	
F Extende Product /	Product ETOEquity ed Type ANY	Sub Sub Pricer Price ExtendedType	Type European rBlack 1FAnalyticDiscreteV SubType	Add Add Add Pricer Dricer	DiscreteVapilla	
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() [NOTE: Apart from the above illustration there are more pricers available for ETOEquity and ETOEquityIndex – Please refer to the Equity Derivatives Analytics Guide for details and set the pricers as needed]

The following pricing parameters should be set.



Edit Pricing Parameters	Edit Pricing Parameters Set								
Pricing Params Set Nam									
Pricir	ig Param Name	Enter Value							
Product Type AN	(<u> </u>	Add	Remove						
Product Type	N	ame	Value	Τ					
ANY	INSTANCE_TYPE		CLOSE						
ANY	NPV_INCLUDE_COST		true						
ANY	NPV_INCLUDE_COST_AFTE	R_SETTLE	true						
ANY	FUTURE_FROM_QUOTE		true						
ANY	QuoteUsage		CLOSE						
ANY	NPV_FROM_QUOTE		true						

For FutureOptionMM and FutureOptionBond, add the pricing parameter USE_IMPLIED_VOL = true which would eliminate the need for a vol surface.

Please note that the pricer needs a risk-free rate to calculate the option price, so a discount curve is required.



3.4 Position Configuration

Once the trades are imported, positions are computed by the liquidation engine.

3.4.1 Position/Liquidation Key Configuration

Positions in the listed clearing solution are only expected to be offset if both the Client and the CounterParty Accounts match, along with the book and product which are checked by default. This means that close outs will only occur when a trade on a specific product is in the same account on the client side as well as the counterparty side, otherwise the buys and sells will remain open.

To achieve this, create a Position/Liquidation Key Configuration which uses the trade attributes ClientAccount and CounterPartyAccount as the additional liquidation criteria, as shown below.

Z Position/Li	Z Position/Liquidation Key Configuration - Version - [14 💻 💷 💻 🎫									
View										
Id	1902 Name ETD Liq Keys									
Attributes	Attributes ClientAccount,CounterPartyAccount									
	Load									
Id ,	Name									
	1902 ETD Liq Keys									

3.4.2 Liquidation Configuration

The liquidation configuration dictates how position-based products are liquidated (aka offset or closed out) and there is a standard configuration expected to process listed derivatives in Calypso. The liquidation configuration described below should be chosen in the Liquidation Info used in the listed clearing solution.

There are 3 key fields in the Liquidation Configuration window which drive the logic, as described below.



	Configuration Editor						
	General						
	Name		ETD Liq Config				
	Id				0		
	Process						
	Liquidation Key		Book Product Aggregation	1			
	Info Selector		Book, ClientAccount, Con	tract, CounterParty/	Account, Curr		
	Booking Date		POAttribute				
	Liquidation Scope						
	Trade Filter						
nfigurations							
🖞 Add/Mod	lify 🗙 Delete						
	Id	Liquidation Key	Info Selector	Trade Filter	Booking Date		
lame		0 Book Product Aggrega	ation Book, ClientAccount, C		POAttribute		
iame ID Liq Config							
vame TD Liq Config							

You can use the environment property XFER_PL_ON_CLOSE_TRADE to determine when REALIZED_PL transfers (for future trades liquidations) are generated. If set to true, REALIZED_PL transfers are generated on closing trades (the second trade which could be buy or sell). Default is false, REALIZED_PL transfers are generated on sell trades.

3.4.3 Liquidation Key

Calypso requires that the two transactions be on the same product and in the same trade book to be liquidated. This field allows the user to add one additional set of criteria called 'aggregation' to use for determining the eligibility of liquidation.

Liquidation Key	Book Product Aggregation 🗸 🗸
Info Selector	Book Product
Booking Date	Book Product Aggregation
Liquidation Scope	OK Cancel
Trade Filter	Curce Curce

Selecting "Book Product Aggregation" will allow us to point to the additional trade criteria of Client Account and Counterparty Account to ensure only trades in the same client and counterparty account can be closed out.

() [NOTE: This is the only supported aggregation configuration – Any other aggregation configuration is NOT supported]

3.4.4 Info Selector

This field allows the user to include additional criteria of the position by which to define the liquidation rules at a more granular level. The position criteria available to select are shown in the panel on the right.





Info Selector	oductType,ProductSubType,Contract,Exchange,Currer	oductType,ProductSubType,Contract,Exchange,Currency 🚽				
Booking Date	🕣 Book	F				
Liquidation Scope	ClientAccount					
Trade Filter	CounterPartyAccount					
	ProductType					
	ProductSubType					
▼ Delete	Contract					
	😉 Exchange					
Td	Currency					
IU						
	OK Canc	el				

3.4.5 Position Specification

Configure the position specification as below for ETD Clearing.

Z Position Spe	cification										×
C	Configuration Editor										
	General										
	Name				ETD Pos S	pec					
	Used For				Risk and P	L					
	Product Position By				Trade Dat	2					
	Cash Position By				Settle Dat	e					
	Liquidation/Position K	(ey			ETD Lig Ke	ys					
	Liquidation Config				ETD Liq Co	nfig					
	FX Products										
	Split Ccy Prs by Ccy										
	Gp Non-Settled FX Tr	ades by Settle D	t								
Configurations											
📑 Add/Modify	🗙 Delete										
Name	× 1	Used For	Product Po	Cash Positi	Liquidation/	Liquidation	Split Ccy Pr	Gp Non-Set	Cash Type	Reporting	J
ETD Pos Spec		Risk and PL	Trade Date	Settle Date	ETD Liq Keys	ETD Liq Config	False	False	ProductPosition		0
									S	ave	Close

3.4.6 Liquidation Info

Selecting these categories simply makes them available to use when we configure the liquidation rules in the Liquidation Info window. By providing more criteria, we can set rules for a specific exchange, currency, contract etc.

Note: <u>The hierarchy of the selection of a rule is dependent on the order in which the fields appear in the Info</u> <u>Selector window</u> above. So, in the screenshot above, "Book" would be the priority, followed by ClientAccount, CounterPartyAccount, ProductType and so on.

Once selected in the Info Selector field of the Liquidation Config, these fields will be available in the Liquidation Info panel as shown below.

🦽 Liquidati	on Info														
🕫 🖸 🖬 🖡	- 6 6 6	🐻 🕰 Q- T	ype here to filter table	e content											
Book	Cross Book	Product Type	Product Sub Type	Liquidation Config	ClientAccount	Contract	CounterPartyAccount	Currency	Exchange	Liquidation Method	Comparator Method	Date Rule	Liquidation Attributes	Fee Positions	Fees Settlement Amount Positions
ALL		FutureBond		ETD Lig Config						FIFO	TradeDate	NONE	ETD Lig Keys		

The liquidation configuration "ETD Liq Config" described earlier in this document must be selected.



Note: The liquidation configuration = "ETD Liq Config" and liquidation attributes = "ETD Liq Keys" are specifically featured for listed derivatives product types; therefore, it is recommended to specify a listed derivatives product type for the liquidation info.

Alternatively, you can select Product Type = All and set a trade filter in the "ETD Liq Config" liquidation configuration that contains all listed derivatives product types:



A liquidation method, such as LIFO, FIFO, AvgPrice, Manual and MFIFO can be assigned to each configured set of criteria in the Liquidation Info based on the users' requirements.

A comparator method of "**TradeDate**" is the standard choice for any out of the box liquidation methods, but the user can also choose a Dynamic Comparator which allows more complex comparison of trades based on price, trade time and quantity.

When producing client statement, Trade Date comparator is the only one supported.

"Value by Trade" should be checked/true to allow positions to be valued based on the individual transaction prices rather than based on the average price of the position. Valuation by trade is the market standard used by clearinghouses and brokers.

3.4.7 Dynamic Comparator

The comparator method, "Dynamic Comparator" must be used only with Liquidation Method FIFO or LIFO and the Liquidation engine in Batch Mode (Environment Property LIQUIDATION_TIMEOUT = -4).



	Li	quidat	ion Info									X
4	9 (ອ 2	868	🖬 🐻 🔯 🤇	Q→ Type here to filter	r table content	XML -					0
		Book	Cross Book	Product Type	Product Sub Type	Liquidation Config	ClientAccount	Comparator Method	Co	Details		D P
		ALL		ALL		ETD Liq Config		TradeDate		1 2 🖬 📼		
h	Þ									Book	ALL	
F	-									Cross Book		
										Product Type	ALL	
										Product Sub Type		
										Liquidation Config	ETD Liq Config	
										ClientAccount		
										Contract		
										CounterPartyAccount		
										Currency		
										Exchange		
										Liquidation Method	FIFO	
									1	Comparator Method	TradeDate	
										Date Rule	NONE	
										Liquidation Attributes	ETD Liq Keys	
										Fee Positions	v	
										Fees Settlement A		
										Snapshots	1	
										Value By Trade	V	
					F7F 0							

Liquidation Method	FIFO	
Comparator Method	TradeDate	
Date Rule	Dynamic Comparator	~
Liquidation Attributes	Manual	

Dynamic Comparator is available in the Comparator Method list.

Liquidation Method	FIFO
Comparator Method	Dynamic Comparator
Comparator Dynamic	- <i>/</i>
Date Rule	New Vs New
Liquidation Attributes	OpenClose

When selected, a Comparator Dynamic must be chosen or created by clicking on \checkmark to open the Comparator Dynamic Window.

	Comparator Dynamic								
4	¥.	o 🔚 📙	Fig 😫 Fig 🐻 🐺 🔍	, Type here to filter table	content XML -				
		Name	Description	Liquidation Date Type	OffSettingProcessing	OffSettingElements			
		New Vs New	New Vs New Automatic TD	Trade Date	Automatic	New Trades Vs New Trades			
	Ы	OpenClose	OpenClose Standard	Trade Date	OpenClose	New Closing Trades Vs New Opening Trades,			

The following fields should be set:

Fields	Description
Name	Name of the Comparator Dynamic
	Will be displayed in the Liquidation Info Window



Fields	Description
Description	Description of the Comparator Dynamic
Liquidation Date Type	Fixed Trade Date Frade Date Settle Date EOD Trade Date Fixed Trade Date Start Of Day Trade Date Date used to compute the Liquidation Date: • Trade Date • Settle Date • Settle Date • EOD Trade Date: • Trade Date • Settle Date • EOD Trade Date: based on Book EOD • Fixed Trade Date: based on Book Attribute LiquidationTime • Start of Day Trade Date
OffSettingProcessing	Automatic Automatic OpenClose Liquidation Processing Type: Automatic: Liquidation is automatically performed OpenClose: Liquidation is automatically performed only when a Closing Trade is input
OffSettingElements	Q: Q: New Trades Vs Open Trades Q: Open Trades Vs Open Trades Q: Open Trades Vs Open Trades Q: Open Trades Vs Open Trades Q: For OffSettingProcessing = Automatic Q: New Trades Vs New Trades: New Buy Trades are liquidated with New Sell Trades New Trades Vs Open Trades: New Trades are liquidated with Open Trades Open Trades Vs Open Trades: Open Trades are liquidated with Open Trades Open Trades Vs Open Trades: Open Trades are liquidated with Open Trades For OffSettingProcessing = OpenClose New Closing Trades Vs New Opening Trades: New Trades are liquidated with Open Trades For OffSettingProcessing = OpenClose New Closing Trades Vs Open Trades: New Trades in liquidated with Open Trades New Closing Trades Vs Open Trades: New Trades are liquidated with Open Trades The Closing Trades Vs Open Trades: New Trades are liquidated with Open Trades The Closing Trades are identified by the Trade Attribute OpenClose = C Example: OffSettingProcessing = Automatic Offsetting Elements = Open Trades Vs Open Trades, New Trades Vs New Trades, New Trades Vs Open Trades



Fields	Description
	Liquidation Method = FIFO Trades: • T1: Open Trade 50 • T2: Open Trade 10 • T3: New Trade 40 • T4: New Trade -30 • T5: New Trade -30 Process and results: • Open Trades Vs Open Trades: no Liquidation as two Buy Open Trades only - T1: Open Trade 50 - T2: Open Trade 50 - T2: Open Trade 10 - T3: New Trade 40 - T4: New Trade 40 - T5: New Trade -30 • New Trades Vs New Trades: T4 fully liquidated by T3, T5 partially liquidated by T3 - T1: Open Trade 50 - T2: Open Trade 50 - T2: Open Trade 50 - T5: New Trade -20 • New Trades Vs Open Trades: T5 fully liquidated by T1
	 T1: Open Trade 30 T2: Open Trade 10
Ordering Criteria	TradeDate TradeDate Oriteria used for comparison in decreasing priority Each criteria can be sorted in Ascending or Descending Order using a Right click. TradeDate Sort Ascending Example: OffSettingProcessing = Automatic Offsetting Elements = New Trades Vs New Trades Ordering Criteria = Trade Date (Asc) / Price (Asc) / Quantity (Desc) Liquidation Method = FIFO Trades: All Trades are New Trades • T1: TD: 17/11 Price: 100 Quantity: 50 • T2: TD: 17/11 Price: 101 Quantity: -40



Fields	Description					
	• T4: TD: 17/11 Price: 101 Quantity: -10					
	• T5: TD: 17/11 Price: 103 Quantity: -10					
	• T6: TD: 17/11 Price: 102 Quantity: 70					
	• T7: TD: 14/11 Price: 107 Quantity: 10					
	Process and results:					
	Buy Trades after ordering					
	– T7: +10					
	– T1: +50					
	– T6: +70					
	– T2: +50					
	Sell Trades after ordering					
	– T4: -10					
	– T3: -40					
	– T5: -10					
	Trade Open Quantities after Liquidation					
	– T6: +70					
	– T2: +50					



3.5 Booking Date

To support the processing of transactions and activity for a specific clearing date without changing the activity in the past or including any activity on T+1, Calypso associates a processing date to each Processing Organization. All clearing activity is 'stamped' with this date to tell the system when to include the activity in the end of day and in the client statement.

This concept applies to cleared transactions and all the related transfers that impact the account balance. The processing date is rolled forward when all the EOD activity is completed for a given day and shouldn't change until the next day's activity is complete.

The Booking Date should not be rolled backward unless there is a requirement to do a back value adjustment (through **New**, Cancel or Amend). During the backward rollover process, ensure that the current days trade is not entered. If trade is entered, it will be recorded as a future dated trade as booking date is back value. TOQ will indicate that the liquidation status is "Non liquidable" and will only be liquidable when Booking Dated has been moved to the current date.

3.5.1 Set the Legal Entity Attribute 'Booking Date'

To set the processing date of the system for each Processing Organization, set the PO's LE Attribute 'Booking Date' to the desired processing date using the format mm-dd-yyyy as shown below.

Le	egal Entity	NEWYORK		Ro	le ALL	•
Proces	sing Org	ALL	•	•		
Attrib	oute Type	Booking Da	te	Val	ue 02-15-2017	
Id	Process	sing Org	Legal Entity	Role	Attribute Type 🕗	Attribute Value
	805 411		NEWYORK	ALL	Booking Date	02-15-2017

In addition, we need to set the BookingDateManager domain value (found under the ProcessingConfig node) to a value of "tk.bo.bookingdate.POAttributeStrategy".

Z Domain Values		Record O	interest of	Name Institute	
🔗 Reload 📓 Save 🦏 Save All 🛛 🕸 Constraints Setup					0
Q. BookingDateManager Image: Constraint of the second) Value	Name: <u>V</u> alue: <u>C</u> omment: << <u>A</u> >> <u>R</u> en	ProcessingC BookingDate tk.bo.bookin dd	onfig Manager Igdate.POAttributeStra	ategy Add & Save

In the Liquidation Configuration set the Booking Date field to a value of "POAttribute" so that positions and 'trade open quantities' are also built using the concept of Booking Date. This ensures that T+1 transactions are not impacting open positions on T and are therefore not included in the offsetting process, IM/VM calculation, lifecycle or transaction confirmation reporting in the EOD.



Liquidation C	onfiguration				
-0	Configuration Editor				
	General				
	Name		ETD Liq Config		
	Id				0
	Process				
	Liquidation Key		Book Product Aggregation	l i i i i i i i i i i i i i i i i i i i	
	Info Selector		Book, ClientAccount, Cont	tract, CounterParty	Account, Curr
	Booking Date		POAttribute		
	Liquidation Scope				
	Trade Filter				
onfigurations	Delete				
Name	Id	Liquidation Key	Info Selector	Trade Filter	Booking Date
ETD Liq Config		0 Book Product Aggrega	ation Book, ClientAccount, C		POAttribute

3.5.2 Rolling the Booking Date Forward

The Booking Date can be moved forward by manually editing the LE Attribute value or can be rolled using the ROLL_BOOKINGDATE Scheduled Task which will roll the date forward one day according to the calendar set in the 'Business Holidays' Scheduled Task attribute.

Task Description						
Task Type:	ROLL_BOOKINGDATE ~					
External Reference:	0 - Roll Booking Date					
Comments:	ents: ROLL_BOOKINGDATE					
Description	ROLL BOOKINGDATE					
Execution Parameters						
Attempts: 1	Retry After: 0 minutes Expected Execution Time (SLA): 1 minutes					
JVM Settings: -Xms	2048m -Xmx2048m					
Log Settings: TAT	S, CLEAR_CONNECT , Monitoring. ServerRequest, Monitoring. IncomingServerRequest, Monitoring. ClientRequest, ScheduledTask					
Task Notification Ontion						
Send Emails	Publish Business Events To Liser:					
🖃 Common Attribu	265					
Task ID	13620					
Processing Org						
Trade Filter						
Filter Set						
Pricing Environment						
Timezone	Europe/London					
Valuation Time Hour	22					
Valuation Time Minu	te 0					
Undo Time Hour						
Undo Time Minute						
Valuation Date Offs	et					
From Days	0					
To Days	0					
Pricer Measures						
Inside set Holdays						
Task Attributes						
Processing Org	SETCLEAR; SETCLEAR2; SETCLEAR3					
	ALL @ SETCLEAR @					
	NONE SETCLEAR2					
	😌 setclear3					



If task Attributes Processing Org is blank and the Common attributes Processing Org is selected with PO, then the Common attributes Processing Org Booking Date will be rolled to next business day.

If Common Attributes Processing Org is blank and the Task attributes Processing Org is selected with POs, then the Task attributes Processing Org Booking Date are rolled to next business day.

Note: When PO LE are added with the "Booking Date" attributes, the list of POs for selection will be displayed in the Task Attributes ProcessingOrg selection list.

The date should not be rolled backwards, as once the EOD processing is completed all corrections will happen on the next day – we don't expect to run past days.

Task Description							
Task Type:	ROLL_BOOKINGDATE v						
External Reference:	ROLL_BOOKINGDATE						
Comments:	Comments: ROLL_BOOKINGDATE						
Description:	ROLL BOOKINGDATE						
i							
Execution Parameters							
Attempts: 1 Retry After: 0 minutes Expected Execution Time (SLA): 1 minutes							
JVM Settings: -Xms5	12m -Xmx1024m -XX:MaxPermSize=256m						
Log Settings:							
Task Notification Options							
Send Emails	Publish Business Events To User:	-					
Send Emails	Publish Business Events To User:	-					
Send Emails	Publish Business Events To User:						
Send Emails [Common Attribute Task ID	Publish Business Events To User:	4001					
Send Emails	Publish Business Events To User:	4001 NEWYORK					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central					
Send Emails	Publish Business Events To User:	4001 NEWYORK default US/Central 22					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central 22 0					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central 22 0					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central 22 0					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central 22 0					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central 22 0					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central 22 0					
Send Emails Send E	Publish Business Events To User:	4001 NEWYORK default US/Central 22 0					

Whenever we're looking at cash positions, we want to use a Position Date of "Available (Frozen)" which returns the later of the transfer's Available Date and Booking Date. This way a transfer will never impact the balance prior to the processing date on which it's booked (since Booking Date will always be set to the Processing Date).

Available (Frozen) is used to report balances in the Client Statement, so to match these balances when generating cash and security inventory reports, the user should add the domain values as shown below, which makes them available for selection in the Inventory Cash position report.



Statement Configuration should also be set to use Available (Frozen) Position Date.

Account S	Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Browse									
	Statement Type Clearing									
Freq	uency:	Daily		•						
Position	n Type:	Actual					•			
Position	n Date:	Available	(Frozen)				-			
Active	From:			To:						
Message (Config:	38702								
	٩	/lessage Ty	/pe: CLEARIN	G_ETD_STATE	MENT					
		Templ	ate: CalypsoE	TDStatement.x	sl					
		Forn	nat: HTML							
	Gateway: FILE									
	Last Statement:									
					_			1		
Config Id	Statem	ent Type	Numbering	Last Statemer	nt Zer	o Bal 🛛 N	lo Mvt	Client St	atement G	Seneration
44561	Clearing							N/A		



3.5.3 Transfer Engine and Workflow

To make sure the transfers behave as expected in this model, we want to set up the system so that we can cancel transfers which are generated intraday if needed, because they have not yet been reported as part of the EOD statement. However, we require that transfers from past days will be reversed by posting a credit/debit on the current processing date, since we don't want to impact the balances that were reported on past statements and have already been distributed to clients.

Transfer Workflow

The transfer workflow for all transfers other than those related to external payments between client and PO (typically only found on Margin Call trades) will always expect perfect settlement, but we will stop the STP path in VERIFIED status so that if they get updated or cancelled intraday, we can still cancel them. We use an action of SETTLE_INTERNAL to move them to SETTLED as part of the EOD process and can use the PROCESS_TRANSFERS scheduled task with an action of SETTLE_INTERNAL to isolate only these internal transfers.

External payments will be settled through a SETTLE workflow action, which can be triggered by a separate scheduled task or manually triggered.

Note that there is no CANCEL action from the SETTLED status. This ensures that any transfer which has been settled will be reversed out instead of cancelled.

The workflow presented below is only indicative.



Screenshot of the PROCESS_TRANSFER scheduled task used to move internal transfers to SETTLED status once all processing is done, but prior to generating the statement.



Task Attributes	
Process	Apply Action
Status	VERIFIED
Action to Apply	SETTLE_INTERNAL
Agent	
SD Filter	

3.5.4 Behavior of Transactions in the Statement

One of the benefits of using the Accounting Booking Date is that transactions can now be classified as new, backdated, corrected and cancelled by comparing the transactions Available and the Booking Date (the date that the PO was set to when the trade was accepted into the system). This classification is used in the Trade Confirmation section of the client statement is given below, including a description of the enhanced Trade Open Quantity and Liquidation Tables. Note that the statement period is from the day after the last statement until the processing date on which the statement is being run, so it could include more than one calendar day.

3.5.5 Trade Open Quantity (TOQ) Table

Trades which contribute to open positions are stored in Calypso in the Trade Open Quantity (TOQ) table. The structure of the TOQ gives us all the information we need to know about the trade economic details, when it was entered, when it was cleared and when/if it has been amended or cancelled. The columns in this table are referenced throughout the next sections to determine which transactions to include in each statement section and subsection.

TOQ Id	Trade Id	Trad	le Date	Settle Date	Quantity	Price	Bo	oking Date History	Status	Open Quantity
	1	1000	30-Sep	30-Sep)	10	99	30-Sep New	Eligible	4
	2	1001	30-Sep	30-Sep)	-6	101	30-Sep New	Eligible	0

3.5.6 Liquidation Table and Liquidation Deletion Tables

Similarly, the history of the offsets of buys and sells are stored in two tables, the Liquidation Table and The Liquidation Deletion Table. Through the combination of these two tables, we can determine what to include in the P&S section of the statement and characterize them appropriately as new offsets or cancelled offsets. The structure of the two tables is shown below and is referenced in the inclusion logic in the next section.

Liquidation Table

Trade 1	Trade 2		Liquidation Date	Quantity	Realized		Booking Date
	1000	1001	30-Sep		6	24000	30-Sep
Liquidati	on Deletion Ta	able					
Liquidati Trade 1	on Deletion Ta Trade 2	able I	Liquidation Date	Quantity	Realized		Booking Date



3.6 Fees Setup

A number of fees need to be setup for the following trades:

- Future and Future Option trades Exchange/Clearing Fees and Commissions (optional)
- Trade Exercise EXERCISE_FEE
- Corporate Action Cash Adjustment for Options: OPT_CASH_ADJ

Additionally, the EOD process through CLEARING_VM creates the following technical fees to impact the collateral, the respective inventory bucket and, for NPV related fees, the inventory cash balance:

- Clearing Transfer and Collateral Exposure trades:
- SOV, SOV_REV: Short Option Value and its Reversal.
- LOV, LOV_REV: Long Option Value and its Reversal
- NPVFUT, NPVFUT_REV: NPV or Realized Variation Margin for Futures only. This fee is created when Account Margin Mode = Realized VM
- NPVOPT, NPV_OPT_REV: NPV or Realized Variation Margin for future-style options only. This fee is created when Account Margin Mode = Realized VM
- DISC_FWD_NPV, DISC_FWD_NPV_REV: This fee is created for LME contracts when Account Margin Mode = RealizedVM
- OTEFUT, OTEFUT_REV: OTE for Futures only. This fee is created when Account Margin Mode = OTE
- OTEOPT, OTEOPT_REV: OTE for future-style options only. This fee is created when Account Margin Mode = OTE
- DISC_FWD_OTE, DISC_FWD_OTE_REV: This fee is created for LME contracts when Account Margin Mode = OTE
- NFA: National Future Association fees

We have listed below the related transfer behavior for the EOD fees created by the CLEARING_VM Scheduled Task in terms of Margin Call enrichment (always except for LOV and SOV + reversal) and impact on the cash inventory balance used to produce Financial Summary for the client statement.

Xfer Type	Perisited Bucket	Impact Cash Balance	Impact MarginCall Balance	Margin Category
OTEFUT, OTEFUT_REV	OTE Futures			
OTEOPT,OTEOPT_REV	OTE Options	No	Always	OTE
DISC_FWD_NPV, DISC_FWD_NPV_REV	Discounted OTE			
NPVFUT, NPV_FUT_REV	Variation Margin Futures			
NPVOPT, NPV_OPT_REV	Variation Margin Options	Yes	Account Level	VM
DISC_FWD_OTE, DISC_FWD_OTE_REV	Discounted VM			
LOV, LOV_REV	LOV	No	Nover	
SOV, SOV_REV	SOV	INO	Never	NOV

You can use the fee calculator ETDClearingTransferSettleDateCalculator to set the fee settlement date to Booking Date + Settle Lag.



Fees and Commissions

These optional fees can be defined by the user, but they must be classified in the Inventory Bucket of "Fees" or "Commissions" in order to be properly aggregated in the cash balance and client statement level.

EXERCISE_FEE

Calculated upon exercise.

Fee Definition			
General		Properties	
.			
Type:	EXERCISE_FEE	Key	Value
Role:	CounterParty		
Fee Ofset:	0 Cal		
Products:	ALL		
Default Calculator:	NONE		
Include:	I▼ Pricing I▼ Allocation	ETD	
	☑ Transfer 🔲 Settlement Amount	Inventory Bucket: Option Cas	h Settlement 💌
Comments:	Exercise Fee	🗸 Duplicate Transfer	
connertor		Margin: Always	~

SOV (Short Option Value)

Calculated by the scheduled tasks CLEARING_VM_CALC only.

Fee Definition					
General			Properties		
Type:	50V		×		
Role:	CounterParty 👻		Key		
PnL Category:			Exclude from EIR		
	_		FeeDate		
Include:	Pricing		FeeEndDate		
	SOV		FeeKnownDate		
Comments:			FeeStartDate		
Trade fee parame	ters				
Fee Offse	t: 0 Cal				
Product	s: ALL		ETD		
Default Calculate	r: NONE	•	Inventory Bucket: SOV 💌		
Preference	s: 🔽 Accounting 📄 Allocation		🛹 Duplicate Transfer		
	🔽 Transfer 🛛 🔲 Settlement Amount		Margin: Never 👻		

SOV_REV

Calculated by the scheduled tasks CLEARING_VM_CALC only.



🛃 Fee Definition	I			
General			Properties	
Type:	SOV_REV		X	
Role:	CounterParty 👻		Кеу	
PnL Category:			Exclude from EIR	
			FeeDate	
Include:	V Pricing		FeeEndDate	
	SOV Reversal		FeeKnownDate	
Comments:			FeeStartDate	
Trade fee parame	eters			
Fee Offse	et: 0 Cal			
Product	ts: ALL		ETD	
Default Calculate	or: NONE	•	Inventory Bucket: SOV 👻	
Preference	es: 📝 Accounting 📄 Allocation		🖋 Duplicate Transfer	
	📝 Transfer 🛛 📃 Settlement Amount		Margin: Never 👻	

LOV (Long Option Value)

Calculated by the scheduled tasks CLEARING_VM_CALC only.

🛃 Fee Definition			
General			Properties
Type:	LOV]	×
Role:	CounterParty -		Key
PnL Category:			Exclude from EIR
			FeeDate
Include:	Pricing		FeeEndDate
	LOV		FeeKnownDate
Comments:			FeeStartDate
Trade fee parame	ters		
Fee Offse	et: 0 Cal		
Product	s: ALL		ETD
Default Calculate	r: NONE	•	Inventory Bucket: LOV 💌
Preference	s: 🔽 Accounting 🔲 Allocation		✓ Duplicate Transfer
	📝 Transfer 🛛 📄 Settlement Amount		Margin: Never 💌

LOV_REV

Calculated by the scheduled tasks CLEARING_VM_CALC only.

🛃 Fee Definition			
General		Properties	
Type:	LOV_REV	×	
Role:	CounterParty 👻	Кеу	
PnL Category:		Exclude from EIR	
		FeeDate	
Include:	Pricing	FeeEndDate	
	LOV	FeeKnownDate	
Comments:		FeeStartDate	
Trade fee parame	ters		
Fee Offse	et: 0 Cal		
Product	s: ALL		
Default Calculate	r: NONE	Inventory Bucket: LOV 👻	
Preference	s: 🔽 Accounting 🔲 Allocation	V Duplicate Transfer	
	🔽 Transfer 🛛 🔲 Settlement Amount	Margin: Never 💌	



NPVFUT

Calculated by the scheduled tasks CLEARING_VM_CALC.

A Fee Definition	
General	Properties
Type: NPVFUT	
Role: CounterParty 💌	Key
PnL Category:	Exclude from EIR
Induity Parities	FeeDate
Include: V Pricing	FeeEndDate
NPV Futures	FeeKnownDate
Comments:	FeeStartDate
Trade fee parameters	
Fee Offset: 0 Cal	
Products: ALL	ETD
Default Calculator: NONE	Inventory Bucket: Variation Margin Futures 💌
Preferences: 📝 Accounting 📃 Allocation	V Duplicate Transfer
✓ Transfer Settlement Amount	Margin: Account Level Margin Category: VM

NPVFUT_REV

Calculated by the scheduled tasks CLEARING_VM_CALC.

🛃 Fee Definition		
General		Properties
Type: NPVFUT_REV		×
Role:	CounterParty -	Кеу
PnL Category:		Exclude from EIR
		FeeDate
Include:	Pricing	FeeEndDate
	NPV Futures Reversal	FeeKnownDate
Comments:		FeeStartDate
Trade fee parame	iters	
Fee Offs	at: 0 Cal	
Produc	ts: ALL	ETD
Default Calculate	r: NONE	Inventory Bucket: Variation Margin Futures 💌
Preference	s: 🔽 Accounting 🔲 Allocation	🖋 Duplicate Transfer
	Transfer Settlement Amount	Margin: Account Level 💌 Margin Category: VM

NPVOPT

Calculated by the scheduled tasks CLEARING_VM_CALC.

🔀 Fee Definition		
General		Properties
Type:	NPVOPT	X
Role:	CounterParty -	Key
Pnl. Category:		Exclude from EIR
		FeeDate
Include:	Pricing	FeeEndDate
	NPV VM Options	FeeKnownDate
Comments:		FeeStartDate
Trade fee parame	ters	
Fee Offs	et: 0 Cal	
Product	ts: ALL	ETD
Default Calculate	r: NONE -	Inventory Bucket: Variation Margin Options 💌
Preference	s: 🔽 Accounting 🔲 Allocation	🖋 Duplicate Transfer
	📝 Transfer 🛛 📄 Settlement Amount	Margin: Account Level 👻 Margin Category: VM

NPVOPT_REV

Calculated by the scheduled tasks CLEARING_VM_CALC.


🛃 Fee Definition			
General			Properties
Type:	NPVOPT_REV		
Role:	CounterParty •		Кеу
PnL Category:			Exclude from EIR
			FeeDate
Include:	M Pricing		FeeEndDate
	NPV VM Options Reveral		FeeknownDate
Comments:			FeeStartDate
Trade fee parame	ters		
Fee Offse	et: 0 Cal		
Product	ts: ALL		ETD
Default Calculate	r: NONE	•]	Inventory Bucket: Variation Margin Options 💌
Preference	is: 🔽 Accounting 📄 Allocation		Duplicate Transfer
	📝 Transfer 🛛 📄 Settlement Amount		Margin: Account Level Margin Category: VM

OTEFUT (Open Trade Equity – Futures Only)

Calculated by the scheduled tasks CLEARING_VM_CALC.

🔀 Fee Definition	
General	Properties
Type: OTEFUT	X
Role: CounterParty	Кеу
PnL Category:	Exclude from EIR
	FeeDate
Include: 🗹 Pricing	FeeEndDate
OTE Futures	FeeKnownDate
Comments:	FeeStartDate
Trade fee parameters	
Fee Offset: 0 Cal	
Products: ALL	ETD
Default Calculator: NONE	Inventory Bucket: OTE Futures 🔻
Preferences: 📝 Accounting 📗 Allocation	V Duplicate Transfer
🔽 Transfer 🛛 🔲 Settlement Amount	Margin: Always 💌

OTEFUT_REV

Calculated by the scheduled tasks CLEARING_VM_CALC.

🛃 Fee Definition			
General			Properties
Туре:	OTEFUT_REV		×
Role:	CounterParty 💌		Кеу
PnL Category:			Exclude from EIR
Terrah sala s	Decision -		FeeDate
Include:	Pricing		FeeEndDate
	OTE Futures Reversal		FeeKnownDate
Comments:			FeeStartDate
Trade fee parame	ters		
Fee Offse	rt: 0 Cal		
Product	s: ALL		ETD
Default Calculate	r: NONE	•	Inventory Bucket: OTE Futures 🔻
Preference	s: 🔽 Accounting 📃 Allocation		Duplicate Transfer
	🔽 Transfer 🛛 📄 Settlement Amount		Margin: Always

OTEOPT (Open Trade Equity – Future-Style Options Only)

Calculated by the scheduled tasks CLEARING_VM_CALC.



🛃 Fee Definition	
General	Properties
Туре: ОТЕОРТ	
Role: CounterParty	Кеу
PnL Category:	Exclude from EIR
· · · · · ·	FeeDate
Include: 🗹 Pricing	FeeEndDate
OTE VM options	FeeKnownDate
Comments:	FeeStartDate
Trade fee parameters	
Fee Offset: D Cal	
December and L	ETD
Products: ALL	
Default Calculator: NONE	Inventory Bucket: OTE Options 🔻
Preferences: 📝 Accounting 📃 Allocation	🖋 Duplicate Transfer
📝 Transfer 🛛 🔲 Settlement Amount	Margin: Always 👻

OTEOPT_REV

Calculated by the scheduled tasks CLEARING_VM_CALC.

Fee Definition	
General	Properties
Type: OTEOPT_REV	
Role: CounterParty 🔹	Кеу
PnL Category:	Exclude from EIR
Include: Pricing	FeeDate
include.	FeeEndDate
OTE VM options Reversal	FeeKnownDate
Comments:	FeeStartDate
Trade fee parameters	_
Fee Offset: 0 Cal	
Products: ALL	ETD
Default Calculator: NONE	Inventory Bucket: OTE Options 💌
Preferences: 📝 Accounting 📃 Allocation	🖋 Duplicate Transfer
Transfer 📃 Settlement Amount	Margin: Always 💌

DISC_FWD_NPV

Calculated by the scheduled tasks CLEARING_VM_CALC.

🔏 Fee Definition	
General	Properties
Type: DISC_FWD_NPV	×
Role: CounterParty	Кеу
PnL Category: MTM	FeeDate
Include: I Pricing	FeeEndDate
and the second s	FeeStartDate
Comments:	
Trade fee parameters	_
Fee Offset: 0 Bus	
Products: ALL	ETD
Default Calculator: NONE	Inventory Bucket: Discounted VM 💌
Preferences: 📝 Accounting 📃 Allocation	🖋 Duplicate Transfer
Transfer Settlement Amount	Margin: Account Level 💌 Margin Category: VM

DISC_FWD_NPV_REV

Calculated by the scheduled tasks CLEARING_VM_CALC.



🛃 Fee Definition		
General		Properties
Туре:	DISC_FWD_NPV_REV	X
Role:	CounterParty -	Кеу
PhiL Category:	MTM	FeeDate
5.7		FeeEndDate
Include:	Pricing	FeeStartDate
Comments:	Discounted Forward NPV Reversal	
Trade fee parame	aters	
Fee Offs	at: 0 Bus	
Produc	ts: ALL	ETD
Default Calculate	or: NONE	Inventory Bucket: Discounted VM 💌
Preference	es: 🔽 Accounting 🔲 Allocation	🖋 Duplicate Transfer
	Transfer Settlement Amount	Margin: Account Level 🔻 Margin Category: VM

DISC_FWD_OTE

Calculated by the scheduled tasks CLEARING_VM_CALC.

🛃 Fee Definition			
General			Properties
Туре:	DISC_FWD_OTE		×
Role:	CounterParty 👻		Кеу
PnL Category:	MTM		FeeDate
			FeeEndDate
Include:	V Pricing		FeeStartDate
Comments:	Discounted Forward OTE		
Traue lee paralite	- CEI 5		
Fee Offse	et: O Bus		
Product	ts: ALL		ETD
Default Calculate	or: NONE	•	Inventory Bucket: Discounted OTE 💌
Preference	is: 📝 Accounting 📃 Allocation		Duplicate Transfer
	📝 Transfer 🛛 📃 Settlement Amount		Margin: Always 💌

DISC_FWD_OTE_REV

Calculated by the scheduled tasks CLEARING_VM_CALC.

🛃 Fee Definition			
General			Properties
Type:	DISC_FWD_OTE_REV		×
Role:	CounterParty 🗸		Кеу
PnL Category:	мтм		FeeDate
Include:	V Pricina		FeeEndDate
Comments: Trade fee parame	Discounted Forward OTE Reversal		
Fee Offse	et: 0 Bus		
Product	bs: ALL		EID
Default Calculate	or: NONE	•	Inventory Bucket: Discounted OTE 🔻
Preference	is: 🔽 Accounting 📄 Allocation		Duplicate Transfer
	🔽 Transfer 🛛 📃 Settlement Amount		Margin: Always



3.7 Inventory Position

3.7.1 Inventory Buckets

We compute balances by buckets for client and internal accounts in order to prepare the financial summary part of our statements and reconcile specific types of cash.

The following buckets are supported:

Balance/Movements	Xfer Type		
SOV	SOV + SOV_REV		
LOV	LOV + LOV_REV		
OTE Futures	OTEFUT+OTEFUT_REV		
OTE Options	OTEOPT+OTEOPT_REV		
Discounted OTE	DISC_FWD_OTE+DISC_FWD_OTE_REV		
Variation Margin Futures	NPVFUT+NPVFUT_REV		
Variation Margin Options	NPVOPT+NPVOPT_REV		
Discounted VM	DISC_FWD_NPV+DISC_FWD_NPV_REV		
Commissions	All transfer types fees defined as Inventory Bucket = Commissions		
Fees	All transfer types fees defined as Inventory Bucket = Fees		
Option Premium	PREMIUM		
ption Cash Settlement EXERCISE_FEE, OPT_CASH_ADJ			
Futures PL	REALIZED_PL		
Cash Settlement	All other xfer types including COLLATERAL		
InMemory Buckets / compute	ed from existing buckets		
Variation Margin	Variation Margin Futures + Variation Margin Options		
NOV	SOV + LOV		
OTE	OTE Futures + OTE Options		

Balance NFA

Movements NFA

3.7.2 Available Inventory Position

To build statements (financial summary) and ensure consistency with our posting dates and margin call movements, we have added an Available (Frozen) Inventory position. This is the position to use at Client Account Statement level.

Available (Frozen) Inventory Position is used for statement and computed as:

- When transfer booking date <= available date, transfer is taken into the balance based on its available date
- When transfer booking date > available date, transfer is taken into the balance based on its booking date (back-value)

Available Date position is based on the Available set as described below.

Bucket Type	Transfer Type	Transfer Settle Date	Transfer Available Date	Transfer Booking Date
SOV	SOV, SOV_REV	CT Settle Date	CT Trade Date	PO Attribute Value
LOV	LOV, LOV_REV	CT Settle Date	CT Trade Date	PO Attribute Value
OTE Futures	OTE FUT, OTEFUT_REV	CT Settle Date	CT Trade Date	PO Attribute Value
OTE Options	OTEOPT, OTEOPT_REV	CT Settle Date	CT Trade Date	PO Attribute Value
Variation Margin Futures	NPVFUT, NPVFUT_REV	CT Settle Date	CT Trade Date	PO Attribute Value
Variation Margin Options	NPVOPT, NPVOPT_REV	CT Settle Date	CT Trade Date	PO Attribute Value
Discounted VM	DISC_FWD_NPV, DISC_FWD_NPV_REV	CT Settle Date	CT Trade Date	PO Attribute Value
Discounted OTE	DISC_FWD_OTE, DISC_FWD_OTE_REV	CT Settle Date	CT Trade Date	PO Attribute Value
Commissions	Fees defined in Commissions Bucket	Transaction Settle Date	Transaction Trade Date	PO Attribute Value
Fees	Fees defined in Fees Bucket	Transaction Settle Date	Transaction Trade Date	PO Attribute Value
Option Premium	PREMIUM	Transaction Settle Date	Transaction Trade Date for premium based options (Conventional); Liquidation Date for future style option (VariationMargin)	PO Attribute Value
Option Cash Settlement	EXERCISE_FEE, OPT_CASH_ADJ	CloseOut Settle Date	Transaction Trade Date	PO Attribute Value
Futures PL	REALIZED_PL	Liquidation Effective Date (= greater of settle date of liquidated trades, settle date being computed by the system. This used Comparator = TradeDate)	Liquidation Date	PO Attribute Value
Cash Settlement	All other Transfer Types	Transaction Settle Date	Transaction Settle Date	PO Attribute Value



Settle Date of transaction is computed by the system adding a default of 1 Business Day lag (using contract exchange calendar).

If a different lag must be used by currency, we refer to the currency attribute ClearingTransferSettleLag.

This attribute can also be defined per Counterparty (CCP or broker) by using the LE Short Name + ClearingTransferLag attribute.

For example, if you have to apply a 2D lag for PLN, except when you clear PLN with BROKER1 (BROKER1 being the shortname of your LE), you will define ClearingTransferSettleLag = 0 for PLN and another PLN attribute BROKER1ClearingTransferSettleLag that would be set to 0.

Available date is set based on the type of flow and how we want to build the inventory buckets for statement.



3.8 Collateral Setup

The workflow below supports collateral processing for ETD Clearing.

Client and Counterparty side use the bilateral model	approach.
--	-----------

Id	Orig Status	Action	Resulting Status	Different User	Use STP	Priority	Log	Subtype	Product Type	Rules	Processing
332508	CALCULATED	CALCULATE	CALCULATED			0		ALL	ALL		ALL
332129	CALCULATED	PROCESS	PROCESSED		V	0		ALL	ALL		ALL
335425	CALCULATED	REFRESH	NONE			0	Г	ALL	ALL		ALL
335423	EXECUTED	CALCULATE	CALCULATED			0	Г	ALL	ALL		ALL
335424	EXECUTED	PROCESS	PROCESSED			0	Г	ALL	ALL		ALL
335426	EXECUTED	REFRESH	NONE			0	Г	ALL	ALL		ALL
332128	NONE	CALCULATE	CALCULATED			0		ALL	ALL		ALL
332507	NONE	PROCESS	PROCESSED			0	Г	ALL	ALL		ALL
332510	PROCESSED	CALCULATE	CALCULATED			0		ALL	ALL		ALL
332130	PROCESSED	EXECUTE	EXECUTED		2	0	Г	ALL	ALL	Execute	ALL
332509	PROCESSED	PROCESS	PROCESSED	E E	Г	0		ALL	ALL	1	ALL
335427	PROCESSED	REFRESH	NONE			0	Г	ALL	ALL		ALL
335428	NONE	PRICE	PRICED_RECEIVE			0		ALL	ALL	CheckReceive	ALL
335429	PRICED_RECEIVE	ALLOCATE	ALLOCATED		4	0	Г	ALL	ALL	AutoAdjust	ALL
335430	ALLOCATED	EXECUTE	EXECUTED	Г		0		ALL	ALL	Execute	ALL
335431	NONE	PRICE	PRICED_PAY			0	Г	ALL	ALL	CheckPay	ALL
335433	NONE	PRICE	PRICED_NO_CALL	E		0	Г	ALL	ALL	CheckNoCall	ALL
335434	PRICED_NO_CALL	ALLOCATE	ALLOCATED		2	0		ALL	ALL	AutoAdjust	ALL
335435	PRICED_PAY	ALLOCATE	ALLOCATED		2	0	Г	ALL	ALL	AutoAdjust	ALL



3.9 Engines Configuration

Engines are configured using the Engine Manager in Web Admin.

3.9.1 Liquidation Engine

Use the filter LiquidationEngineEventFilter.

3.9.2 Transfer Engine

The Transfer engine must subscribe to PSEventAggLiquidatedPosition events.

It should also use the VerifiedEventFilter

The following engine parameters must be set:

LIQUIDATION_CONFIG = ETD Liq Config XFER_NEXT_EVENT = true XFER_PAST_GENERATION = true XFER_POS_AGGREGATION_NAME = ETD Liq Keys XFER_USE_POS_AGGREGATION_ONLY = true XFER_USE_REVERSE = true

3.9.3 Margin Call Position Engine

Use the filter MarginCallEventFilter.

3.9.4 Accounting/CRE Engine

The Accounting engine must subscribe to PSEventAggLiquidatedPosition events.

The following engine parameters must be set:

ACCENGINE_PRDFAM_SELL_POSITION = 'no'



Legal Entities Configuration

4.1 Processing Organizations

Summary

The primary information required for clearing processing on the Legal Entities is captured through the LE Attributes. The Processing Organization represents the Clearing Broker operating the system.

The roles Agent, CounterParty and ProcessingOrg are mandatory.

🌽 Legal Entity- V	ersion - 3 [144003/CLEARING_40/calypso_user]	×
Utilities Help		
Short Name	US FCM Status Enabled	-
Full Name	US FCM Role(s) Agent	_
Parent	CounterParty	
, arone	ProcessingOrg	
Country	UNITED STATES	
Inactive As From	User bspota	
Entered Date	07/27/2015 8:58:30 AM Triparty Substitutions	1
External Ref		
Holidays	NYC Financial	
Holidays	C Non Financial	

It is mandatory to define at least one contact for settlement instructions.

Processing Org Attributes

Attribute Name	Purpose/Impact			
Booking Date	The current processing date, set in format of mm-dd-yyyy. This date can be set manually and can also be rolled forward using the ROLL_BOOKINGDATE scheduled task.			
ClearingType	Set to FCM to allow onboarding clients using the ETD Client Onboarding Tool.			
Client Clearing Book	Sets the Book on Trades based on the CCPOriginCode of the related Client Account.			
Client Execution Book	Sets the Book on Cleared Trades based on the ServiceLevel keyword of the transaction for Client activity.			
ClientErrorAccount	References the Account into which any trade which is entered or imported with an invalid account will be created.			
House Clearing Book	Sets the Book on Trades based on the CCPOriginCode of the related Client Account.			



Attribute Name	Purpose/Impact
House Execution Book	Sets the Book on Cleared Trades based on the ServiceLevel keyword of the transaction for House activity

4.2 Client

The Client represents either the external (client) or proprietary (house) entity clearing through the PO.

The roles **Client** and **CounterParty** are mandatory.

📕 Legal Entity- Version - 0 [144003/CLEARING_40/calypso_user]									
Utilities Help									
Short Name	SA TEST Status Enabled	-							
Full Name	SA Trading Corp Role(s) Client								
Parent	CounterParty								
Country	NONE								
Inactive As From	User santil								
Entered Date	08/10/2015 1:53:24 PM Triparty Substitutions								
External Ref									
Holidays	Financial C Non Financial								

It is mandatory to define at least one contact for settlement instructions.

There are no mandatory client attributes, since most client specific information is captured by the account definition.

You can also onboard clients using the ETD Client Onboarding tool.

See ETD Client Onboarding Tool for details.



4.3 Counterparty

The Counterparty represents the clearing house or Third-Party Broker through which the PO clears and/or executes its client trades.

The roles **CounterParty** and **Clearer** are mandatory.

🔀 Legal Entity- Version - 0 [144005/erste/admin]									
Utilities Help									
Short Name	UBS CLEARING BRO	OKER	Status	Enabled 🔹					
Full Name	UBS CLEARING BRO	OKER	Role	Clearer					
Parent				CounterParty					
Country	Switzerland	▼]						
Inactive As Fr		User admin							
Entered Date	03/17/2017	10:27:09 AM		Triparty Substitutions					
External Ref									
Holidays		Generation Generation Generation Generation	al ancial						

It is mandatory to define at least one contact for settlement instructions.

Attribute Name	Purpose/Impact				
DefaultHouseAccount	Sets the Counterparty Account to be used for a trade cleared by a House account, when the Counterparty Account is not provided on the trade capture. The value must match a valid Counterparty Account with the LE as the Account owner.				
DefaultClientAccount	Sets the Counterparty Account to be used for a trade cleared by a Client account, when the Counterparty Account is not provided on the trade capture. The value must match a valid Counterparty Account with the LE as the Account owner.				
DefaultExecutionAccount	Sets the Counterparty Account to be used for an execution only trade executed by the PO. The value must match a valid Counterparty Account with the LE as the Account owner.				



4.4 Exchange

The Exchange represents the entity that facilitates the trading of the products cleared by the PO.

The role MarketPlace is mandatory.

📕 Legal Entity- V	ersion - 5	[151010/	MARGIN	DEMO2	2/calypso_use	r]		_ [] >
Utilities Help								
Short Name	EUREX					State	us Enabled	v
Full Name	Eurex				Role(
Parent								
Country	GERMANY				-	_		
🔎 Legal Entity At	tributes ¥	∕indow						_0
Q- Search								
Legal Entity FL	IREX		-		Role ALL	-	Processing O	
Abbelle de Crever				the desides		Ξ.		
Accribuce Group		<u> </u>	2 4	conduce	туре рассоо			
Id Proce	essing Org	Legal Er	ntity	Role	Attribute Grou	up	Attribute Type	Attribute Value
301218 ALL		EUREX	AL	.L		Clea	ringHouse	EUREX CLEARING
301219 ALL		EUREX	AL	.L		Defa	ultCounterparty	EUREX CLEARING
301220 ALL		EUREX	AL	.L		MIC		XEUR
301221 ALL		EUREX	AL	.L		Time	Zone	Europe/Paris
Legal Entity- V Utilities Help	'ersion - 1	[151010/*	MARGIND)EMI02/	'calypso_user]		_	<u>=0×</u>
Legal Entity- V Utilities Help Short Name	ersion - 1 ICE EUR	[151010/*	MARGING	DEMO2,	'calypso_user]	Status	Enabled	_
Legal Entity- V Utilities Help Short Name Full Name	ICE EUR	[151010/*	MARGINE	DEMIO2/	(calypso_user)	Status Role(s)	Enabled MarketPlace	_D×
Legal Entity- V Utilities Help Short Name Full Name Parent	ersion - 1 ICE EUR ICE EUR IFI	[151010/* LL	MARGINO	DEMICIZ/	'calypso_user]	Status Role(s)	Enabled MarketPlace	×
Legal Entity- V Utilities Help Short Name Full Name Parent Country	ersion - 1 ICE EUR ICE EUR IFI UNITED KIN	[151010/M	MARGINE)EM(02/	(calypso_user)	Status Role(s)	Enabled MarketPlace	_D×
Legal Entity- Y Utilities Help Short Name Full Name Parent Country Inactive As From	ICE EUR ICE EUR IFI UNITED KIM	(151010/M	HARGINI User cal	DEMIO2/	(calyp50_user)	Status Role(s)	Enabled MarketPlace	_ D ×
Legal Entity- V Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017	[151010/*	User cals	DEMIO2	(calypso_user)	Status Role(s)	Enabled MarketPlace	X X
Legal Entity- V Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 ttributes V	[151010/N	User call	ypso_us	(calypso_user) ▼ er	Status Role(s)	Enabled MarketPlace	×
Legal Entity- V Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date Legal Entity A	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 ttributes V	[151010/N LL NGDOM	HARGING	ypso_us	(calypso_user)	Status Role(s)	Enabled MarketPlace	×
Legal Entity- V Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date Legal Entity At Legal Entity To	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 ttributes V	[151010/N	User cali)EMIO2/ ypso_us	(calypso_user)	Status Role(s)	Enabled MarketPlace	X
Legal Entity- V Utilities Help Short Name Parent Country Inactive As From Entered Date Legal Entity AU Legal Entity IC Attribute Group	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 ttributes V	[151010/N	HARGING User [cal; 11:57:35 € Att	ypso_us AM	(Calypso_user)	Status Role(s)	Enabled MarketPlace Processing Org Value	
Legal Entity- Y Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date Legal Entity At CQ Search Legal Entity IC Attribute Group	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 ttributes V CE EUR	[151010/N	MARGINO User [ca]; 11:57:35 	ypso_us AM	(calyp50_User)	Status Role(s)	Enabled MarketPlace Processing Org Value	
Legal Entity- Y Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date Legal Entity At Q Search Legal Entity IC Attribute Group	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 ttributes V CE EUR	ELEgal Entit	HARGINU User cab 11:57:35 € Att ity Ri	ypso_us AM tribute T	Colyp50_Use()	Status Role(s)	Enabled MarketPlace Processing Org Value	
Legal Entity- Y Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date Legal Entity At Legal Entity IC Attribute Group Id Proces 302720 ALL 302722 ALL	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 CE EUR	ELEGAL EINE	HARGING User cal: 11:57:35	ypso_us AM tribute 1	(CalypSo_User)	Status Role(s)	Enabled MarketPlace Processing Org Value ribute Type	
Legal Entity- Y Utilities Help Short Name Full Name Parent Country Inactive As From Entered Date Legal Entity At Legal Entity At Legal Entity IX Attribute Group Id Proce 302720 ALL 302722 ALL	ICE EUR ICE EUR IFI UNITED KIN 01/12/2017 ttributes V CE EUR	ELSI010/*	User cals 11:57:35 Att ity Rr ALL ALL ALL	ypso_us AM tribute 1	Calypso_user)	Status Role(s)	Enabled MarketPlace Processing Org Value ribute Type House I e	ALL Attribute Value CE CLEAR EUROPE Surope/London



🗾 Legal Entity- Version - 0 [144003/CLEARING_40/calypso_user]									
Utilities Help									
Short Name	NYMEX Status Enabled]							
Full Name	New York Mercantile Exchange Role(s) MarketPlace	-							
Parent									
Country	UNITED STATES								
Inactive As From	User bspota								
Entered Date	07/27/2015 12:24:21 PM Triparty Substitutions]							
External Ref									
Holidays	C Financial								

Exchange Attributes

Attribute Name	Purpose/Impact
ClearingHouse	Indicates the Clearinghouse on which this exchange's products are cleared. The value should be the LE Short Name of a valid Counterparty.
MarginMethod	Sets the Initial Margin Calculation method for the exchange. This is set on the exchange rather than the Clearinghouse because some clearinghouses use different methodologies for different exchanges when they clear multiple exchanges.
	This attribute can be left blank, in which case it will default to the primary supported exchange methodology. The use can instruct the IM calculation to be done using simple strategy margining by entering a value of "Strategy" here
	See Initial Margin Calculation for details.
DefaultCounterparty	Indicates the Counterparty through which products on this exchange will be cleared for the indicated Processing Org. This allows the Counterparty of the cleared trade to be set if it's not provided in the trade capture process. This attribute allows the PO to indicate whether the products on this exchange are cleared directly on the Clearinghouse, or through a 3rd Party Broker.
MIC	The official Market Identification Code for this LE. This allows us to uniquely identify this exchange despite the users' choice of long or short name and is used to uniquely identify the exchange for our FOW interface and for SPAN calculations.
TimeZone	The Time Zone in which the exchange operates. Used for Last Trading Time.

Note that the attributes can be defined as associated to ALL Processing Orgs or to a specific PO. This is important, since in a multi-PO environment we expect all POs to use the same Exchange and Counterparty Legal Entities, but we also understand that some POs will clear a particular market on the clearinghouse, while others may set the DefaultCounteparty to a 3rd part broker. We should be able to define these attributes per PO and have the processing logic look for the specific PO name first, then look for the attribute associated to ALL POs.



4.5 Clearing House

The Clearing House represents the entity that compensates contracts of the exchange. Several exchanges can be linked to the same Clearing House. It is mandatory to define Clearing House and assign the Clearing House to each Exchange through attributes as stated above.

The role **CCP** is mandatory. When the PO is a clearing member, the Clearing House must also be defined with Role **Clearer** and **CounterParty**.

🔀 Legal Entity	y- Version - 5 [15	2001/corelisted/caly	/pso_user]	
Utilities Hel	p			
Short Name	EUREX CLEARING		Status	Enabled 🔹
Full Name	EUREX CLEARING		Role	Agent
Parent				CCP Clearer
Country	GERMANY	▼		CounterParty
Inactive As Fr		User calypso_user		
Entered Date	04/16/2015	2:20:01 PM		
External Ref				
Holidays		I O Financia Non Fin	al Iancial	

4.6 Executing Broker

The Executing Broker represents an entity that may execute transactions for the PO's clients, with the intent of giving the up to the PO to clear. The PO may also execute trades.

The roles **ExecutingBroker** and **Broker** are mandatory. The Role Broker is used to select the LE in the Pricing Sheet, the role ExecutingBroker is used to define the fee grid and fee configuration when we want to generate fees on this Legal Entity. SDI for fee settlement is only needed for the Role ExecutingBroker used for the fee generation.

🔀 Legal Entity	🟒 Legal Entity- Version - 0 [144005/erste2/admin]						
Utilities Help	p						
Short Name	EXECUTING BROKE	R			Status	Enabled 🔹	
Full Name	EXECUTING BROKE				Role	ExecutingBroker	
Parent]	Broker	
Country	GERMANY		▼				
Inactive As Fr		User	admin		_		
Entered Date	10/06/2017	3:43	:45 PM			Triparty Substitutions	
External Ref							
Holidays) 💿 Financi () Non Fir	al nancial			





ETD Client / Counterparty Onboarding Tool

It allows defining a client / counterparty based on a client / counterparty template, previewing the data that will be created, and saving the required data:

- Legal entities
- Contacts
- Legal entity attributes
- Settlement instructions
- Clearing account and IM deposit account
- Margin call contracts for IM and VM

(I) [NOTE: You can only onboard clients for Processing Orgs with attribute ClearingType = FCM]

Open the ETD Client Onboarding Tool using menu action onboarding.ETDOnboardingWindow.

ale Client Uploader						
pid direct optidades		A	Client Onboarding Template Configuration		x	
ie		<i></i>	cheft onbourding remplate configuration			
lient Information (ETD)		File				
. ,	_	Template	PHASE2_01	EUC	^	
Template	TAGG	Processing Org	ETDCOBPO			
Processing Org	841_	 Legal Entity 				
Clearing Book	841_	✓ Roles		Add	=	
Client		Role	CounterParty	Remove		
Short Name	cient	Role	Client	Remove		
Long Name	full di	Financial				
Account Name	dient	Status	Disabled			
Parent	parer	Country	UNITED STATES			
External Reference	exter	Holidays				
Holidays	[NYC]	LE Attributes		Add		
Country	UNITE	✓ Books				
Contact Details		Clearing Book				
Contact Type	Defau	Book Name	Message			
SWIFT SDI Agent Details		 Accounts 				
SWIFT SDI A/C	conta	 Clearing 	Template 'PHASE2_01' saved			
SWIFT SDI Agent	conta	Account Name Format	Provide and a second			
Initial Margin		Processing Org	OK			
Eligible Securities	conta	Call Account				
Attributes		Туре	SETTLE			
LE Attributes		Sub Type	Clearing			
Properties		Security				
 Account Properties 		Currency	AUTO			
 Clearing 		Auto/Template Acc	\checkmark			
ActivityType	HEDG	Interface Rule	Aggregate			
CCPOriginCode	CLIEN	Role	Client			
Clearing Book	841_	Create by Acc Engine Only	\checkmark			
IM Deposit		Balance	\checkmark			
		Frequency	DLY			
		Day	1			
		Rule				
		Dall	END MONTH		Ľ.	



5.1 Templates

Templates are provided out-of-the-box: "ETD_CLIENT" for Client onboarding and "ETD_COUNTERPARTY" for counterparty onboarding. They contain the basic required data. They are described below.

You can choose File > Configure to save the out-of-the-box template as a new template, in order to modify it.

Choose File > Save or File > Save As New to save your changes if any.

🔀 Client Onboarding Template Configuration

File		
ETD Template Type	ETD_CLIENT	
Template	ETD_default_Client	EUC
Processing Org		
Legal Entity		
Roles		Add
Role	CounterParty	Remove
Role	Client	Remove
Financial	\checkmark	
Status	Disabled	
Country		
Holidays		
LE Attributes		Add
▼ Books		
 Clearing Book 		
Book Name		
 Accounts 		
Clearing		
Seperate IM Deposit Account Require	1 🗸	
IM Deposit Account		
 Settlement Delivery Instructions 		
Direct		
Direct IM Deposit		
► SWIFT		
Margin Call Contracts		
▶ VM		
▶ IM		

Select the processing org and modify the following fields as needed.

Legal Entity

Field Name	Sub field	Derived From
Processing Org		Select the Processing org for the template
Roles	Role	By default , will always be 'Client' (Mandatory) – Only for ETD_CLIENT
	Role	By default , will always be 'Counterparty' (Mandatory)
	Role	By default , will always be 'Clearer' (Mandatory) – Only for ETD_COUNTERPARTY



Field Name	Sub field	Derived From
	Role	User can add more roles as per requirements
Financial		By default, its ticked and untick to this if not a financial entity
Status		Status must be set to Active to be able to select the account for clearing activity.
Country		Select the country for entity
Holidays		Select the holidays which needs to apply throughout the process
LE Attributes		Select the LE attributes

Books

Field Name	Sub field	Derived From
Clearing book	Book name	Select the clearing book for transactions

Accounts – Clearing Account

Field Name	Sub field	Derived From
	Account name format	This field will get auto populated after saving the template
	Processing Org	Auto populate once you select the PO in earlier field
	Call Account	Need to tick if this is call account, and it's used for client custody management
	Туре	Need to select for which purpose this account is getting used (In ETD, SETTLE type is getting used mainly)
	Sub type	Need to select sub type of the account (In ETD, Clearing sub type is getting used mainly) or Only applies to SETTLE accounts.
	Security	Check the Security checkbox to indicate that the account is a security account.
	Currency	Select the currency of the postings to this account
	Auto/Template Acc	Check the "Auto/Template Acc" to create account numbers based on user-defined attributes for this account.



Field Name	Sub field	Derived From
	Interface rule	Select the rule for exporting postings on this account to the general ledger
	Role	By default, will always be 'Client'
	Create by Acc Engine Only	This checkbox only appears for automatic accounts. If checked, the automatic account number will only be generated by the Accounting engine. If not checked, the automatic account number can be generated by both the Accounting engine and the Transfer engine.
	Balance	Check the Balance checkbox to specify that the account can generate balances.
	Frequency	Select a frequency from the Freq field to generate the balance according to that.
	Day	If using date rule, then can select the day of the week or month in this day field.
	Rule	Select the date rule as per requirements
	Roll	Select the date roll convention to roll the dates in case of holidays
	Billing	Check the Billing checkbox to allow the calculation of management fees. It can only calculate on SETTLE accounts.
	Interest Bearing	Check the "Interest Bearing" checkbox to allow the calculation of interests. It can only calculate on SETTLE accounts.
	ISIMVMByRegCode	
Account Properties	Activity type	Select either hedge or speculator. This field can impact the way initial margin is calculated for the account.
	CCPOriginCode	For a client account select "Client", and for house/proprietary accounts select "House".
	Clearing Book	Select the clearing book for transactions as above
	1.OriginalAccountNa me	Select the account attributes as per requirements
	2.Constant	Select the account attributes as per requirements
	3.XferCcy	Select the account attributes as per requirements
Clearing Base Ccy		Represents the base currency for the account, used to convert balances in the client statement to a single currency.



Field Name	Sub field	Derived From
Is Collateral	Clearing margin mode	Select between "OTE" (open trade equity) and "Realized VM" modes to drive how unrealized PL is treated in the account, statement and margin call calculation.
	Clearing Risk multiplier	User entered value which can be used to mark up the Margin Requirement calculation. Default value is 1.0 which implies no markup (multiply calculated margin by 1). Value can be greater than or less than 1.
	Clearing risk Netting	 Indicates how to calculate risk on the positions in this account: 'Net' will calculate risk on all positions in the account considering any risk offsetting available in the methodology. 'Gross' will calculate risk on each position in the account individually.
Clearing parent account		Select if any parent account is their
Clearing statement frequency		Identifies this statement config as eligible to be run daily. Does not control the format or content of the output, just the timing.
Clearing statement position type		The field controls how the account balances are displayed in the statement, based on the status of the inventory transfers. Actual is the standard value but is configurable based on the user's business logic.
Clearing statement position date		The field controls how the account balances are displayed in the statement, based on the status of the inventory transfers.
Clearing Advise Config		Allow to select multiple message configuration such as PDF, XML, HTML in template configuration
Clearing statement active from		Allows the statement configuration to be active for a set period. When the user triggers the statement run for a processing date
Clearing statement active to		outside of this fange, no statement will be generated.
Clearing advice config		Select the message configuration which is applicable to the account statement generation.

Accounts – IM Deposit Account

Field Name	Sub field	Derived From
Separate IM deposit account required		Tick if Separate IM deposit account required. By default, this field is unticked.



Field Name	Sub field	Derived From
	Account name format	Auto populated field after saving the template
	Processing Org	Auto populate once you select the PO in earlier field
	Call Account	Need to tick if this is call account, and it's used for client custody management
	Туре	Need to select for which purpose this account is getting used (In ETD, SETTLE type is getting used mainly)
	Sub type	Need to select sub type of the account (In ETD, clearing sub type is getting used mainly) or Only applies to SETTLE accounts.
	Security	This field only appears for SETTLE accounts. Check the Security checkbox to indicate that the account is a security account.
	Currency	Select the currency of the postings to this account
	Auto/Template Acc	Check the "Auto/Template Acc" to create account numbers based on user-defined attributes for this account.
	Interface rule	Select the rule for exporting postings on this account to the general ledger
	Role	By default, will always be 'Client'
	Create by Acc Engine only	This checkbox only appears for automatic accounts. If checked, the automatic account number will only be generated by the Accounting engine. If not checked, the automatic account number can be generated by both the Accounting engine and the Transfer engine.
	Balance	Check the Balance checkbox to specify that the account can generate balances.
	Frequency	Select a frequency from the Freq field to generate the balance according to that.
	Day	If using date rule, then can select the day of the week or month in this day field.
	Rule	Select the date rule as per requirements
	Roll	Select the date roll convention to roll the dates in case of holidays
	Billing	Check the Billing checkbox to allow the calculation of management fees. It can only calculate on SETTLE accounts.



Field Name	Sub field	Derived From
Interest Bearing	Interest config	You can select No, Yes, or Both for Penalty. The penalty configuration is applied when the account balance is below a certain amount. Limits are defined in the Limits panel.
	Interests valid from	Enter the validity dates of the configuration.
	Interests valid to	
	Interests type	Select the type of configuration: Interest or Margin
	Interests penalty	If the interest rule is defined as both interest and penalty, an interest will be computed when the balance on the account is above its overdraft limit or minimum balance requirement, and a penalty will be computed otherwise.
		Limits are defined in the Limits panel.
		If the interest rule is defined as interest only (Penalty = No), an interest will be computed when the balance on the account is above its overdraft limit or minimum balance requirement. In this case, you can also associate a penalty configuration if you have defined one. Check the Penalty checkbox and add a penalty configuration to the account.
Account Properties	Activity type	Select either hedge or speculator. This field can impact the way initial margin is calculated for the account.
	CCPOriginCode	For a client account select "Client", and for house/proprietary accounts select "House".
Account Attributes	1.OriginalAccountN ame	Select the account attributes as per requirements
	2.Constant	Select the account attributes as per requirements
	3.XferCcy	Select the account attributes as per requirements

Settlement and Delivery Instructions

Field Name	Sub field	Derived From
Direct SDI	Role	Select the role for SDI
	Currency	Select the settlement currencies to which the SDI applies, or ANY.
	Pay/Receive	Select the direction of the transfer to which the SDI applies: PAY, RECEIVE, or BOTH.



Field Name	Sub field	Derived From
	Cash/Security	Select the type of transfer to which the SDI applies: CASH, SECURITY or BOTH.
	Contact	Select the contact of the beneficiary for retrieving address information.
	Processing Org	Select the processing org to which the SDI applies, or ALL.
	Products	Select product types to which the SDI applies, or ALL.
	SD filter	Select a static data filter to restrict the validity of the SDI based on trade, product and legal entity attributes as applicable.
	Preferred	Check the Preferred checkbox to allow the SDI to be automatically associated with a trade upon trade capture.
	Priority	You can enter a priority in the Priority field (0 being the highest priority).
	Method	Select the settlement method. The settlement method is used to match SDI instructions between each party of a trade. Both parties need SDIs that use the same settlement method. By default, method will be clearing.
	Trade Counterparty	Select the trade counterparty to which the SDI applies.
	Is direct	Check the Direct checkbox to indicate that the beneficiary has a direct account with the processing org. No agent or intermediary is used. This usually indicates that the beneficiary is a client of the processing org. This only applies if the beneficiary is not a processing org, and the processing org is specified in the Processing Org field. The Direct panel will be enabled to specify the account.
	DDA	Auto populated field after saving the template
Direct IM	Role	Select the role for SDI
Deposit	Currency	Select the settlement currencies to which the SDI applies, or ANY.
	Pay/Receive	Select the direction of the transfer to which the SDI applies: PAY, RECEIVE, or BOTH.
	Cash/Security	Select the type of transfer to which the SDI applies: CASH, SECURITY or BOTH.
	Contact	Select the contact of the beneficiary for retrieving address information.
	Processing Org	Select the processing org to which the SDI applies, or ALL.
	Products	Select product types to which the SDI applies, or ALL. Here by default product will be margin call only.



Field Name	Sub field	Derived From
	SD filter	Select a static data filter to restrict the validity of the SDI based on trade, product and legal entity attributes as applicable.
	Preferred	Check the Preferred checkbox to allow the SDI to be automatically associated with a trade upon trade capture.
	Priority	You can enter a priority in the Priority field (0 being the highest priority).
	Method	Select the settlement method. The settlement method is used to match SDI instructions between each party of a trade. Both parties need SDIs that use the same settlement method. By default, method will be clearing.
	Trade Counterparty	Select the trade counterparty to which the SDI applies.
	Is direct	Check the Direct checkbox to indicate that the beneficiary has a direct account with the processing org. No agent or intermediary is used. This usually indicates that the beneficiary is a client of the processing org. This only applies if the beneficiary is not a processing org, and the processing org is specified in the Processing Org field. The Direct panel will be enabled to specify the account.
	DDA	Auto populated field after saving the template
SWIFT	Role	Select the role for SDI
	Currency	Select the settlement currencies to which the SDI applies, or ANY.
	Pay/Receive	Select the direction of the transfer to which the SDI applies: PAY, RECEIVE, or BOTH.
	Cash/Security	Select the type of transfer to which the SDI applies: CASH, SECURITY or BOTH.
	Contact	Select the contact of the beneficiary for retrieving address information.
	Processing Org	Select the processing org to which the SDI applies, or ALL.
	Products	Select product types to which the SDI applies, or ALL. Here by default product will be margin call only.
	SD filter	Select a static data filter to restrict the validity of the SDI based on trade, product and legal entity attributes as applicable.
	Preferred	Check the Preferred checkbox to allow the SDI to be automatically associated with a trade upon trade capture.
	Priority	You can enter a priority in the Priority field (0 being the highest priority).



Field Name	Sub field	Derived From
	Method	Select the settlement method. The settlement method is used to match SDI instructions between each party of a trade. Both parties need SDIs that use the same settlement method. By default, method will be SWIFT.
	Trade Counterparty	Select the trade counterparty to which the SDI applies.
	ls direct	Check the Direct checkbox to indicate that the beneficiary has a direct account with the processing org. No agent or intermediary is used. This usually indicates that the beneficiary is a client of the processing org. This only applies if the beneficiary is not a processing org, and the processing org is specified in the Processing Org field. The Direct panel will be enabled to specify the account.
	DDA	Auto populated field after saving the template
	Intermediary	Tick to select the intermediary
	Agent Contact	Select the contact of the agent for retrieving address information.
	Agent Identifier	Enter the member identifier for the place of settlement.
	Sub-Account	Displays the sub account specified in the SDI relationship if any.
	Msg to Agent	Check the Msg checkbox to indicate that a payment message should be sent to the agent or uncheck otherwise.

Margin Call Contracts – VM

VM margining is categorized broadly as:

• Single Currency Margining: In this model FCM settles all underlying cleared currency's cashflow i.e. VM+Commission+Fees etc in base currency depending upon preference of the client. For e.g. if client is clearing GBP, EUR, USD, JPY, AUD, CAD and CHF then it will only be settled say in USD or EUR or GBP depending upon preference of client.

So, for this case COB tool will create one VM MCC which will have all these currencies defined in currencies multi select dropdown in details tab (under perimeter node) and eligible currency panel with base currency marked (checked) as adjusted currency

Native Currency Margining: In this model FCM settles all underlying cleared currency's cashflow i.e.
 VM+Commission+Fees etc in respective currencies. For e.g. if client is clearing GBP, EUR, USD, JPY, AUD, CAD and CHF then it will be settled in respective currency.

So, for this case COB tool will create seven VM MCC which will have individual currency defined in currencies multi select dropdown in details tab (under perimeter node) and eligible currency tab, have each currency marked as adjusted (checked) in respective VM MCC



Field Name	Sub field	Derived From	
VM	Margining Scenario	Select the currency type for generation of margin call i.e., Native or single. Native means margin calls will be generating in different currencies and in single, margin calls will be generating in single currency	
	Contact name Auto populated field after saving the templa format		
	Legal entity role	Select the LE role 'Counterparty or client'	
Details	Currencies	Select the applicable currencies	
	Start date	Select the start date for the operations and processes related to VM margin call	
	EOD pricing environment	Select the pricing environment	
	ITD pricing enviornment	Select the pricing environment	
	Position type	Select the position type which is getting in consideration for generating margin call.	
	position date	By default, it will be 'POSITION_DATE_VALUE'	
	Val date frequency	This rule should select, COL_MIGR_DAILY_BUS – A date rule which sets the processing date to business dates on the configured calendar.	
	Val time offset	This rule should select, COL_MIGR_VAL_REL - A date rule which is relative to the rule above and falls one business day prior. This sets the Collateral processing so that the process date is always T+1 based on end of day balances on T and generates a Margin Call which is settled on T+1.	
	Holidays	Select the holidays which needs to apply throughout the process	
Collateral Dates	Method	Refer to Calypso Collateral documentation for the details under "Setting Collateral Dates"	
	Currency Refer to Calypso Collateral documer "Setting Collateral Dates"		
	Cash	Refer to Calypso Collateral documentation for the details under "Setting Collateral Dates"	
Eligible book	book	Select the book which is capturing the trades i.e., clearing book	



Field Name	Sub field	Derived From
Contract currencies	Base currency	Define an Exposure Group per Currency cleared on this CCP/Clearer account and define the Base Currency as Exposure Group Currency. In the screenshot below, we define an Exposure Group for EUR and Define Base Currency = EUR. We need to do the same for each currency that the CCP/Clearer account is clearing in order to generate a margin call per cleared currency.
Eligible Currencies	Currency	Add the Exposure Group Currency as eligible currency and define it as Adjustment Currency. Do the same for each Exposure Group you define per currency.
	Adjustment Currency	Select the currency which will be using for adjustment in the contracts which are in different currency.
Additional Info	Margin type	By default , will always be 'VM'
	CCP origin code	By default , will always be 'Client'
	Product type	By default , will always be 'ETD'
Native currencies for exposure groups		Select the native currencies

Margin Call Contracts - IM

Field Name	Sub field	Derived From
IM	Margining Scenario	Select the currency type for generation of margin call i.e., Native or single. Native means margin calls will be generating in different currencies and in single, margin calls will be generating in single currency
	Contact name format	Auto populated field after saving the template
	Legal entity role	Select the LE role 'Counterparty or client'
Collateral Type Select the		Select the collateral type 'Security or cash' or both
Details	Start date	Select the start date for the operations and processes related to VM margin call
	EOD pricing environment	Select the EOD pricing environment



Field Name	Sub field	Derived From
	ITD pricing environment	Select the ITD pricing environment
	Position type	Select the position type which is getting in consideration for generating margin call.
	position date	By default, it will be 'POSITION_DATE_VALUE'
	Val date frequency	This rule should select, COL_MIGR_DAILY_BUS – A date rule which sets the processing date to business dates on the configured calendar.
	Val time offset	This rule should select, COL_MIGR_VAL_REL - A date rule which is relative to the rule above and falls one business day prior. This sets the Collateral processing so that the process date is always T+1 based on end of day balances on T and generates a Margin Call which is settled on T+1.
	Holidays	Select the holidays which needs to apply throughout the process
Collateral Dates	Method	Refer to Calypso Collateral documentation for the details under "Setting Collateral Dates"
	Currency	Refer to Calypso Collateral documentation for the details under "Setting Collateral Dates"
	Cash	Refer to Calypso Collateral documentation for the details under "Setting Collateral Dates"
	Any	Refer to Calypso Collateral documentation for the details under "Setting Collateral Dates"
Eligible book	book	Select the book which is capturing the trades i.e., clearing book
Contract currencies	Base currency	Define an Exposure Group per Currency cleared on this CCP/Clearer account and define the Base Currency as Exposure Group Currency. In the screenshot below, we define an Exposure Group for EUR and Define Base Currency = EUR. We need to do the same for each currency that the CCP/Clearer account is clearing in order to generate a margin call per cleared currency.
Securities	Haircut type	Select the type of haircut, which will use to calculate the value of non-cash collateral
Additional Info	Margin type	By default , will always be 'IM'
	CCP origin code	By default , will always be 'Client'
	Product type	By default , will always be 'ETD'



5.2 Single Client / Counterparty Onboarding

Select a Client template or a Counterparty template and fill in the client information as needed.

Sample Client template

Client Information (ETD_C	LIENT)	
Template	QA_CLIENT_01	
Processing Org	SETCLEAR	
Clearing Book	EUREX (LSE)	
Client / CounterParty		
Short Name	QA_CL_01	
Long Name	full dient name	
Account Name	QA_CL_01	
Parent	parent legal entity	
External Reference	external reference	
Holidays	holidays	
Country	country	
Contact Details		Add
Contact Type	Default	Remove
SWIFT SDI Agent Details		
SWIFT SDI A/C	123	
SWIFT SDI Agent	CITI BANK	
🗸 Initial Margin		Add
Eligible Securities	contact type	

Sample Counterparty template

Template	QA1CPTY	
Processing Org	SETCLEAR	
Clearing Book	EUREX (LSE)	
Client / CounterParty		
Short Name	NEWEDGE	
Long Name	Newedge clearing Services P Ltd	
Account Name	NEWEDGE_CPTY101	
Parent	parent legal entity	
External Reference	external reference	
Holidays	0	
Country	UNITED STATES	
Contact Details		Add
Contact Type	Default	Remove
SWIFT SDI Agent Details		
SWIFT SDI A/C	contact type	
SWIFT SDI Agent	contact type	
Initial Margin		Add
Eligible Securities	contact type	



Fields

Area	Field Name	Sub field	Derived From
	Processing Org		This field will get auto populated after selecting the template in above step.
	Clearing Book		This field will get auto populated after selecting the template in above step. But you can select another clearing book and that will reflect throughout.
Client / Counterparty	Short Name		Give short name for client
	Long name		Give long name for client
	Account name		Give account name for client
	Parent		Select parent for given client, if any
	External reference		Select external reference, if any. It can be used for selection and reporting purposes.
	Holidays		This field will get auto populated after selecting the template in above step. But you can select another holidays and that will reflect throughout.
	Country		This field will get auto populated after selecting the template in above step. But you can select another Country and that will reflect throughout.
Contact Details	Contact Type		This field will get auto populated after selecting the template in above step. But you can select another Contact Type and that will reflect throughout
SWIFT SDI Agent Details	SWIFT SDI A/C		Select SDI A/C for SWIFT process
	SWIFT SDI Agent		Select SDI Agent for SWIFT process
Initial Margin	Eligible Securities		Select the eligible securities for getting exposure in initial margin.
Attributes	LE Attributes		Select the attributes for legal entity.
Properties	Account Properties	Clearing	Select account properties for clearing and
		IM Deposit	



jege Clerit Upbader ite Template QA_Q_DIM_ON Processing Ory STICLEAR Clearing Book BLER (LSS) Cleart / CounterParty Short Name QA_Q_D1 Long Name M_d Cleart name Short Name QA_Q_D1 Darg Name M_d Cleart name Long Name M_d Cleart name County M_dCleart Name M_d Cleart name County Cleart / C	- 🗆				ETD Client Onboarding Tool
Ident Information (ETD_CLIENT) Template QA_QLIBNT_01 Processing Org STGLEAR Clearing Book EUREX (SS) Cinet / CounterParty Image Short Hame QA_Q_01 Contact Oreaning Add days Account Name QA_Q_01 Account Reference activity/ Contact Oreaning CounterParty Contact Oreaning Add SWIFT S01 Agent CounterParty SWIFT S01 Agent Add Biglible Securities contect frage Activity/rye HEDGE Coaring Add Activity/rye HEDGE Coaring Sook ELEXT Activity/rye HEDGE Coaring Sook ELEXT Activity/rye HEDGE Coaring Sook ELEXT					gle Client Uploader
Itent Information (ETD_CLIENT) Template QA_CLENT_01 Processing Org SETCEAR Clearing Book EREX (LSP) Clearing Book EREX (LSP) Short Name QA_C_01 CloanterParty					le
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Properties Margin Call Contracts * Account Properties > VM * Clearing	143283	SWIFT/CITI BANK/123	Add Direct		LE Attributes
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Then click Save Client if you are satisfied with the results. A summary of the results will be displayed.



5.3 Uploading Multiple Clients / Counterparties

You can upload multiple clients using a CSV file from the Uploader tab.

CSV File Format

Fields	Values in csv (for reference)	Mandatory Fields (True / False)	Description
Template	STD CLIENT	TRUE	Select the pre-saved template to onboard the client
Account Type	Standard	FALSE	Defaults to Standard if not set. Set to Parent / Child for Parent / Child accounts, see below.
Processing Org	SETCLEAR	TRUE	User to specify legal entity short name of Processing Org
Clearing Book	EUREX	FALSE	User to provide name for Clearing Book which is link to above processing org
Short Name	STD CLI	TRUE	User to provide desired short name to create Client Legal Entity
Long Name	STD CLIENT003	FALSE	User to provide desired long name to create Client Legal Entity
Account Name	STD CLI	TRUE	User to provide desired account name to create Client account
Parent	ASX	FALSE	Select parent for given client, if any
External Reference	STANDARD CLIENT	FALSE	User to provide External reference for client
Holidays	[NYC]	TRUE	User to provide Holidays for client LE. But user may select multiple holidays, and, in that case, another holiday is segregated by



			"Semicolon(;)" only. For e.g. LON; NYC
Country	UNITED STATES	TRUE	User to provide Country for client LE
Contacts Type	Default; Payments	TRUE	User to provide Contacts Type for client and user can add multiple contact type by i " Semicolon(;)" separation. For e.g. Default; Payments
SWIFT SDI A/C	1124321	FALSE	User to provide SDI A/C for SWIFT process
SWIFT SDI Agent	AGENT	FALSE	User to provide SDI Agent for SWIFT process
Create Swift SDI			User can provide value as "Yes" or "No" "Yes" or Blank will allow to create SWIFT SDI when LE and account is onboarded. "No" value is to not to create SWIFT SDI. Note: This field is useful when an LE has many child accounts and does not wish to create multiple Swift SDIs.
Eligible securities	12345-AO; ACC NOT Zero-Coupon Bond	FALSE	user to select SD filter for eligible securities, user may select Multiple filters and, in that case, segregates each SD filter by "Semicolon(;)". For e.g. 12345-AO; ACC NOT Zero-Coupon Bond
Client.LEAttribute. ClearingReportingCurrency	USD	FALSE	Select the attributes for legal entity. For this field, user may select 1st attribute and after that its value. There can be multiple attributes. So, attributes are segregated by "dot (.)" For e.g. ClientLEAttribute.ClearingRe portingCurrency



Client.LEAttribute. ClearingBook	EUREX		
Client.LEAttribute. CFTCID	CFTC_STD033		Note: If you have multiple values for specific to columns then separate the value by semi colon.
Clearing.accountproperty. CFTCAccountNumber	12345_A	FALSE Select according field, user in attribute an value. There attributes. segregated e.g. Clearing.accord.	Select account properties for clearing account. For this field, user may select 1st
Clearing.accountproperty. CFTCSubAccount	12_CFTC		attribute and after that its value. There can be multiple attributes. So, attributes are
Clearing.accountproperty. CFTCNetGrossReportingFlag	Gross		segregated by "dot (.)" For e.g. Clearing.accountproperty.CF TCAccountNumber
IM.accountproperty. CFTCAccountNumber	98345_A	FALSE Sele for this 1st its v mul attr "do Cle .CF	Select account properties for IM deposit account. For this field, we have to select 1st attribute and after that its value. There can be multiple attributes. So, attributes are segregated by "dot (.)" For e.g. Clearing.IM.accountproperty .CFTCAccountNumber
IM.accountproperty. CFTCSubAccount	82_CFTC		
IM.accountproperty. CFTCNetGrossReportingFlag	Net		
MCC.IM.Configurations.Sweeping between exposure groups		Yes	Enabling Collateral Sweeping. To make an IM (Initial Margin) margin call contract eligible for the collateral sweeping process, enter "Yes" in the designated field.
		No	Disabling Collateral Sweeping. To ensure an IM (Initial Margin) margin call contract is not eligible for the collateral sweeping process, enter "No" in the designated field.
		Blank	Default Collateral Sweeping Behavior. If the designated field is left blank or if this column is not included in your configuration, the IM



		margin call contract will not be eligible for the collateral sweeping process by default.
	Yes	Enabling Collateral Sweeping. To make a VM (Variation Margin) margin call contract eligible for the collateral sweeping process, enter "Yes" in the designated field.
	No	Disabling Collateral Sweeping. To ensure a VM (Variation Margin) margin call contract is not eligible for the collateral sweeping process, enter "No" in the designated field.
MCC.VM.Configurations.Sweeping between exposure groups	Blank	Default Collateral Sweeping Behavior. If the designated field is left blank or if this column is not included in your configuration, the VM margin call contract will not be eligible for the collateral sweeping process by default.
	Regular	Enter Regular to set the quote convention to regular. If this field is left empty or is not included in your configuration, the system will automatically default to "Regular". Entering any other value will result in an "Invalid Input" error.
MCC.IM.PO.Haircut.Type	Inverse	Enter Inverse to set the quote convention to inverse. If a value other than Inverse or Regular is entered, an Invalid Input error will be displayed. Note: Leaving this field empty or omitting it will default the convention to Regular.



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MCC.IM.LE.Haircut.Type		Regular	Enter Regular to set the quote convention to regular. If this field is left empty or is not included in your configuration, the system will automatically default to "Regular". Entering any other value will result in an "Invalid Input" error.
		Inverse	Enter Inverse to set the quote convention to inverse. If a value other than Inverse or Regular is entered, an Invalid Input error will be displayed. Note: Leaving this field empty or omitting it will
			Regular.
MCC.IM.PO.Haircut.Rule	Haircut Rule Name		Enter the name of a single Haircut Rule. The system will validate if this rule exists; otherwise, the Haircut Rule does not exist error will be displayed. If valid, the entered Haircut Rule will be automatically applied to the "Haircut" field within the Parties Tab. Note: Ensure the desired Haircut Rule is configured in the system beforehand. Leaving this column empty or omitting it will result in the Haircut Rule field remaining blank for the corresponding party.
MCC.IM.LE.Haircut.Rule	Haircut Rule Name		Specify a single Haircut Rule to be applied. The system will verify if the entered Haircut Rule name exists. If not, the Haircut Rule does not exist error will appear. Upon successful validation, the mentioned Haircut Rule



		will be populated in the Haircut field within the Parties Tab. Note: Ensure the Haircut Rule is set up beforehand. If this field is left empty or omitted, the Haircut Rule value in the system will remain blank.
MCC.IM.POEligible.currencies		In the Eligibility tab, under Eligible Currencies, specify currencies for PO processing. Enter single or multiple currency codes separated by semicolons (e.g., EUR;GBP;USD).
	USD	The system validates each entered currency. For each valid currency (single or in a multiple entry), a separate entry is created in the "PO Eligible currencies" section of the "Eligible Currencies" tab. An CCY does not exist error appears for invalid codes.
		Note: Leaving the Eligible Currencies field empty or omitting, will result in no currencies added as PO eligible. Ensure you provide valid and existing currency codes to enable PO processing for those currencies.
MCC.IM.POEligible.currencies.call cutoff	HH:MM:SS	Define specific processing cut-off times for different currencies. In the "Call Cut- Off Times for Eligible Currencies" field (e.g., MCC.IM.POEligible.currencie s.callcutoff), enter a sequence of desired cut-off times in 24-hour format (HH:MM:SS), separated by



	! ! /
	semicolons (e.g., 11:00:00;11:20:00;11:30:00).
	In the "Eligible Currencies" field (e.g., MCC.IM.POEligible.currencie s), list the currencies in the desired order (e.g., EUR;GBP;USD). The system will automatically assign the cut-off times to the currencies based on their respective sequence. For instance, EUR will get 11:00:00, GBP 11:20:00, and USD 11:30:00.
	Note: Ensure the time format is valid (HH:MM:SS). Incorrect formats will trigger an "Invalid time format for call cut off" error. This cut- off time setting is optional. If the "Call Cut-Off Times for Eligible Currencies" field is empty or omitted, no specific cut-off times will be assigned to the currencies.


Static Data (SD) filter configuration

Ensure you create SD filter with default name format as "CE_Base Currency Name". For example: CE_EUR.

Navigator > Configuration > Filters > Static Data Filter

Static Data Filter Window [18240901/Calypso_120624/calypso_user] - D X									
Name	CE_EUR								
External Ref.									
Comment									
Groups	ANY								
Criteria	a					🜔 Sin	nulate		
Attribute		Criteria		Filter Value(s)					
Product Type		▼ IN	Add	CollateralExposure					
Trade Currency	y .	▼ IN	Add	EUR					

Once you flag the Margin call contract for account with Sweeping between exposure groups, the system captures the SD filter for each exposure currency under Exposure Group tab as mentioned below:

Configuring Margining Scenario and Exposure Currency Filters

The Margining Scenario field in the COB template determines how exposure currency filters are handled.

- **Single Currency:** If you select "Single currency" in the "Margining Scenario" field, the system will not apply any specific SD filters based on the exposure currency.
- Native Currency: If you select "Native currency" in the "Margining Scenario" field, you need to configure the "Native Currencies for Exposure Groups" under the IM section of the margin call contract template. For each native currency listed, the system will look for a corresponding SD filter. The SD filter name should clearly indicate the currency it applies to. For Example, If you have EUR listed as a native currency and an SD filter named "CE_EUR" exists, this filter will be applied to exposures in EUR.

Note:

- 1. **SD Filter Existence:** Before uploading accounts, ensure that an SD filter exists in the system for each exposure currency you have defined in the "Native Currencies for Exposure Groups". If a corresponding SD filter is not found, an error message "**SD filter does not exist**" will be displayed during the upload process.
- 2. Separate SD Filters: You must create a unique SD filter for each individual exposure group currency you intend to use with the "Native currency" margining scenario.
- 3. IM Margin Calls Only: The system will only apply these SD filters to IM (Initial Margin) margin call contracts.



Margin Call W	/indow - Version - 6							
Margin Call Confi	ig Util Help							
Edit Browse								
Name :	SETCLEAR PORTFOLIO-10	ІМ	121839	6	Subtype :	Master	-	Templat
Description :	SETCLEAR PORTFOLIO-10	IM			Parent :			
Parties Details D	ates & Times Exposure Groups	Initial Ma	rgin Independent Amount	t Eligibility Co	ncentration & Limits Opt	timization Configuratio	ns Ratings Additi	ional Info Doci
9 6 6	8 1	F #	Name :	EUR		123302		
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GBP			Details Parties Tripar	ty Details Acad	ia Details Eligibility Co	ncentration & Limits B	uffer Attributes	
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			E Perimeter				CE EU	_
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			Contract Direction				NET -	BILATERAL

Uploader

A ETD Client Onboarding Tool	-	- 0	×
Single Clert [uploader]			
Fig. 1		Refresh	Upload

Select a file.

Once the file is selected, it will provide the "Input status" whether the content in the file is valid or invalid.

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Single Client U	ploader														
File : C:\Users	\ChetanSadgir\Desktop\CSV Format 1.csv													Refres	n Upload
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VALID ENTRY		CLIENT-N	SETCLEAR	EUREX (LSE)	VN39	JP MORGAN1	CD18	AGENT SETCLEAR	VD21	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-A0;1234
VALID ENTRY		CLIENT-S	SETCLEAR	EUREX (LSE)	VN40	JP MORGAN2	CD19	AGENT SETCLEAR	VD22	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-A0;1234
VALID ENTRY		HOUSE-S	SETCLEAR	EUREX (LSE)	VN41	JP MORGAN3	CD20	AGENT SETCLEAR	VD23	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-A0;1234
VALID ENTRY		HOUSE-N	SETCLEAR	EUREX (LSE)	VN42	JP MORGAN4	CD21	AGENT SETCLEAR	VD24	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-A0;1234
VALID ENTRY		CLIENT-N	SETCLEAR	EUREX (LSE)	VN43	JP MORGAN5	CD22	AGENT SETCLEAR	VD25	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-A0;1234
VALID ENTRY		CLIENT-S	SETCLEAR	EUREX (LSE)	VN44	JP MORGAN6	CD23	AGENT SETCLEAR	VD26	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-A0;1234
INVALID ENTRY	[Client name VN39 is already used in the CSV]	HOUSE-S	SETCLEAR	EUREX (LSE)	VN39	JP MORGAN7	CD24	AGENT SETCLEAR	VD27	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-A0;1234

You can then click **Upload** to upload the file.

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File : C:\Users\ChetanSadgri (Desitup) (CSV Format 1.csv										efresh	Upload							
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SUCCESS	114757	114764	1	CLIENT-N	SETCLEAR	EUREX (LSE)	VN39	JP MORGAN1	CD18	AGENT SETCLEAR	VD21	LON; ANK; NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-4	A0;12345-A
SUCCESS	114769	114776	1	CLIENT-S	SETCLEAR	EUREX (LSE)	VN40	JP MORGAN2	CD19	AGENT SETCLEAR	VD22	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-/	A0;12345-A
SUCCESS	114781	114788	1	HOUSE-S	SETCLEAR	EUREX (LSE)	VN41	JP MORGAN3	CD20	AGENT SETCLEAR	VD23	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-/	A0;12345-A
SUCCESS	114793	114800	1	HOUSE-N	SETCLEAR	EUREX (LSE)	VN42	JP MORGAN4	CD21	AGENT SETCLEAR	VD24	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-/	A0;12345-A
SUCCESS	114805	114812	1	CLIENT-N	SETCLEAR	EUREX (LSE)	VN43	JP MORGAN5	CD22	AGENT SETCLEAR	VD25	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-/	A0;12345-A
SUCCESS	114817	114824	1	CLIENT-S	SETCLEAR	EUREX (LSE)	VN44	JP MORGAN6	CD23	AGENT SETCLEAR	VD26	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-/	A0;12345-A
SUCCESS	114829	114836		HOUSE-S	SETCLEAR	EUREX (LSE)	V145	JP MORGAN7	CD24	AGENT SETCLEAR	VD27	LON;ANK;NYC	UNITED KINGDOM	[Operation, Settlement, Payments]	7724321	CITI BANK	12345-7	A0;12345-A



5.4 Uploading Parent / Child Relationships

You can upload parent / child relationships using Account Type = Parent or Child.

The following fields need to be specified for parent / child relationship upload in addition to the standard fields described above.

Fields	Mandatory Fields (True / False)	Description
Clearing.Margining.Collateral	TRUE	Margin account, "Yes" or "No".
		Parent - This column is mandatory. If mentioned as "Yes" then margin payment will be settled through this account. If mentioned as "No" then only positions will be managed at this account. For parent account, this column should always be "Yes".
		Child - This column is mandatory. If mentioned as "Yes" then margin payment will be settled through this account. If mentioned as "No" then only positions will be managed at this account.
Clearing.Margining.Has Children	TRUE	"Yes" to identify parent account, or "No" otherwise.
Clearing.Margining.Is Grouping	TRUE	Group margined account, "Yes" or "No".
		Parent - If mentioned as "Yes" then this field allows PO to create a child account grouping structure which allows margin to be calculated across one or more child accounts. If mentioned as "No" then child account under this parent account behaves independently for margin calculation.
		Child - This column is always "No" in case of child account.
Clearing.Margining.RiskSetting.Multiplier	FALSE	Numerical value, which can be greater than or less than 1. It is used to mark up the Margin Requirement calculation for each defined margin group.
		Parent - This column is not mandatory for independently or non-Group margined parent account.
		Child - This column is mandatory for independently margined child account. Default



Fields	Mandatory Fields (True / False)	Description
		value is 1.0 which implies no markup (multiply calculated margin by 1).
Clearing.Margining.RiskSetting.Netting	FALSE	"Gross" or "Net" to indicate how to calculate risk on the positions in this account. Parent - This column is not mandatory for independently or non-Group margined parent account. Child - This column is mandatory for independently margined child account.
Clearing.Margining.MarginGroupForChild ren.Name	FALSE	Name of margin group into which a child account can be placed. For a single parent account with multiple margin groups, all margin group names must be unique. Parent - This column is mandatory for Group margined parent account. Multiple margin groups must be separated with ";" – Example: BalnMG1;BalnMG2;BalnMG3. Child - This column is not mandatory.
Clearing.Margining.MarginGroupForChild ren.Multiplier	FALSE	Numerical value, which can be greater than or less than 1. It is used to mark up the Margin Requirement calculation for each defined margin group. Parent - This column is mandatory for Group margined parent account. Default value is 1.0 which implies no markup (multiply calculated margin by 1). Multipliers for multiple margin groups must be separated with ";" – Example: 1;1.1;1.2. Child - This column is not mandatory.
Clearing.Margining.MarginGroupForChild ren.Netting	FALSE	"Gross" or "Net" to indicate how to calculate risk on the positions in this account. Parent - This column is mandatory for Group margined parent account. Netting values for multiple margin groups must be separated with ";" - Example: Net;Gross;Net. Child - This column is not mandatory.



Fields	Mandatory Fields (True / False)	Description
Clearing.AccountHierarchy.Parent	FALSE	Parent account name for a child account. Restricted to Parents Accounts with the same LE and PO. Parent - This column is not mandatory. Child - This column is mandatory for child account.
Clearing.AccountHierarchy.ParentMargi nGroup	FALSE	Name of margin group into which a child account is placed. References the margin group to which the account belongs. Restricted to margin groups defined on the selected parent account. Parent - This column is not mandatory. Child - This column is mandatory for Group margined child account.
Clearing.AccountHierarchy.RiskSettingF orParentMargining.Multiplier	FALSE	Numerical value, which can be greater than or less than 1. It is used to mark up the Margin Requirement calculation for each defined margin group. Parent - This column is not mandatory. Child - This column is mandatory for independently or non-Group margined child account. Default value is 1.0 which implies no markup (multiply calculated margin by 1).
Clearing.AccountHierarchy.RiskSettingF orParentMargining.Netting	FALSE	"Gross" or "Net" to indicate how to calculate risk on the positions in this account: Parent - This column is not mandatory. Child - This column is mandatory for independently or non-Group margined child account.



Collateral Configuration

Collateral contracts hold the configuration that drives the calculation of margin excess/deficit and the generation of predictive margin calls facing clients and counterparties. Both sides are using the collateral bilateral model.

This section will not go into deep detail of the configuration, as that is already documented in the Collateral documentation. This document will simply highlight the configurations that are critical to the clearing model.

6.1 Client Collateral – "Deposit Contract" for VM Settlement in Original Currency

To be able to settle the variation margin in the original trade currency we rely on the concept of a **Master margin call contract with Exposure Groups** per currency (or child contracts). Each transfer will be enriched with the contract id of the Exposure Group associated with the transfer currency. Each exposure group is a subset/child margin call contract. The Master is only defined to link these child contracts and is used as the Deposit Contract in the Clearing tab of the Client or Counterparty Account. This allows the system to link collateral information with the clearing account activity.

To define a Deposit Collateral Contract, go to the menu Margin Call and Choose the SubType Master. Then follow the steps below:

Field Name	Purpose/Impact			
Parties Details Dates & Times Exposure Groups Initial Margin Independent Amount Eligibility	Concentration & Limits Optimization Configurations Ratings	Additional Info		
	Show Haircut			
Processing Org		ELegal Entity		
Role ProcessingOrg		Role	CounterParty	
Processing Org US FOM		Legal Entity	CLIENTA	
Full name US FCM		Full name	CLIENTA	
Collateral Type		Collateral Type		
Collateral Type BOTH		Collateral Type	BOTH	
E Threshold		Threshold		
Type AMOUNT		Type	AMOUNT	
Amount 0		Amount	0	
Base Currency		Base Currency		
Percentage Basis		Percentage Basis		
Percentage 0		Percentage	0	
Rating		Rating		
Value Basis Net Value		Value Basis	Net Value	
Minimum Transfer Amount		Minimum Transfer Amount		
Type AMOUNT		Type	AMOUNT	
Amount 0		Amount	0	
Base Currency		Base Currency		
Percentage Basis		Percentage Basis		
Percentage 0		Percentage	0	
Rating		Rating		
Value Basis Net Value		Value Basis	Net Value	
Rounding		Rounding		
Delivery Method NONE		Delivery Method	NONE	
Return Method NONE		Return Method	NONE	
Haircut		E Haircut		
Haircut Rule		Haircut Rule		
Haircut Type Regular		Haircut Type	Regular	
Exclude Trade Hairout		Exclude Trade Haircut	9	
Termination/Settlement Currencies		Termination/Settlement Currencies		Name of Control of Con
Rehynothecation Rules		Rehynothecation Rules		
Enable Rehypothecation		Enable Rehypothecation		

Parties Tab



<u>Details Tab</u>

Field Name	Purpose/Impact
Products	ClearingTransfer.
Books	Should be set to the Book in which the client's trades are captured. The ETD model does not recommend multiple Books, especially not for a single client, so this should just be a single value.
Currencies	Any.
Start Date	Set to a date in the past.
Position Type	THEORETICAL
Position Date	POSITION_DATE_DEFAULT
Contract Direction	NET-BILATERAL
End of Day/Intraday Pricing Environment	Set to the PE used for clearing activity.
Generate a Call	This is set to 'True' if you want to generate a Margin Call

Parties	Details	Dates & Times E	xposure Groups	Initial Margin	Independent Amount	Eligibility	Concentration & Limit	Optimization	Configurations Ratin	ngs Additional Info				
Details	Ad-Hoc	Details Triparty D	etails											
Q- Ty	pe here to	filter contract deta	ails properties											
•	: e:													
🖃 Peri	imeter													
Peri	meter Typ	e								Default				
Proc	lucts									ClearingTransfer				
Proc	ducts Filter													
Boo	<s< td=""><td></td><td></td><td></td><th></th><th></th><td></td><td></td><td></td><td></td><td></td><td></td></s<>													
Curr	rencies									ANY				
Exp	osure Type	9S												
🗄 Star	t Date									01/01/2016				
🗄 End	Date													
Effe	Effective Date TRADE DATE													
🗆 Wol	kflow													
Proc	duct									ANY				
Sub	type									ANY				
🗆 Mar	qin Call G	eneration Level												
Gen	erate Marg	gin Calls per Expos	ure Group								V			
Det	ails													
Stat	us									OPEN				
Con	tract Type									VM				
Con	tract Group	p												
Con	tract Direc	tion												
Sec	ured Party									ProcessingOrg				
End	Of Day Pri	icing Environment								default				
Intra	aday Pricin	ig Environment								default				
Sim	ulation Prid	ting Environment								default				
Incl	ude End Da	ate Exposure												
Excl	ude Delive	ry Date Accruals												
Igno	re MTA or	n Returned Margin												
Igno	re MTA or	n Returned Margin	below Threshold											
Rou	nding befo	re MTA									1			
Posi	tion Type									THEORETICAL				
Posi	tion Date									POSITION_DATE_DEFAULT				
_														
🗄 Dispu	te Tolerance							0						
Accep	t CP Amoun	t in PO's Favor												
Metho	d Time							NO	NE					
Respo	rise i me voie Time 70	200						Br	nneil andan					
Alterr	ative Proced	ture						NO	NE					
Resol	ution Time													
Resol	ution Time Z	lone						Eur	ope/London					
Dispu	spute Aging Start T+1						1							

Dates & Times Tab



Field Name	Purpose/Impact
Value Date Frequency	COL_MIGR_DAILY_BUS – A date rule which sets the processing date to business dates on the configured calendar.
Valuation Time Offset	COL_MIGR_VAL_REL - A date rule which is relative to the rule above and falls one business day prior. This sets the Collateral processing so that the process date is always T+1 based on end of day balances on T and generates a Margin Call which is settled on T+1.
Valuation Time	Set to the same time as the Book EOD time.
Valuation Time Zone	Set to the same time zone as the Book.

Exposure Groups Tab

Field Name	Purpose/Impact
Details/Base Currency	Define an Exposure Group per Currency cleared on this client account and define the Base Currency as Exposure Group Currency. In the screenshot below, we define an Exposure Group for EUR and Define Base Currency = EUR. We need to do the same for each currency that the client account is clearing in order to generate a margin call per cleared currency.
Eligibility/Eligible Books	Inherit from the Master contract
Eligibility/Eligible Currencies	Add the Exposure Group Currency as eligible currency and define it as Adjustment Currency. Do the same for each Exposure Group you define per currency
Attributes	Define MARGIN_TYPE = VM and PRODUCT_TYPE = ETD

No other specificity to define at Exposure Group level for standard VM settled in the original trade currency. All elements not defined at the exposure group level are inherited from the Master

Parties Details Dates & Times Exposure Groups	Initial Margin Independent Amount Eligibility Concentration & Limits Optimization Configurations Ratings Additional Info	
91 To To To T	Name : EUR 5508	
III EUR	Description :	
USD		
GBP	Details Parties Trinarty Details Elinibility Concentration & Limits Buffer Attributes	
PLN .		
	Perimeter	
	Filter	
	Details	
	Contract Direction	NET - BILATERAL
	Secured Party	ProcessingOrg
	Collateral Distribution MTA	0
	Collateral Distribution MTA Currency	
	Base Currency	EUR



Parties Details Dates & T	imes Exposure G	OUDS Initial Ma	argin Independent Amount B	Eligibility Concentration & Limits Optimization Con	figurations Ratings Additional Info			
91 🖬 🖬 🐻	÷	Name :	EUR	5508				
		Constant of	N					
III EUR		Descript	tion :					
050								
GBP		Details	Parties Triparty Details Elig	ibility Concentration & Limits Buffer Attributes				
III PLN								
			t e1		Show Haircut	m == == == == == == == == == == == == ==		
		Pro	cessina Ora			Threshold		
		Role	B	ProcessingOrg		Туре	AMOUNT	
		Proc	cessing Org	US FCM		Amount	0	
		Full	name	US FCM		Base Currency		
		🖃 Thre	eshold			Percentage Basis		
		Тур	0	AMOUNT		Percentage	0	
		Amo	ount	0		Rating		
		Base	e Currency			Value Basis	Net Value	
		Perc	centage Basis			Minimum Transfer Amount		
		Perc	centage	0		Туре	AMOUNT	
		Rati	ing			Amount	0	
		Val.	ue Basis	Net Value		Base Currency		
		🖃 Mini	imum Transfer Amount			Percentage Basis		
		Typ	8	AMOUNT		Percentage	0	
		Amo	ount	0		Rating		
		Base	e Currency			Value Basis	Net Value	
		Perc	centage Basis			Rounding		
		Perc	centage	0		Delivery Method	NONE	
		Rati	ing			Return Method	NONE	
		Valu	ue Basis	Net Value		Haircut		
		Rou	unding			Haircut Rule		
		Delr	ivery Method	NONE		Haircut Type	Regular	
		Ret	urn Method	NONE		Exclude Trade Haircut		
		🖃 Hair	rcut			Termination/Settlement Currencies		
		Hair	rcut Rule			Rehypothecation Rules		
		Hair	rcut Type	Regular		Enable Rehypothecation		
		Exc	lude Trade Haircut					
		Ter	mination/Settlement Currencie	16				

Parties Details Dates & Times Exposure Groups Initial Margin Independent Amount Eligibility Concentration & Limits Optimization Configurations Ratings Additional Info

Description :	
GEP Details Parties Triparty Details Eligibility Concentration & Limits Buffer Attributes	
Eligible Books Eligible Securities Eligible Currencies	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Legal Entity Books Filter Type Value	
Incoming Security Book	
Outgoing Security Book	
Outgoing Cash Book	
Use inventory source book	

Parties Details Dates & Times Exposure Groups Initial Margin Independent Amount Eligibility Concentration & Limits Optimization Configurations Ratings Additional Info

9 6 6 6 1	r 4	Name :	EUR		5508						
III EUR		Description :									
USD											
GBP GBP		Details Parties 1	riparty Details Eligi	bility Concentrati	ion & Limits Buffer	Attributes					
III PLN		Eligible Books Eli	gible Securities Elig	ible Currencies							
		PO Eliglible curre	ncies								Asymmetrical LE Eligible currencies
		Si 🕫 🕫 🛛	5						t + 3	F ±	19 II. II. II.
		Currency Typ	e Fixed Rate	Index Te	enor Source	Spread	Factor	Floor	Floor	Comp	Qurrency Type Fixed Rate Index Tenor Source Scread Factor Floor
		EUR Fixe	d Rate 0.0000000.			0	10000.00		0.00		



Comment:

Z Eligible Currency Definition		×
Currency : EUR	Include Interest to Position	📝 Adjustment Currency
	Project Interest to Position	
Account :		
Fixed Rate Floating Rate		
0.000000000		
	Apply	Cancel
	lity Concentration 9. Limits Ontimization Configurations Patie	Additional Info

 Image: Image

Eligibility Tab - Eligible Books Sub-Tab

Enter incoming/outgoing Cash and Security Books for that PO.

Eligibility Tab - Eligible Currencies Sub-Tab

Field Name	Purpose/Impact
Base Currency	Equal to the Base Currency of the Account. This currency is not used when contract is defined with Exposure Group per currency.
Cash MarginCall Account	True.



Field Name	Purpose/Impact
Security MarginCall Account	True.
Orderer Role	Set this to ' Client ' as this will trigger the generation of a second transfer on the Margin Call trade that will credit the internal client account when a client makes a payment.
Eligible Currencies	Leave it empty when using Exposure Group per Currency.

Additional Info Tab

Field Name	Purpose/Impact
CCP_ORIGIN_CODE	Set to "HOUSE" or "CLIENT" (note caps) based on account status.
MARGIN_TYPE	Set to 'VM " for the Deposit Contract.
PRODUCT_TYPE	Set to " ETD " for ETD accounts.

You will then have to attach the Master VM contract to the Clearing tab on the Client Account as a Deposit Account (See Client Account section).





6.2 Client Collateral - Liability or IM Contract

The liability contract does not refer to exposure group as initial margin is settled in a unique/consolidated currency. The Eligible currency is therefore defined at the contract level as adjustment currency.

We only outline below the differences between the Deposit and Liability contract definition.

Details Tab

Field Name	Purpose/Impact
Exposure Types	Initial Margin. This ensures that collateral exposures that represent actual IM as well as those that represent OTE will be collected by the contract.
Products	CollateralExposure.

Additional Info Tab

Field Name	Purpose/Impact
PRODUCT_TYPE	Still set to 'ETD'
MARGIN_TYPE	Set to "IM " for the Liability Contract.

Others			
ACCOUNT NAME			
COP			
CCP_ORIGIN_CODE			
CCP_REFERENCE			
CCP_SEGREGATION_ACCOUNT			
CLIENT_TRANSFERS			
CVA_COLLATERAL_POLICY			
DISPUTE_COMMENT_MANDATORY			
EXCLUDE_REPO_INTEREST			
EXCLUDE_SECLENDING_INTEREST			
IGNORE_ALLOW_EX_DIVIDEND			
IM_IMPORT_CURRENCY			
INCLUDED_VM_FLOWS			
NITEDEET_DATEDIAEONAV			
MARGIN_TYPE	IM		
PRODUCT_TYPE	ETD		
		•	
SEPARATE_VM_SETTLEMENT			
USE_RECONCILIATION			

Eligibility Tab - Eligible Currency Sub-Tab

We do not refer to Exposure group and define the IM payment currency as the unique eligible currency in the Eligible currency part of the IM contract. This currency is also defined as Adjustment Currency for that contract

Field Name	Purpose/Impact
Base Currency	Set the IM Settlement Currency
Orderer Role	Set Role ' Client ' as this will trigger the generation of a second transfer on the Margin Call trade that will credit the internal clearing account when a client makes a payment.



Field Name	Purpose/Impact
Eligible Currency	Set the IM Settlement Currency and define that currency as Adjustment Currency
Parties Details Dates & Times Exposure Groups Initial Margin Independent Amount E Eligible Books Eligible Securities Eligible Currencies ■ ** * *: ■ Contract Currency Collateral Policy Settlement Cu-Off ■ Interest to Principal Interest to Principal Margin Eligible Securities Eligible Currencies ■ ** *: Settlement Cu-Off ■ Interest Type Interest Type Settlement Cu-Off ■ Interest Type Interest Type Eligible Books Eligible Securities Eligible Currencies ■ ** *: Settlement Cu-Off ■ Interest Type Interest Type Interest Type Interest Type Interest Type Interest Date Sub Securities Eligible Currencies	gbility Concentration & Limits Optimization Configurations Ratings EUR 0
Interest Date Rule Conty Roll Interest Date Rule Conty Cash Margin Call Account Coder Role (Vanne) (Description) PO Eligible currencies P Call Course Call	Client
Currency Type Fixed Rate Index Tenor Source Spread EVR Fixed Rate 0.0000000 0	Factor Floor Compound Included Project 10000.00 0.00 0.00 Included Project
Eligible Currency Definition Currency : EUR Compounding Includ Project Account :	e Interest to Position

You will then have to attach the IM contract to the Clearing tab on the Client Account as a Liability Account (See Client Account section).



6.3 Counterparty Collateral – Variation Margin Contract

The counterparty VM contract is defined using Master Contract and Exposure Group, similarly to what we do on the client side. Only the Role used in the parties and eligibility tab are different. See details below.

Parties Tab

Field Name	Purpose/Impact
Processing Org	The PO Legal Entity that is clearing through the Counterparty Account.
Legal Entity	The Clearer (clearinghouse or carry broker).
LE Role	Set this to 'Clearer'.

Parties Details Dates & Times Exposure Groups Initial Margin Indep	andent Amount Eligibility Concentration & Limits Optimization	Configurations Ratings Ad	dditional Info	
■ » ⁺ 6 ⁺		Show Hairout	■ » ⁺ 5 ⁺	
Processing Org			ELegal Entity	
Role	ProcessingOrg		Role	Clearer
Processing Org	US FCM		Legal Entity	UBS CLEARING BROKER
Full name	US FOM		Full name	UBS CLEARING BROKER
Collateral Type			🗄 Collateral Type	
Collateral Type	BOTH		Collateral Type	BOTH
Threshold			Ihreshold	
Туре	AMOUNT		Туре	AMOUNT
Amount	0		Amount	0
Base Currency			Base Currency	
Percentage Basis			Percentage Basis	
Percentage	0		Percentage	0
Rating			Rating	
Value Basis	Net Value		Value Basis	Net Value
Minimum Transfer Amount			Minimum Transfer Amount	
Туре	AMOUNT		Туре	AMOUNT
Amount	0		Amount	0
Base Currency			Base Currency	
Percentage Basis			Percentage Basis	
Percentage	0		Percentage	0
Rating			Rating	
Value Basis	Net Value		Value Basis	Net Value
Rounding			Rounding	
Delivery Method	NONE		Delivery Method	NONE
Return Method	NONE		Return Method	NONE
Haircut			Haircut	
Haircut Rule			Haircut Rule	
Haircut Type	Regular		Haircut Type	Regular
Exclude Trade Haircut			Exclude Trade Haircut	
Termination/Settlement Currencies			Termination/Settlement Currencies	
Rehypothecation Rules			Rehypothecation Rules	
Enable Rehypothecation			Enable Rehypothecation	

Details Tab

Field Name	Purpose/Impact
Products	ClearingTransfer.
Books	Should be set to the Book in which trades are captured. The ETD model does not recommend multiple Books, especially not for a single client, so this should just be a single value.
Currencies	Any.
Contract Type	VM
Status	OPEN
Contract Direction	NET-BILATERAL
Position Type	THEORETICAL
Position Date	POSITION_DATE_DEFAULT



Field Name	Purpose/Impact
End of Day/Intraday Pricing Environment	Set to the PE used for clearing activity.
Generate a Call	This is set to 'True' if you want to generate a Margin Call

Dates & Times Tab

Field Name	Purpose/Impact
Value Date Frequency	COL_MIGR_DAILY_BUS – A date rule which sets the processing date to business dates on the configured calendar.
Valuation Time Offset	COL_MIGR_VAL_REL - A date rule which is relative to the rule above and falls one business day prior. This sets the Collateral processing so that the process date is always T+1 based on end of day balances on T and generates a Margin Call which is settled on T+1.
Valuation Time	Set to the same time as the Book EOD time.
Valuation Time Zone	Set to the same time zone as the Book.

Exposure Groups Tab

Field Name	Purpose/Impact				
Details/Base Currency	Define an Exposure Group per Currency cleared on this CCP/Clearer account and define the Base Currency as Exposure Group Currency. In the screenshot below, we define an Exposure Group for EUR and Define Base Currency = EUR. We need to do the same for each currency that the CCP/Clearer account is clearing in order to generate a margin call per cleared currency.				
Eligibility/Eligible Books	Inherit from the Master contract				
Eligibility/Eligible Currencies	Add the Exposure Group Currency as eligible currency and define it as Adjustment Currency. Do the same for each Exposure Group you define per currency				
Attributes	Define MARGIN_TYPE = VM and PRODUCT_TYPE = ETD				
CCP ORIGIN CODE	CLIENT/HOUSE				
No other specificity to define at Exposure Group level for standard VM settled in the original trade currency. All elements not defined at the exposure group level are inherited from the Master					



Name :	UBS - VM Master		5501	1	Subtype :	Master	•			
Description :	UBS - VM Master				Parent :					
Parties Details I	Dates & Times Expo	isure Groups	Initial Margin Ir	ndependent Amo	unt Eligibility Cond	centration & Limits Opt	imization Co	onfigurations Ratings Additional Info		
🖭 🖬 🐻 🐻		1.1	Name :	EUR		5502				
III EUR			Description :							
🔲 USD										
GBP			Details Parties	Triparty Details	Eligibility Concen	ntration & Limits Buffer	Attributes			
III FUN			🚥 et et							
			Perimeter							
			Filter							
			Details Contract Direct	tion					NET - BILATERAL	
			Secured Party	/					ProcessingOrg	
			Collateral Dist	ribution MTA					0	
			Collateral Dist	ribution MTA Cur	rency					
			Currency						CUD	
				·						
Parties Details Dates	& Times Exposure Groups	Initial Margin Ir	ndependent Amount Eli	gibility Concentration	& Limits Optimization Co	onfigurations Ratings Additiona	al Info			
😢 🖷 🐻 🐻	1.1	Name :	EUR	5	702					
III E R		Description :								
USD										
III GBP		Details Parties	Triparty Details Eligib	ility Concentration & L	imits Buffer Attributes					
		📼 =‡ e1				S	Show Hairout			
		Processing	Org					Threshold		
		Role Processing (Ora		ProcessingOrg			Type Amount	AMOUNT	
		Full name	org		US FCM			Base Currency	0	
		Threshold			ANOUNT			Percentage Basis		
		Amount			AMOUNT 0			Rating	0	
		Base Curren	ю					Value Basis	Net Value	
		Percentage	Basis		0			Minimum Transfer Amount	AMOUNT	
		Rating			0			Amount	0	
		Value Basis			Net Value			Base Currency		
		Minimum Tr	ransfer Amount		10000			Percentage Basis		
		Amount			AMOUNT			Rating	0	
		Base Curren	1CY					Value Basis	Net Value	
		Percentage	Basis					Rounding		
		Percentage			0			Delivery Method	NONE	
		Value Racio			Not Value			Return Method	NONE	
		Rounding			And A glub			Hairout Rule		
		Delivery Me	thod		NONE			Haircut Type	Regular	
		Return Meth	nod		NONE			Exclude Trade Haircut		
		Haircut						Termination/Settlement Currencies		
		Haircut Rule	r B		Regular			Enable Rehypothecation		
		Exclude Tra	de Haircut		rogand			and the resigned back of the		-
		Termination	/Settlement Currencies							
		Rehypothe	cation Rules			len!				
		Enable Rehy	poelecation							

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Margin Call Con	fig Util Help					
Edit Browse						
Name :	UBS - VM Master		5501	1 Subtype :	Master 👻	
Description :	UBS - VM Master			Parent :		
Parties Details D	ates & Times Expos	sure Groups	Initial Margin Inde	endent Amount Eligibility Co	ncentration & Limits Optimization	Configurations Ratings Additional Info
9 🖥 🖬 🐻		1.1	Name :	EUR	5502	
EUR			Description :			
GBP			Details Parties Tr	iparty Details Eligibility Conce	ntration & Limits Buffer Attribut	tes
E PLN			Eligible Books Elig	ible Securities Eligible Currenc	ies	
			***	🔽 Inherit	Ť. Į	🗏 💭 Report 👻 💭 Data 👻 💭 View 👻
			Legal Entity Books	Filter Type	Value	



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Name :	UBS - VM Master	5501	1	Subtype :	Master	•							
Description :	UBS - VM Master			Parent :									
Parties Details D	ates & Times Exposure Groups	Initial Margin Inc	dependent Amount	Eligibility Cor	ncentration & Li	mits Optimiz	ation Configu	rations Ratin	gs Additional	Info			
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III EUR		Description :											
GBP		Details Parties	Triparty Details Eli	gibility Conce	ntration & Limit	s Buffer Att	ributes						
E PLN		Eligible Books El	ligible Securities El	ligible Currenci	ies								
		- 🔲 Inherit											
		PO Eliglible curre	encies				Asymn	netrical LE Elig	lible currencie	s			
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		Currency Ty	pe Fixed Rat	te Index	Tenor	Source	Currency	Туре	Fixed Rate	Index	Tenor	Source	Sp
		EUR Fixe	ed Rate 0.000000	D		(

Z Eligible Currency Definition		×
Currency : EUR	Include Interest to Position	🔽 Adjustment Currency
	Project Interest to Position	
Account :	🛃 😰	
Fixed Rate Floating Rate		
0.000000000		
	Apply	Cancel
Others		
ACCOUNT_NAME CCP CCP_ORIGIN_CODE CCP_REFERENCE CCP_SEGREGATION_ACCOUNT		CLIENT
CLIENT_TRANSFERS CVA_COLLATERAL_POLICY DISPUTE_COMMENT_MANDATORY EXCLUDE_REPO_INTEREST		

SEPARATE_VM_SETTLEMENT USE_RECONCILIATION

Eligibility Tab – Eligible Books Sub-Tab

Enter incoming/outgoing Cash and Security Books for that PO.

Eligibility Tab – Eligible Currency Sub-Tab



Field Name	Purpose/Impact
Base Currency	Equal to the Base Currency of the Account. This currency is not used when contract is defined with Exposure Group per currency.
Cash MarginCall Account	True.
Security MarginCall Account	True.
Orderer Role	Set this to ' CounterParty ' as this will trigger the generation of a second transfer on the Margin Call trade that will credit the internal clearer account when a client makes a payment.
Eligible Currencies	Leave it empty when using Exposure Group per Currency.

Edit Browse															
Name :	UBS - VM Master		5501	1	Subtype	:	Master	•							
Description :	UBS - VM Master				Parent :										
Parties Details D	ates & Times Expo	sure Groups Initia	Margin Indepe	endent Amount	Eligibility	Concent	ration & Limit	s Optimizat	ion Configura	itions Ratin	gs Additiona	ll Info			
Eligible Books Elig	gible Securities Elig	ible Currencies													
■ * ‡ ₹ !	05														
Interest Date Ru	ule Only														
Roll Interest to I	Principal														
Security Margin	Call Account							_			7				
Orderer Role						C	ounterParty				-				
Security Margin(Call Account														
If you set to true, a	and ORDERER_ROLE	= Client, the Secur	ity margin call v	vill also be gene	erated to a	dedicated	d account, allo	owing separa	ite interest pa	yments.					
PO Eliglible currer	ncies						Asymme	etrical LE Elig	lible currencie	es					
91 🐻 🐻 🗹				1	4.1	F 🗶	11 15 1						+		ŧ
Currency Type	e Fixed Rate	Index Ten	or Source	spread	Factor	FI	Currency	Туре	Fixed Rate	Index	Tenor	Source	Spread	Factor	

Additional Info Tab

Field Name	Purpose/Impact
MARGIN_TYPE	VM
PRODUCT_TYPE	ETD
CCP_ORIGIN_CODE	HOUSE/CLIENT



6.4 Counterparty Collateral – Initial Margin Contract

Facing the Counterparty, we will use the same bilateral collateral model than facing the client. We will specify the Margin Call contract in the setup of the Counterparty Account.

Parties Tab

Field Name	Purpose/Impact
Processing Org	The PO Legal Entity that is clearing through the Counterparty Account.
Legal Entity	The Clearer (clearinghouse or carry broker)
LE Role	Set this to 'Clearer'.

<u>Details Tab</u>

Field Name	Purpose/Impact
Products	CollateralExposure.
Books	Should be set to the Book in which the trades are captured. The ETD model does not recommend multiple Books, especially not for a single client, so this should just be a single value.
Currencies	Any.
Start Date	This is used as the Trade Date of the Collateral Exposure trade generated from the contract. Set to a date in the past.
End of Day/Intraday Pricing Environment	Set to the PE used for clearing activity.
Contract Type	IM
Contract Direction	NET-BILATERAL

Dates & Times Tab

Field Name	Purpose/Impact
Value Date Frequency	COL_MIGR_DAILY_BUS – A date rule which sets the processing date to business dates on the configured calendar.
Valuation Time Offset	COL_MIGR_VAL_REL - A date rule which is relative to the rule above and falls one business day prior. This sets the Collateral processing so that the process



Field Name	Purpose/Impact
	date is always T+1 based on end of day balances on T and generates a Margin Call which is settled on T+1.
Valuation Time	Set to the same time as the Book EOD time.
Valuation Time Zone	Set to the same time zone as the Book.

Eligibility Tab - Eligible Currency Sub-Tab

We do not refer to Exposure group and define the IM payment currency as the unique eligible currency in the Eligible currency part of the IM contract. This currency is also defined as Adjustment Currency for that contract.

Field Name	Purpose/Impact
Base Currency	Set the IM Settlement Currency
Orderer Role	Set Role ' CounterParty ' as this will trigger the generation of a second transfer on the Margin Call trade that will credit the internal clearing account when a client makes a payment.
Eligible Currency	Set the IM Settlement Currency and define that currency as Adjustment Currency.

Edit Browse															
Name :	UBS - IM		5506	0	Subtype :		Master	•	_						
Description :	UBS - IM				Parent :										
Parties Details D	ates & Times Expo	sure Groups Initia	l Margin Indepe	ndent Amount	Eligibility Co	ncentr	ation & Limit	s Optimizat	on Configura	ations Ratin	gs Additiona	al Info			
Eligible Books Elig	jible Securities Eligi	ble Currencies													
📼 📑 🕂															
Contract Curr	-					(1)	417.144								-
Base Currency						<u>E</u>	:UR								
Settlement Cut-	Off					0									=
Interest Interest Type Interest Date Ru	ile					Ir	nterest Bearin	ig							-
Base Currency Select the base cu	rency for margin ca	ls.													4 >
PO Eliglible currer	cies						🛛 🔲 Asymm	etrical LE Elig	lible currencia	es					
91 💀 🐻 🗹				+	∓ ∓	Ŧ	9 5 5						+	¥ i	F ±
Currency Type	e Fixed Rate	Index Ten	or Source	Spread	Factor	Fl	Currency	Type	Fixed Rate	Index	Tenor	Source	Spread	Factor	Floc
EUR Fixed	Rate 0.0000000			0	10000.00			. 11-2							



Margin Call Window - Version - 0	• ×
Margin Call Config Util Help	
Edit Browse	
Name : UBS - IM 5506 0 Subtype : Master	
Description : UBS - IM Parent :	
Parties Details Dates & Times Exposure Groups Initial Margin Independent Amount Eligibility Concentration & Limits Optimization Configurations Ratings Additional Info	
Eigble Books Eligble Securities Eligble Currencies	
Interest Type Interest Bearing Interest Date Rule	-
Interest Date Rule Only	
Roin innerest within part	=
Concrists Margin Call Access at Orderer Role CounterParty	-
Base Currency Select the base currency for margin calls.	÷
PO Eligible currencies	
	∓ ±
Currency Type Fixed Rate Index Tenor Source Spread Factor Fi	or Flot
🛓 Eligible Currency Definition	

Currency : EUR	Include Interest to Position	📝 Adjustment Currency
	Project Interest to Position	
Account :	👤 🕰	
Fixed Rate Floating Rate		
0.000000000		
	Apply	Cancel

Additional Info Tab

Field Name	Purpose/Impact
MARGIN_TYPE	IM
PRODUCT_TYPE	ETD



Parties	Details	Dates &	Times	Exposu	ire Group	s Init	ial Margir	Inde	epender	nt Amo	ount E	ligibility	Conce	entration	& Limits	Optim	ization	Conf	iguratio	ns Ra	tings	Additional Ir	nfo	
Comme	nt:																							
₫‼ Ż₩	· · ·	- E.																						
Othe	are																							
ACC	JUNT N	AME																						
CCP																								
CCP	ORIGIN	CODE																				CLIENT		
CCP	REFERE	NCE																						
CCP	SEGREG	ATION AC	COUNT	Γ																				
CLIE	NT_TRA	VSFERS																						
CVA.	COLLAT	ERAL_POL	.ICY																					
DISP	UTE_CO	MMENT_M	1ANDAT	ORY																				
EXCL	UDE_RE	PO_INTER	EST																					
EXCL	UDE_SE	CLENDING	_INTER	EST																				
IGNC	RE_ALLO	DW_EX_DI	IVIDEND)																				
IM_I	MPORT_	CURRENC'	Ý																					
INCL	UDED_VI	M_FLOWS																						
INTE	REST D	ATERULEC	NI Y						_															
MAR	GIN_TYP	E																				IM		
PRO	UCT T	/PE							_													ETD		
REIN	VEST_O	OUPON																						
SEP/	RATE_V	M_SETTL	EMENT																					
USE	RECONO	ILIATION																						

You will then have to attach the IM contract to the Clearing tab on the CounterParty Account as a Liability Account (See Client Account section).



Account Configuration

7.1 Client Account Configuration

7.1.1 Standard VM Client Account

A standard client account is a single account designed to manage all of the activity, positions and balances for a client LE. This is the simplest account, with no family structure involved.

"Account" Tab

Account Utilities Reports Process Help			
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing	Browse		
	" 		
Account Name CLIENT A @ US FCM			
Type SETTLE SubType Clearing V Auto/Template Act	c 🔍		
External Name Q Interface Rule Aggregate	👻 Кеу	Value	☆
	AccountStructure	v	
Description	AccountType	*	=
Legal Entity (F2) CLIENTA Role Client	 AssignmentMethod 	*	
	CATradeDDAInternal	•	
Creation Date 3/17/17 3:27:29 PM	CFTCAccountNumber		
Closing Account	CFTCNetGrossReportingFlag	*	
	CFTCSubAccount		
Parent Account Parent Id 0	ClearingCashAccount		T
Balance			

Field Name	Purpose/Impact
Account Name	The unique identifier of the Account in the Books and Records. User Entered using whatever naming convention the user prefers.
Processing Org	The PO who is managing this account.
Ссу	Set to AUTO. Note, "Auto/Template Acc" must be checked for AUTO to appear in the Ccy menu.
Туре	Set to SETTLE.
SubType	Set to Clearing for a Client Account. This activates the Clearing tab of the Account.
Auto/Template Acc	Check this field to create automatic accounts in each settlement currency.
External Name	Optional field which can be used to provide a secondary name to the account for reporting and display.



Field Name	Purpose/Impact
Description	Optional field which can be used to provide additional information for reporting and display.
Legal Entity	The Client LE who this account is opened on behalf of.
Role	Set to Client.
Create by Acc Engine only	Check this field to suppress the automatic accounts from being searchable.
Status	Displays the status of an account. Processing and reporting can use this field to include or exclude an account from processing events. Only accounts in active status are eligible to be seen in the pricing sheet.
	Status must be set to Active to be able to select the account for clearing activity.

"Attributes" Tab

This is a user configurable tab which sets the naming convention of the automatically created accounts (created since 'Auto/Template Acc' is checked). It is mandatory to have some configuration here. Define your attributes based on the naming convention you want to use when generating your settlement postings.

Account Statements Attributes Interests Limits Consolidat	ion Translation/Revaluation Clearing Browse	
Order	Attribute	Value
	l = Book	
2	2 × XferCcy	
	3 XferAccount	
	2 ™ XferCcy 3 ™ XferAccount	

"Statement" Tab

Daily Statement using **Available (Frozen)** position date to include back dated changes management and CLEARING_ETD_STATEMENT message configuration.

Account	Utilities Repo	orts Process	Help								
Account S	itatements Attrib	utes Interests	Limits Consolida	ation Tran	slation/Re	valuation Clearing Browse					
	Sta	atement Type	Clearing 🔻								
Fred	uency: Daily		•								
Position	Position Type: Actual										
Positio	Position Date Available (Frozen)										
Active	From:		To:								
Message	Config: 2019										
	Me <u>ssage Type:</u>	CLEARING ET	D STATEMENT		_						
	Template:	CalypsoConde	nsedETDStatemen	tPDF.xsl							
	Format:	PDF									
	Gateway:	FILE									
	Last Statement:	09/28/2017									
Config Id	Statement Type	Numbering	Last Statement	Zero Bal	No Mvt	Client Statement Generation	Active From	Active To	Position Cash/Sec	Position Cla	
7420	Clearing		09/28/2017			N/A			Cash	Client	



Product Type	N/A 👻	Language	English (United Kingdom) 🔹 🔻
Event Type		Address Type	EMAIL 🔻
Message Type	CLEARING_ETD_STATEM 👻	Gateway	FILE 🔻
Processing Org	ALL 🗸 🗸	Format Type	PDF 🔻
PO Contact Type	Default 🗸 🗸	Template	CondensedETDStatementPDF.xsI
Receiver	ALL	SD Filter	
Receiver Role	Client 👻	Audit Filte	r 🗌 🔽 👻
Rec Contact Type	Default 🗸 🗸]	▼
Grouping	▼		Matching Inactive
Config Id	2019 Delete	Save	Save As New

See statement message config used to produce PDF statements below:

We have also done that work for individual confirmations that you could generate for each transaction.

In that case, the PDF template to use is: CalypsoTradeCondensedETDStatementTradePDF.xsl, triggered by VERIFIED_TRADE and CANCELED_TRADE event for Message Type = CLEARING_ETD_TRADE_EVENT.

Product Type	N/A 👻	Language	English (United Kingdom) 🔹 🔻
Event Type	VERIFIED_TRADE	Address Type	EMAIL 🗾 🗸
Message Type	CLEARING_ETD_TRADE_E	Gateway	FILE 🔻
Processing Org	ALL 🔻	Format Type	PDF 🔻
O Contact Type	Default 🔹	Template	ndensedETDStatementTrade.xsl
Receiver	ALL	SD Filter	
Receiver Role	Client 👻	Audit Filte	r 📃 👻
c Contact Type	Default 🔹 🔻		▼
Grouping	▼		Matching Inactive

"Clearing" Tab



Account Statemer	nts Attributes Interests Limits	3	Consolidation Transla	tion/Revaluation	Clearing	Browse			
Properties									
Base Currency: EUR - Activity Type: Hedge - Origin Code: Client -									
Margining									
🛷 Collateral		×	🕻 Has Children						
Margin Mode: R	tealized VM 🔹	R	isk Setting						
Deposit: C	LIENT A VM Master(5801)		Multiplier	Netting					
Liability: C	ilient A - IM - EUR(5806)		1	Net	÷				
Account Hierarchy									
Parent:	-								

Field Name	Purpose/Impact
Base Currency	Represents the base currency for the account, used to convert balances in the client statement to a single currency.
Activity Type	Select either hedge or speculator. This field can impact the way initial margin is calculated for the account.
Origin Code	For a client account select "Client", and for house/proprietary accounts select "House".
Collateral	Checked to true for Standard Client Account since this is the account through which margin payments will be settled.
Child Account Indicator	Checked to false for Standard Client Account. By definition, this account type will not have any children.
Margin Mode	Select between "OTE" (open trade equity) and "Realized VM" modes to drive how unrealized PL is treated in the account, statement and margin call calculation.
Deposit Contract	References the Deposit ('VM') Contract configured for this LE to aggregate the assets and balances used in the margin calculation. Attach the <u>Master</u> <u>collateral contract to the account</u> . This contract is used to link the clearing account activity to each exposure group/child contract for the settlement of the variation margin in the original currency.
Liability Contract	References the Liability ('IM') Contract configured for this LE to aggregate their margin requirements. Attach the unique IM contract to the account. This contract is used to create the collateral exposure trades for this account.
Risk Setting – Multiplier	User entered value which can be used to mark up the Margin Requirement calculation.



Field Name	Purpose/Impact			
	Default value is 1.0 which implies no markup (multiply calculated margin by 1).			
	Value can be greater than or less than 1.			
Risk Setting - Netting	Indicates how to calculate risk on the positions in this account:			
	'Net' will calculate risk on all positions in the account considering any risk offsetting available in the methodology.			
	'Gross' will calculate risk on each position in the account individually.			
Parent	Empty for Standard Client Account			
Status	Status must be set to Active to be able to select the account for clearing activity.			

7.1.2 Standard IM Client Account

To avoid impacting the Cash Movement section of the financial summary for the client account and segregate cashflows hitting VM and IM account, you have to define a specific IM Clearing Account for the client. This account is a standard DDA/client SETTLE Account without the Clearing Type. This account will be attached to a specific SDI for Product Type = MarginCall and SD Filter referring to the Initial Margin Contract Id.

There is no Clearing no Statement tab to specify for that IM account – just defined to segregate the transfers of the Initial Margin.

Accounts Definition - Authorization mode OFF IM Deposit SA_TEST1 / 44584 - version 0									
Account Utilities Reports Process Help									
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Browse									
Account Name IM Deposit CLIENT A									
Processing Ora US FCM V Ccv ANV V Id 44584									
Type SETTLE SubType I Auto/Template Acc									
External Name Q Interface Rule Aggregate V Key Value	\$								
CFTCAccountNumber	A								
CFTCNetGrossReportingFlag ~									
Legal Entity (F2) CLIENT A Role Client CCFTCSubAccount									
LiquidationIsManual									
PayInterestOnly -									
Closing Account Last Closing Date UTLAccountType									
Parent Account Parent Id 0	~								
External Settl									
Balance									

Refer to Section on Settlement Instruction for SDI setup for VM and IM Client Accounts.

Accounts Definition - Authorization mode OFF PIMCO / 90768 - version 47
Account Utilities Reports Process Help
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Legal Entities Browse
Properties
Base Currency: GBP V Activity Type: Speculator V Origin Code: Client V
Margining
🔀 Collateral 🛷 Has Children
Account Hierarchy
Parent:



<u>Note:</u> Parent Account is used to capture only Child's transaction activities, and each Child account manage the collateral.

For such use case, the collateral can be unticked to onboard Parent Account.

7.1.3 Parent VM Client Account

"Account" Tab

The fields on the Account tab for a Parent Account follow the same rules as a Standard Account.

"Attributes" Tab

The fields on the Attributes tab for a Parent Account follow the same rules as a Standard Account.

"Clearing" Tab

🔏 Accounts Definition - Authorization mode OFF SW	TY3-P / 21805 - version	4	
Account Utilities Reports Process Help			
Account Statements Attributes Interests Limits Con	solidation Translation/F	tevaluation Clearing Bro	wse
Properties			
Base Currency: USD 🗸 Activity Type: Hedge 🗸	• Origin Code: Client •	•	
Margining			
🛷 Collateral	🥖 Has Children 🛛 🛷 is	Grouping	
Margin Mode: Realized VM 🗸 Margin Group For Children			
Deposit: SWTY3 Deposit contract(15804)	x		
Liability: SWTY3 Liability Contract(15805)	Name	Multiplier	Netting
	MG1	1.5	Gross
	MG2	1.2	Net
Account Hierarchy			
Parent:			

Field Name	Purpose/Impact
Base Currency	Represents the base currency for the account, used to convert balances in the client statement to a single currency.
Activity Type	Select either hedge or speculator. This field can impact the way initial margin is calculated for the account.
Origin Code	For a client account select "Client", and for house/proprietary accounts select "House".
Collateral	Checked to true for Parent Account since this is the account through which margin payments will be settled.



Field Name	Purpose/Impact
Child Account Indicator	Checked to true for Parent Account. By definition, this account type will have one or more associated child accounts.
Child Account Grouping Indicator	If set to false, the child accounts underneath this parent will all behave independent of each other in terms of margin calculation. If set to true, this field allows the PO to create a child account grouping structure which could allow margin to be calculated across one or more child accounts. When set to true, the Risk Setting panel is exposed for the user to configure the appropriate grouping.
Margin Mode	Select between "OTE" (open trade equity) and "Realized VM" modes to drive how unrealized PL is treated in the account, statement and margin call calculation.
Deposit Contract	References the Deposit Contract configured for this LE to aggregate the assets and balances used in the margin calculation across all child accounts.
Liability Contract	References the Liability Contract configured for this LE to aggregate their margin requirements across all margin groups.
Risk Setting - Name	When child account grouping is activated, this field represents the name of a Margin Group into which a child account can be placed. For a single parent account with multiple margin groups, all margin group names must be unique.
Risk Setting – Multiplier	User entered value which can be used to mark up the Margin Requirement calculation for each defined Margin Group. Default value is 1.0 which implies no markup (multiply calculated margin by 1). Value can be greater than or less than 1.
Risk Setting - Netting	 Indicates how to calculate risk on the positions in each Margin Group: 'Net' will calculate risk on all positions across all child account belonging to the Margin Group, considering any risk offsetting available in the methodology. 'Gross' will calculate risk on each position in the accounts belonging to the Margin Group individually.
Parent	Empty for Parent Account.
Status	Status must be set to Active to be able to select the account for clearing activity.



7.1.4 Child VM Client Account

"Account" Tab

The fields on the Account tab for a Parent Account follow the same rules as a Standard Account.

"Attributes" Tab

The fields on the Attributes tab for a Parent Account follow the same rules as a Standard Account.

"Clearing" Tab

Accounts Definition - Authorization mode OFF SWTY3-C1 / 21809 - version 4
Account Utilities Reports Process Help
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Browse
Properties
Base Currency: USD 🗸 Activity Type: Hedge 🗣 Origin Code: Client 👻
Margining
Collateral
Margining X Collateral Account Hierarchy

Field Name	Purpose/Impact
Base Currency	Represents the base currency for the account, used to convert balances in the client statement to a single currency.
Activity Type	Select either hedge or speculator. This field can impact the way initial margin is calculated for the account.
Origin Code	For a client account select "Client", and for house/proprietary accounts select "House".
Collateral	Checked to false for a Child Account, since only positions will be managed at this level.
Parent	Mandatory field which references the Parent Account to which the account is associated. Restricted to Parents Accounts with the same LE and PO.
Parent Margin Group	References the Margin Group to which the account belongs. Restricted to Margin Groups defined on the selected Parent Account. This field is mandatory only if the Parent Account 'Child Grouping' setting is set to true.



Field Name	Purpose/Impact
Status	Status must be set to Active to be able to select the account for clearing activity.

7.1.5 Parent IM Client Account

Usually, when using the Parent and Child account structure, the IM is paid from the parent level.

In that case, a specific Parent LE IM Account can be specified to isolate that flow from the VM flows.

This account will be defined with parent as a Client owner of the standard 'DDA' Account.

7.2 Client Execution Account

This account manages trades which the PO executes then gives up to another clearing broker. By selecting a subtype of 'Execution' the Clearing tab is not activated so there is no configuration allowed/required on that tab.

"Account" Tab

int Utilities Reports	Process Help						
t Statements Attribut	es Interests Limits Consolidation Tran	slation/Revaluation	Clearing Browse				
Account Name US-A	LP-EX]				
			1				
Processing Org US F	CM 👻	Ccy AUTO 🔻	Id 4126				
Type SETT	LE SubType Execution	•	📝 Auto/Template Acc	×			
External Name ALDH		Interface Dut	Annyanta	Key		Value	
External Name		Internate Rui	Ayyreyate	AccountType		v	
Description ALPH	A Execution Account			CATradeDDA	Internal		
				CME CLEARIN	NG GROUPDefaultCptyAcct		
Legal Entity (F2) ALPH	IA	Role	lient	ClearingCash	Account		
Creation Date 4/23	/15 7:52:36 AM Vreate by Acc Env	gine only		DTCPartAcco	untID		
				Description			
Closing Account		Last Closing Date		EUREX CLEAR	er		
Parent Account		Parent Id		InitialDeposit	Amount		
			-				

Field Name	Purpose/Impact
Account Name	The unique identifier of the Account in the Books and Records. User Entered using whatever naming convention the user prefers.
Processing Org	The PO who is managing this account.
Ссу	Set to AUTO. Note, "Auto/Template Acc" must be checked for AUTO to appear in the Ccy menu.
Туре	Set to SETTLE.



Field Name	Purpose/Impact
SubType	Set to Execution. This will not activate the Clearing tab of the Account, and this account will not participate in EOD processing.
Auto/Template Acc	Check this field to create automatic accounts in each settlement currency.
External Name	Optional field which can be used to provide a secondary name to the account for reporting and display.
Description	Optional field which can be used to provide additional information for reporting and display.
Legal Entity	The Client LE who this account is opened on behalf of.
Role	Set to Client
Create by Acc Engine only	Check this field to suppress the automatic accounts from being searchable.
Status	Displays the status of an account. Processing and reporting can use this field to include or exclude an account from processing events. Status must be set to Active to be able to select the account for clearing activity.

7.3 Counterparty Account Configuration

Counterparty accounts represent the accounts managed by the central counterparty into which the clearing member is sending their clients' trades. These entities can be actual clearinghouses or may be other clearing brokers acting as 3rd party clearers. The configuration of the accounts is identical in either case.

7.3.1 Standard Counterparty Account

"Account" Tab Fields

🛃 Accounts Defini	tion - Authorization mode OFF UBS CLIENT / 6007 - version 1		_ 0 ×
Account Utilities	Reports Process Help		
Account Statements	Attributes Interests Limits Consolidation Translation/Revaluation Clearing Brows		
Gaemento			
Account Name	UBS CLIENT Call Account		
Processing Org	US FCM Ccy AUTO V Id 6007		
Туре	SETTLE SubType Clearing Auto/Template Acc	×	
External Name	UBS CLIENT Q Interface Rule Aggregate	Кеу	Value 🏠
Description		AccountStructure	×
Description	OBS CLIENT	AccountType	·
Legal Entity (F2)	UBS CLEARING BROKER Role CounterParty	AssignmentMethod	·
		CATradeDDAInternal	•
Creation Date	17/17 10:41:54 AM Create by Acc Engine only	CFTCAccountNumber	
Clocing Account		CFTCNetGrossReportingFlag	•
Closing Account	Last Clusing Date	CFTCSubAccount	
Parent Account	Parent Id 0	ClearingCashAccount	
Balance			



Field Name	Purpose/Impact
Account Name	The unique identifier of the Account in the Books and Records, typically set to match the name of the account at the CCP.
Processing Org	The PO to whom this account is created at the CCP or Clearing Broker
Ссу	Set to AUTO. Note, "Auto/Template Acc" must be checked for AUTO to appear in the Ccy menu.
Туре	Set to SETTLE.
SubType	Set to Clearing for a Counterparty Account. This activates the Clearing tab of the Account.
Auto/Template Acc	Check this field to create automatic accounts in each settlement currency.
External Name	Optional field which can be used to provide a secondary name to the account for reporting and display.
Description	Optional field which can be used to provide additional information for reporting and display.
Legal Entity	The Counterparty LE who this account is opened on behalf of.
Role	Set to CounterParty.
Create by Acc Engine only	Check this field to suppress the automatic accounts from being searchable.
Status	Displays the status of an account. Processing and reporting can use this field to include or exclude an account from processing events. Status must be set to Active

"Attributes" Tab

The fields on the Attributes tab for a CounterParty Account follow the same rules as a Client Account.

"Clearing" Tab



🛃 Accounts Def	finition - Authorization mo	ode OFF UBS CLIENT	/ 6007 - version 1				
Account Utilities Reports Process Help							
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Browse							
Properties							
Base Currency: EUR - Activity Type: Hedge - Origin Code: Client -							
Margining							
🛹 Collateral	:	🗙 Has Children					
Margin Mode: 🖡	Realized VM 🛛 👻	Risk Setting					
Deposit: U	/BS - VM Master(5501)	Multiplier	Netting				
Liability: U	/BS - IM(5506)	t	Net	<u>*</u>			
Account Hierarchy	Account Hierarchy						
Parent:							
Z Deposit Config Selector							
Q.							
Id 🔨 1	Name	Descriptio	n				
5501	UBS - VM Master	UBS - VM	Master				

Id	Name	Description	
5501	UBS - VM Master	UBS - VM Master	
5502	UBS - VM Master EUR	UBS - VM Master EUR	
5503	UBS - VM Master USD	UBS - VM Master USD	
5504	UBS - VM Master GBP	UBS - VM Master GBP	
5505	UBS - VM Master PLN	UBS - VM Master PLN	
5701	UBS - VM Master House	UBS - VM Master House	
5702	UBS - VM Master House EUR	UBS - VM Master House	
5703	UBS - VM Master House USD	UBS - VM Master House	
5704	UBS - VM Master House GBP	UBS - VM Master House	
5705	UBS - VM Master House PLN	UBS - VM Master House	

Field Name	Purpose/Impact	
Base Currency	Represents the base currency for the account.	
Activity Type	Always set this to Hedge for CounterParty Accounts.	
Origin Code	For a counterparty account containing client positions select "Client", and for one containing house/proprietary positions select "House".	
Collateral	Checked to true for Standard Counterparty Account since this is the account through which margin payments will be settled.	
Child Account Indicator	Checked to false for Standard Counterparty Account. By definition, this account type will not have any children.	
Margin Mode	Should always be set to "Realized VM" for counterparty accounts.	
Deposit Contract	References the Deposit ('VM') Contract configured for this LE to aggregate the assets and balances used in the margin calculation. Attach the <u>Master</u> <u>collateral contract to the account</u> . This contract is used to link the clearing account activity to each exposure group/child contract for the settlement of the variation margin in the original currency.	



Field Name	Purpose/Impact		
Liability Contract	References the Liability ('IM') Contract configured for this LE to aggregate their margin requirements. Attach the unique IM contract to the account. This contract is used to create the collateral exposure trades for this account.		
Risk Setting – Multiplier	Always set to 1 for Counterparty Accounts		
Risk Setting - Netting	Indicates how to calculate risk on the positions in this account:		
	'Net' will calculate risk on all positions in the account considering any risk offsetting available in the methodology.		
	'Gross' will calculate risk on each position in the account individually.		
	'Disclosed' will calculate risk based on the client account position groupings. This setting allows the CCP to calculate risk on omnibus accounts with the understanding that some of the positions belong to the same end client and should get the benefit of risk offsetting.		
Parent	Empty for Standard Counterparty Account.		
Status	Displays the status of an account.		
	Status must be set to Active to be able to select the account for clearing activity.		

7.3.2 Parent Counterparty Account

"Account" Tab

The fields on the Account tab for a Parent Account follow the same rules as a Standard Account

"Attributes" Tab

The fields on the Attributes tab for a Parent Account follow the same rules as a Standard Account

"Clearing" Tab


Account Stater	nents Attributes	Interests	Limits	Consolidation	Translation/Revaluation	Clearing Br	owse
Properties	1.100	-20					
Base Currency Margining	: EUR - Activi	ity Type: He	dge	▼ Origin Co	de: Client 💌		
🛷 Collatera	1			🛷 Has Chil	dren 🛷 is Grouping		
Margin Mode:	rgin Mode: Realized VM 🗸			Margin Grou	p For Children		
Deposit:	Eurex Master Acco	ount VM (1104	Ð	4 🗙	i.		
Liability:	Eure× Master Acc	ount IM(110	9)	Name	Multiplier		Netting
				AA		4	1 Disclosed
				PP		3	1 Net

Field Name Purpose/Impact Base Currency Represents the base currency for the account. Always set this to Hedge for CounterParty Accounts. Activity Type Origin Code For a counterparty account containing client positions select "Client", and for one containing house/proprietary positions select "House". Collateral Checked to true for Parent Account since this is the account through which margin payments will be settled. Child Account Indicator Checked to true for Parent Account. By definition, this account type will have one or more associated child accounts. Child Account Grouping If set to false, the child accounts underneath this parent will all behave Indicator independent of each other in terms of margin calculation. If set to true, this field allows the PO to create a child account grouping structure which could allow margin to be calculated across one or more child accounts. When set to true, the Risk Setting panel is exposed for the user to configure the appropriate grouping. Should always be set to "Realized VM" for counterparty accounts because Margin Mode they do not differentiate between realized and unrealized PL. References the Deposit ('VM') Contract configured for this LE to aggregate the Deposit Contract assets and balances used in the margin calculation. Attach the Master collateral contract to the account. This contract is used to link the clearing



Field Name	Purpose/Impact
	account activity to each exposure group/child contract for the settlement of the variation margin in the original currency.
Liability Contract	References the Liability ('IM') Contract configured for this LE to aggregate their margin requirements. Attach the unique IM contract to the account. This contract is used to create the collateral exposure trades for this account.
Risk Setting - Name	When child account grouping is activated, this field represents the name of a Margin Group into which a child account can be placed. For a single parent account with multiple margin groups, all margin group names must be unique.
Risk Setting – Multiplier	Always set to 1 for Counterparty Accounts.
Risk Setting - Netting	Indicates how to calculate risk on the positions in this account.
	'Net' will calculate risk on all positions in the account considering any risk offsetting available in the methodology.
	'Gross' will calculate risk on each position in the account individually.
	'Disclosed' will calculate risk based on the client account position groupings. This setting allows the CCP to calculate risk on omnibus accounts with the understanding that some of the positions belong to the same end client and should get the benefit of risk offsetting.
Parent	Empty for Parent Account.
Status	Displays the status of an account.
	Status must be set to Active to be able to select the account for clearing activity.

7.3.3 Child Counterparty Account

"Account" Tab

The fields on the Account tab for a Child Account follow the same rules as a Standard Account.

"Attributes" Tab

The fields on the Attributes tab for a Child Account follow the same rules as a Standard Account.

"Clearing" Tab



Accounts Definition - Authorization mode OFF EUREX A1 / 3677 - version 1				
Account Utilities Reports Process Help				
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Browse				
Properties				
Base Currency: EUR - Activity Type: Hedge - Origin Code: Client -				
Margining				
X Collateral				
Account Hierarchy				
Parent: EUREX MASTER A 👻 Parent Margin Group: 🗛 👻				

Field Name	Purpose/Impact
Base Currency	Represents the base currency for the account.
Activity Type	Always set this to Hedge for CounterParty Accounts.
Origin Code	For a counterparty account containing client positions select "Client", and for one containing house/proprietary positions select "House".
Collateral	Checked to false for a Child Account, since only positions will be managed at this level.
Parent	Mandatory field which references the Parent Account to which the account is associated. Restricted to Parents Accounts with the same LE and PO.
Parent Margin Group	References the Margin Group to which the account belongs. Restricted to Margin Groups defined on the selected Parent Account. This field is mandatory only if the Parent Account 'Child Grouping' setting is set to true.

7.3.4 IM Counterparty Account

In some cases, you may want to isolate the IM flow from the rest of the activity of the Counterparty Account – mainly for reconciliation and interest-bearing process on the Deposit part.

In this case, the user will have to define – for standard counterparty accounts – a DDA account for that CCP or Broker with Role = Counterparty; for parent and child structure, a DDA account for the Parent LE with Role = Counterparty.

An example is provided below for a standard broker account.

Refer to section on SDI to attach that account to the Counterparty SDI. Please note this is optional – in the case of Counterparty Account as we do not produce any statement, you may also consolidate all flows into a unique account where VM and IM are integrated.



count Statements	Attributes, Interests, Limits Consolidation, Translation/Revaluation Clearing, Brows	e	
Account Name	IM Deposit UBS CLIENT		
Processing Org	US FCM Ccy ANY Id 44584		
Туре	SETTLE V SubType V Auto/Template Acc	X	
External Name	□ Interface Rule Aggregate ▼	Кеу	Value
Description		CFTCAccountNumber	
Description		CFTCNetGrossReportingFlag	Ŧ
Legal Entity (F2)	UBS CLEARING BROKER Role CounterParty 🗸	CFTCSubAccount	
Creation Date	;/23/17 7:09:01 PM	LiquidationIsManual	
or outdoin batto		HTTAccountType	
Closing Account	Last Closing Date	OTTAccouncilype	
Parent Account	Parent Id 0		
External Settl.	External Cash Account		

7.4 Default Client and CounterParty Account Setup for Interfaces

The below configuration helps to receive the other Interfaces trade when Counterparty and client account routed to default client and counterparty account when it is not mentioned on the listed derivatives trade file trade/message file coming from upstream.

Configuration	Attribute Type	Attribute Value	CCP+DefaultCptyAcct
PO Attributes	ClientErrorAccount	ERROR_ACCT	In Error Account Definition, add the Accountproperty = Counterparty/CCP LE short name +DefaultCptyAcct

Client Error Account Definition:

This error account is generally used when there is no client account information in Trade/message file. This is a general use case for end user where they don't use a client account from broker/FCM etc.



Accounts Definition - Authorization mode OFF ERROR_ACCT / 89759 - version 4 - C X						
Account Utilities Re Account Statements A	ports Process Help tributes Interests Limits Consolidation Translation/Revaluation Legal Entities Clearing Browse					
Account Name	ERROR_ACCT Custody					
Processing Org	SETCLEAR V Ccy AUTO V Id 89759					
Туре	SETTLE V SubType Clearing V Auto/Template Acc					
External Name	ERROR_ACCT Q Interface Rule Aggregate Value		ŵ			
Description	ERROR_ACCT JPM_ClientAccount Vnn-M	emper				
Legal Entity (F2)	ERROR Role Client JPM_CounterPartyAccount LmeETD_ClientAccount		-			
Creation Date	25/07/19 08:02:52 Create by Acc Engine only Multi-Owner LmeETD_CounterPartyAccount NEWEDGEDefaultCotyAcct Newedge	HOUSE				
Closing Account	Last Closing Date Propagate true					
Parent Account	Parent Id 0 UBS_CounterPartyAccount		~			
External Settl.	External Cash Account					

On the above error account which is linked in the PO attributes ClientErrorAccount need to define with Account property with prefix of Counterparty/CCP Legal Entity short name+"DefaultCptyAcct" and the value should be Counterparty/CCP Account Definition Account Name.

Example:

Counterparty Legalentity

📕 Legal Entity-	Version - 1 [17231103,	/Calypso_172381/calypso_	_user]			_		×
Utilities Help								
Short Name	NEWEDGE]	Status	Enabled	~			
Full Name	Newedge clearing Services P Ltd			Role(s)	Clearer]	
Parent					CounterParty			
Country	UNITED STATES	×						
Inactive As From		User calypso_user						
Entered Date	21/11/2018	11:33:00						

Counterparty short name is "NEWEDGE"

Counterparty Account definition



unt Utilities Re	ports Process Help					
nt Statements At	tributes Interests Limits Conse	olidation Translation/Revalue	ation Legal Entities Clearing Br	owse		
Account Name	Newedge HOUSE			ustody		
Processing Org	SETCLEAR	V Ccy AUTO	∨ Id 70274			
Туре	SETTLE V SubType	Clearing \checkmark	Auto/Template Acc	X		
External Name	Newedge HOUSE	Q Interfac	e Rule Aggregate	~ Кеу	Value	\$
Description	Newedge HOUSE			AccountName AccountType		^
				CFTCAccountNumber		
Legal Entity (F2)	NEWEDGE	Role	CounterParty	CFTCNetGrossReportingFlag	 Gross 	
Creation Date	29/11/18 06: 19: 18 🗸 Cre	eate by Acc Engine only	Multi-Owner	CFTCSubAccount		
l				CMEEX_ClientAccount		
Closing Account		··· Last Closing	Date	CMEEX_CounterPartyAccount		
Darant Assount		Dare	nt Id	CMEEX_Member_ID		
Farent Account		··· Part		Ciculing book		¥

In the above screen, the Counterparty Account definition of which Account name is "Newedge HOUSE".

This account is used to for clearing purpose and this account is defined with LE broker/FCM as PO is an end user.

Error Account Definition Mapping details:

📕 Acco	ounts Definiti	on - Auth	orization n	node OFF	ERROR_AC	CT / 89759	- version 4						_		×
Account	Utilities	Reports	Process	Help											
Account	Statements	Attributes	Interests	Limits	Consolidatio	Translatio	n/Revaluat	ion Leg	gal Entities	Clearing Browse					
	Account Nam	e ERROR	_ACCT							Custod	у				
	Processing Or	SETCLE	AR			 ✓ Ccy 	AUTO	\sim	Id 89759						
	Тур	e SETTLE	: ·	~ Sub	Type Clear	ing	~		Auto/Temp	olate Acc	××				
	External Nam	e ERROR	_ACCT		G	2	Interface	Rule	Aggregate	• •	Кеу	Value		4	2
						_					ExchangeCategory.EUREX	▼ Non-M	ember		~
	Descriptio	n ERROR	_ACCT								JPM_ClientAccount				
	1							a 1			JPM_CounterPartyAccount				
L	egal Entity (F2	2) ERROR				•••	Role	Client		~	LmeETD_ClientAccount				
	Creation Dat	a 25/07/	10 08:02:52		Create by	Acc Engine (nalv	🗌 Mu	lti-Owner		LmeETD_CounterPartyAccour	nt			
	creation bat	25/07/	19 00:02:32			Acc engine (NEWEDGEDefaultCptyAcct	Newedge	HOUSE		
	Classing Accourt										Propagate	true			

NEWEDGE is CounterParty LE Short name in this case which needs to be configured as "**NEWEDGE**DefaultCptyAcct" as a AccountProperty in Client Error Account definition.

Step 1: System identifies the PO by "Trading Book" mapping from the value coming from upstream interfaces.

Step2: from the PO Legal Entity system identifies the default client Account from PO LE attribute called "ClientErrorAccount" for example, in this case the client account is defined as a "ErrorAccount".

Step3: in this "ErrorAccount" Definition, user need to provide the counterparty account name which can be mapped through AccountProperty "*CounterParty/CCP legal entity short name*+DefaultCptyAcct".

This counterparty account is a clearing account associated with a counterparty which is mapped through LE attribute by Interfaces.



Settlement Instructions Configuration

Settlement Instructions are required to route both internal and external transfers.

Diagram 1 – SDI between the Client Account and PO for Internal Settlement (clearing activity from transactions, fees, clearing transfers) and margin calls (internal and external SDI).

Please note Internal SDI for Product Type = Margin Call for the Client Role will need to use SD Filter with reference of VM contracts. We will need an SDI Role Client for Margin Call with SD Filter = VM contracts and one SDI Role Client for Margin Call with SD Filter = IM Contract.



Diagram 2 – SDI between the CounterParty (CCP or Clearer) and PO for Internal Settlement (clearing activity from transactions, fees, clearing transfers) and external settlements (margin calls).

In the case where you want to segregate flows between VM and IM for the CCP or Broker side, you will have to define 2 Internal SDIs for Product Type = Margin Call Role = CounterParty. One will refer to SD Filter with reference of VM contracts and the other one will refer to IM Contract. If you globalize all flows for the Counterparty, you may decide to define only one Margin Call Internal SDI with SD Filter = VM + IM contracts.





8.1 Client SDIs

Client SDI for VM Internal Account Balances – Std Flows from Clearing Activity

Settlement Instructions should be configured to settle internal flows to the Client Collateral Account when the LE role is "Client". We use the Method 'CLEARING' to match these SDIs to the PO SDI with the same Method. VM Flows have to be segregated from the IM flow to exclude IM settlement from the Cash Movement buckets/section of the financial summary. To do so, you will have to define specific SDI for Margin Call products for VM contracts on one side and for IM contract on the other side.

Generic Client SDI for all clearing activity occurring during the day (fees & comms, premium, realized_pl, exercise fee, opt_cash_adj, sov, lov, npvfut, npvopt, otefut, oteopt and their reversal).

This SDI can be used for VM margin call settlement if the client has only one clearing account, else you will have to define specific Internal SDI used for VM margin call settlement.

Details are provided below.



Z Settlement Delivery Instructions [144005/erste/]						
Utilities Hel	p					
Edit Attribute:	s & Notes Browse					
SDI Id	6303					
Reference	6303	Cash/Security	BOTH			
Role	Client 🔻	Contact	Default			
Beneficiary	CLIENTA	Processing Org	US FCM 🔹			
Benef. Na		Products	ANY			
Ссу	ANY	SD Filter				
Pay/Rec	вотн 👻	Trade CounterParty	ALL			
Description	Clearing/CLIENT A @ US F	СМ	Preferred Priority 0			
📃 Link SDI						
Method C	learing 🔹	Add 📝 Direct	Effective From 03/17/2015			
Identifier			Effective To			
			by Trade Date			
[lagent] [int	[agent] [intermediary] [intermediary2] Direct					
DDA CLIE	INT A @ US FCM					

Field Name	Purpose/Impact
Reference	System populated with SDI Id.
Cash/Security	Set to BOTH.
Role	Role must be Client for Client Account SDI.
Contact	Default.
Beneficiary	The LE Short Name of the Client.
Processing Org	The LE Short Name of the PO managing this account.
Benef. Name	Optional field.
Products	Set to ANY.
Ссу	Set to ANY.
SD Filter	Can be used to filter specific transfers, but main SDI will leave this field blank for simple account configuration.
	Note you need to define a specific CLEARING SDI for Role = Client and SD Filter using VM MarginCalls Ids for Product Type = Margin Call when the client has more than one clearing account to allow appropriate SDI selection for the Margin Call trade.



Field Name	Purpose/Impact
Pay/Rec	Set to BOTH.
Trade CounterParty	Set to ALL.
Preferred	Check this Box so that this is the first SDI attempted to be used.
Priority	Set to 0 so that this is the first SDI attempted to be used.
Method	Set to CLEARING. This Method must match the same method on the matching PO SDI for internal flows.
Direct	Check this Box.
DDA	Enter the Client Standard or Parent Account. We will also refer to this account as the "Collateral Account" since it has the Collateral flag set to true.

For client internal transfers, the SDI selection is driven by the trade attribute Client Account set at the transaction level except for Margin Call which follows the standard SDI selection (this attribute is not propagated on Margin Call trade).

When the client has more than one clearing account you will have to define, in addition to the standard Client SDI presented above, specific Client SDIs for the Role = Client and Product = Margin Call with SD Filter referring to the VM Margin Calls Contract Ids = Client Master and Children Contract Id. This will force the system to select the appropriate SDI for the Margin Call trade for the Role = Client. An example is presented below.

No need to define this extra-SDI if the client has only one clearing account.

Client SDI for VM Internal Account Balances – Specific SDI for Margin Call VM when Client has more than one VM clearing account



🔀 Settlement	Delivery Instructions [1	.44005/erste/]	
Utilities Hel	p		
Edit Attribute	s & Notes Browse		
SDI Id	6304		
Reference	6304	Cash/Security	BOTH
Role	Client 🔻	Contact	Default 👻
Beneficiary	CLIENTA	Processing Org	US FCM
Benef. Na		Products	MarginCall
Ссу	ANY	SD Filter	VM Contract Client A
Pay/Rec	вотн 💌	Trade CounterParty	ALL
Description	Clearing/CLIENT A @ US F	CM	Preferred Priority 1
📃 Link SDI			
Method C	learing 🔹 🗸	Add 📝 Direct	Effective From 03/17/2015
Identifier			Effective To
			by Trade Date
[agent] [inf	ærmediary] [intermediary2		
DDA CLIE	ENT A @ US FCM		

SD Filter must list all margin call contracts for the Margin Call Trade, i.e. Master and Children or Exposure Groups

🔀 Static Data Filter Window [144005/erste/]							
Name: VM Contract Client A Simulate Simulate							
Comment: Pending Modifs							
Groups: ANY	Groups: ANY						
Attribute	Criteria	Filter Value(s)					
Margin Call Contract Id	VINT_ENUMERATION	> 5507,5508,5509,5510	,5511				

Client SDI for IM Internal Account Balances



Edit Attribute	s & Notes Br	owse				
SDI Id		445	36			
Reference		445	36	Cash/Securit	ty BOTH 💌	
Role	Client		•	Conta	ct Default 👻	
Beneficiary	CLIENT A			Processing Or	rg US FCM 🔹	
Benef. Na				Product	ts MarginCall	
Ссу	ANY			SD Filte	er IM CLIENT A CONTRACT	
Pay/Rec	BOTH		• T	rade CounterPart	ty ALL	
Description	CLEARING/IM	ì			Preferred Priority 2	
📃 Link SDI						
Method C	LEARING	•	Add	📝 Direct	Effective From 05/15/2015	
Identifier				- -	Effective To	
Tachanci					by Trade Date	
[agent] [int	ermediary]	jinter media	ry2] Dire	ct		
DDA CUE	NT A DEPOSIT	ACCOUNT				

SD Filter IM CLIENT A CONTRACT is using the Margin Call Contract Id of the IM contract of CLIENT A to pick that specific IM Account for margin settlements related to IM Deposit only.

External Client SDI

These are the settlement instructions for the actual settled payments between the client and FCM. This SDI is needed to reflect the cash management impact of the margin call (and potentially other cash adjustment flows) process between the FCM and its clients.

🔀 Settlement	Delivery Instructions [1	44005/erste/]	
Utilities Hel	p		
Edit Attribute	s & Notes Browse		
SDI Id	6028		
Reference	6028	Cash/Security	/ ВОТН 🔻
Role	CounterParty 💌	Contact	t Default 👻
Beneficiary	CLIENTA	Processing Org	I ALL 🔻
Benef. Na		Products	\$ ANY
Ссу	ANY	SD Filter	·
Pay/Rec	вотн 💌	Trade CounterParty	ALL
Description	Swift/CITIBANK/666666		Preferred Priority 0
📃 Link SDI			
Method S	wift 🔹	Add Direct	Effective From 03/17/2015
Identifier			Effective To
			by Trade Date
Agent: CITIB	BANK [intermediary] [inter	rmediary2] Direct	
Code CITIBA	NK	A/C 666666	Msg
Contact	Default 🔹	GL A	
Name		Sub A/C	R-Ship
Identifier			



Field Name	Purpose/Impact
Reference	System populated with SDI Id.
Cash/Security	Set to BOTH.
Role	Role must be CounterParty for external settlements. This SDI will only be used when the Client is treated as a CounterParty on a transfer.
Contact	Default.
Beneficiary	The LE Short Name of the Client.
Processing Org	The LE Short Name of the PO managing this account or ALL. External SDI is usually not linked to a specific PO.
Benef. Name	Optional field.
Products	Set to ANY.
Ссу	Set to ANY.
SD Filter	Can be used to filter specific transfers, but main SDI will leave this field blank for simple account configuration.
Pay/Rec	Set to BOTH.
Trade CounterParty	Set to ALL.
Preferred	Check this Box so that this is the first SDI attempted to be used.
Priority	Set to 0 so that this is the first SDI attempted to be used.
Method	Set to SWIFT. This Method could be set to any value, as long as it matches the same method on the matching PO SDI for external settlements.
Direct	Leave this unchecked since this SDI will be used for external settlements.
Code	The Agent used by the Client.
A/C	Free text description of Client's Account.
Contact	Set to the contact type that will be used to confirm settlement with Client.



8.2 Counterparty SDIs

Counterparty Internal Settlement Instructions – Clearing Activity only (not used for Margin Call – VM or IM)

Counterparty SDI's will route transfers to the "mirror view" of the clearing account of the PO. This will be achieved by defining an 'internal' or clearing SDI for the Role Counterparty with the PO/FCM and attach the Account with Role = CounterParty to that CounterParty SDI. An example is presented below.

The SDI selection for the Counterparty is standard. This means that as soon as you have several Clearing Accounts for a CCP or Broker you will have to enrich the CounterParty Clearing SDI with a SD Filter referring to the trade attribute CounterPartyAccount.

🔀 Settlement	Delivery Instructions [1	44005/erste/]	
Utilities Help	p		
Edit Attributes	s & Notes Browse		
SDI Id	6009		
Reference	6009	Cash/Security	BOTH
Role	CounterParty 🔹	Contact	Default
Beneficiary	UBS CLEARING BROKER	Processing Org	US FCM
Benef. Na		Products	ANY
Ссу	ANY	SD Filter	CtpyAccount=UBS CLIENT
Pay/Rec	вотн 💌	Trade CounterParty	ALL
Description	Clearing/UBS CLIENT		Preferred Priority 0
📃 Link SDI			
Method C	learing 🔹	Add 📝 Direct	Effective From 03/17/2015
Identifier			Effective To
			by Trade Date
[agent] [int	ermediary] [intermediary2	Direct	
DDA UBS	CLIENT]

SD Filter must refer to the Trade Attribute CounterpartyAccount

🛓 Static Data Filter Window [144005/erste/]						
Name: CtpyAccount=UBS CLIENT Attributes Simulate						
Comment: Pending Modifs						
Groups: ANY						
Attribute	Criteria		Filter Value(s)			
CounterPartyAccount.Account Name	▼ IN	Add	UBS CLIENT	Remove		

Field Name	Purpose/Impact
Reference	System populated with SDI Id.
Cash/Security	Set to BOTH.



Field Name	Purpose/Impact
Role	Role must be CounterParty .
Contact	Default.
Beneficiary	The LE Short Name of the CounterParty.
Processing Org	The LE Short Name of the PO managing this account.
Benef. Name	Optional field.
Products	Set to ANY.
Ссу	Set to ANY.
SD Filter	When the Counterparty has only one account, you can leave this field blank. When the Counterparty has more than one clearing account, you will have to define a SD Filter referring to the trade attribute CounterPartyAccount in order to select that appropriate Internal/Clearing SDI. This SDI will apply for all trade types except Margin Call where the SDI selection will not use these trade attributes. Thus, as soon as the CounterParty has more than one clearing account, you will also need to define a specific CLEARING SDI for Role = CounterParty and SD Filter using Margin Call Contract Id for Product Type = Margin Call. This will allow selecting the appropriate SDI selection for the Margin Call trade. Example are provided below.
Pay/Rec	Set to BOTH.
Trade CounterParty	Set to ALL.
Preferred	Check this Box so that this is the first SDI attempted to be used.
Priority	Set to 0 so that this is the first SDI attempted to be used.
Method	Set to CLEARING. This Method must match the same method on the matching PO SDI for internal flows.
Direct	Check this Box.
DDA	Enter the CounterParty account.
Contact	Set to the contact type that will be used to confirm settlement with Client.

Counterparty Internal Settlement Instructions – Margin Call Settlement

For counterparty "internal" transfers, the SDI selection remains standard but must be driven for most flows by the trade attribute CounterPartyAccount set at the transaction level (using SD Filter to refer to that attribute).



As we do not propagate the CounterPartyAccount on margin call trade, we also need to define specific SDI for Margin Call referring to the proper contract id.

This is a specific Counterparty SDIs for the Role CounterParty and Product = Margin Call with SD Filter referring to the Margin Call Contract Id = List of Master and Children contracts. This will force the system to select the appropriate SDI for the Margin Call trade for the Role = CounterParty. An example is presented below.

Please note that if you want to segregate the IM portion of the margin for the Counterparty side, you will have to define one SDI for VM Account listing as SD Filter the VM Margin Contract Ids and another one for IM Account listing as SD Filter the IM Margin Contract Id. We present below the case where we segregate VM and IM to mimic the client case and clearly identify the margin type.

VM Internal CounterParty SDI

🔀 Settlement	Delivery Instructions [1	.44005/erste/]		 ×
Utilities Hel	p			
Edit Attribute:	s & Notes Browse			
SDI Id	6009			
Reference	6009	Cash/Securit	ty BOTH 👻	
Role	CounterParty 🔹	Contac	ct Default 👻	
Beneficiary	UBS CLEARING BROKER	Processing Or	rg US FCM	
Benef. Na		Product	ts MarginCall	
Ccy	ANY	SD Filte	er VM Contract UBS Client	
Pay/Rec	BOTH 💌	Trade CounterPart	ty ALL	
Description	Clearing/UBS CLIENT		✓ Preferred Priority	
📃 Link SDI				
Method C	Clearing 🔹	Add 📝 Direct	Effective From 03/17/2015	
Identifier			Effective To	
			by Trade Date	
[agent] [int	termediary] [intermediary2	Direct		
DDA UBS	CLIENT			
🥖 Static Data Fi	Iter Window [144005/erste,	Ŋ		
Name: VM Cont	tract UBS Client		Attributes Simulate	
Comment:			Pending Modifs	
Groups: ANY				
Attribute	Criteria		Filter Value(s)	
Margin Call Contrac	ct Id	ERATION	+ 5501,5502,5503,5504,5505	



IM Internal CounterParty SDI

Edit Attributes	s & Notes Browse					
SDI Id	44579					
Reference	44579		Cash/Security	BOTH	•	
Role	CounterParty 💌		Contact	Default	•	
Beneficiary	UBS CLEARING BROKER		Processing Org	US FCM	•	
Benef. Na			Products	ANY		
Ссу	ANY		SD Filter	IM Contract UBS	CLIENT	
Pay/Rec	вотн 💌	Trac	de CounterParty	ALL		
Description	CLEARING/UBS CLEARING 1			V Preferred F	Priority	1
📃 Link SDI						
Method C	LEARING 🔹	Add	V Direct	Effective From	05/15/2015	
Identifier				Effective To		
Identiner				📃 by Trade Date	9	
[agent] [intermediary] [intermediary2] Direct						
DDA IM DEPOSIT UBS CLIENT						

DDA refers to the Counterparty IM Account and SD Filter = IM Contract UBS CLIENT refers to the IM Margin Call contract between the FCM and the Clearing Broker or the CCP.

Counterparty External Settlement Instructions

These SDI are used to generate the external transfers for the settlements to the CCP or Clearer.

Note the Role must be set to **Clearer** to link to the Orderer Role of our Margin Call contract.

🔀 Settlement	Z Settlement Delivery Instructions [144005/erste/]						
Utilities Hel	p						
Edit Attributes	s & Notes Browse						
SDI Id	6013						
Reference	5013 Cash/Security BOTH						
Role	Clearer Contact Default						
Beneficiary	UBS CLEARING BROKER Processing Org ALL						
Benef. Na	Products ANY						
Ссу	USD SD Filter						
Pay/Rec	BOTH Trade CounterParty ALL						
Description	Swift/CITIBANK/987654 Veferred Priority 0						
📃 Link SDI							
Method S	wift Add Direct Effective From						
Identifier	Effective To						
	by Trade Date						
Agent: CITIB	ANK [intermediary] [intermediary2] Direct						
Code CITIBA	NK						
Contact	Default 🗸 GL A						



8.3 Processing Org SDIs

PO Internal Settlement Instructions

The PO internal SDI is a technical SDI used to match on one side the Client transfer that will be created with GL Account = Client Account and, on the other side, the CounterParty transfer that will be created with GL Account = CounterParty Account. The same unique PO SDI with Method = Clearing will be used to match both sides and create the expected internal transfers.

🛃 Settlement	Delivery Instructions [1	.44005/e	erste/]	
Utilities Hel	p			
Edit Attribute:	s & Notes Browse			
SDI Id	6015			
Reference	6015		Cash/Security	BOTH
Role	ProcessingOrg 🔹 🔻		Contact	Default 👻
Beneficiary	US FCM		Processing Org	ALL
Benef. Na			Products	ANY
Ссу	ANY		SD Filter	
Pay/Rec	вотн 🔻	Tra	ade CounterParty	ALL
Description	Clearing/DUMMY AGENT			Preferred Priority
📃 Link SDI				
Method C	learing 🔹	Add		Effective From
Identifier]		Effective To
				by Trade Date
Agent: DUMM	MY AGENT [intermediary]	[interme	ediary2] Direct	
Code DUMM	Y AGENT	A/C		📝 Msg
Contact	Default 🔹	GL A	DUMMY	

Note the GL Account set on the Clearing Processing Org. SDI must be created as a SETTLE Account with Ccy = ANY and Subtype = blank. See below:

	Demonstra Designational I della			
count Othlues	Reports Process Help			
ount Statements	Attributes Interests Limits Consolidation Translation/Revaluation Clearing Brows	e		
Account Name	DUMMY Call Account			
Durana in a Our				
Processing Org				
_				
Туре	SETTLE SubType Auto/Template Acc			
External Name	Q Interface Rule Aggregate ▼	Кеу	Value	☆
Description		AccountStructure	Ŧ	
Description		AccountType	-	Ξ
Legal Entity (F2)	DUMMY AGENT Role Agent -	AssignmentMethod	v	
		CATradeDDAInternal	v	
Creation Date	17/17 10:52:14 AM	CFTCAccountNumber		
Closing Account	Last Closing Date	CFTCNetGrossReportingFlag	-	
closing Account		CFTCSubAccount		
	Parent Id 0	ClearingCashAccount		-
		CFTCSubAccount ClearingCashAccount		-



PO External Settlement Instructions

For external settlement to CCP or Clearer, we need to define standard Processing Org. SDI with the cash account credited/debited on the PO side. This allows managing the cash impact of all external movements. An example is presented below.

🔀 Settlement	Delivery Instructions []	.44005/erste/]		
Utilities Hel	p			
Edit Attribute	s & Notes Browse			
SDI Id	6017			
Reference	6017	Cash/Se	curity BOTH	•
Role	ProcessingOrg 🗸 🗸	Cc	ntact Default	•
Beneficiary	US FCM	Processing	g Org ALL	T
Benef. Na		Pro	ducts ANY	
Ссу	EUR	SD	Filter	
Pay/Rec	вотн 🔻	Trade Counter	Party ALL	
Description	Swift/BARCLAYS BANK/333	333	V Preferred Priorit	y O
Link SDI				
Method S	wift 💌	Add	Effective From	
Identifier			Effective To	
Tacificities		<u></u>	by Trade Date	
Agent: BARC	CLAYS BANK [intermediary] [intermediary2])irect	
Code BARCL	AYS BANK	A/C 333333		Msg
Contact	Default 🗸 🗸	GL A @BARCLAY	5	
Name		Sub A/C		R-Ship





Parent / Child Account Structures

The following Parent/Child account structures are supported:

- Parent/Child Setup with Multiple Legal Entities
- Parent/Child setup with Single Legal Entity

Both Parent/Child structures allow you to bucket the multiple child accounts activities details in one consolidated statement at parent account level with child account details for each trades and positions, and to generate individual statements for each child account.

In tabular format, you can see the financial summary at parent level and child level.

[Note: When using a Parent/Child structure, it is not supported to book any trade at parent level]

Parent/Child Setup with Multiple Legal entities

🟒 Calypso Clearing - calypso_161010			
CALYPSO [®] Clearing			
Clients & Counterparties Product Data Exchanges & Clearing Houses	Mappings		
Q - Filter Accounts		() Client	
▼ ■ Clients		Client	
× = 12345.A	12345-4	Entity Name	PIMCO INVESTMENT BANKING
× = 12345 A0		Long Name	Bank LEUMI PLC
× 5 MC4		Status	Enabled
		Extornal Rof	Active
12346-A1		Holidays	none
■ 12345-A2		Comment	none
■ 12345-A22		Contrate	Type Name Address Country Phone Email
iii 12345-A3		Contacts	Default HONG KONG
iii 12345-A4		Attributes	none
☐ 12345-A42			
→ T CLIENT 1	Client 1	Account	
► 🔽 CLIENT 2 STD	Client 2 STD	Account Name	PIMCO 🕀
FILE ERROR	ERROR		Parent Account
→ 🗊 HOUSE	HOUSE ETD	External Name	INVESTEC POOL Account
Parent LE	E & its account	Description	INVESTEC POOL Account
Y 🚽 PIMCO		Status	Active
		Active Range	none
EEGGTTSS		Base Currency	GBP
		Activity	Speculator
		Origin	Client
		Risk Netting	
▼ - Counterparties		Callataval	
▶ 🗾 NEWEDGE	Newedge clearing Services P Ltd	Collateral	
		Asset Contract	Bank LEUMI_MASTER_VM
		Requirement Cont	tract Bank LEUMI_MASTER_IM 🔍



🔏 Calypso Clearing - calypso_161010

CALYPSO [®] Clearing				
Clients & Counterparties Product Data Exchanges & Clea	aring Houses Mappings			
Q- Filter Accounts		Q	Client	
▼ ■ Clients			Entity Name	GS CLIENT 2
▼ ■12345-A	12345-A		Long Name	GS Client 2
·			Status	Enabled
- 🔤 MG1			Active	Active
🗎 12345-A1			External Ref	none
🗎 12345-A2			Holidays	none
🗎 12345-A22			Comment	none
🗎 12345-A3			Contacts	Type Name Address Country Phor Default HONG KONG
🗎 12345-A4			Attributes	none
🗎 12345-A42				
→ 🔂 CLIENT 1	Client 1		Account	
F 🗊 CLIENT 2 STD	Client 2 STD			
▶ ■ ERROR	ERROR		Account Name	AAEENNVV
▶ 🗾 HOUSE	HOUSE ETD		Type	Independently Margined Child Account
V T PIMCO INVESTMENT BANKING	Bank LEUMI PLC		External value	650002
т 📑 РІМСО				
		IM and V	'M calculated ar	nd settled at child
EEGGTTSS		account	level and stater	ment can be
🗎 кккиш				
XXNNLLNN		generate	ed on both level	s (child and parent
		levels)		
✓ ➡ Counterparties				
→ 🗊 NEWEDGE	Newedge clearing Services P Ltd		Conderon	
			Asset Contract	GS Client 2_MASTER_VM
			Requirement Contract	GS CLIENT 2_MASTER_IM

In the above account structure, each child accounts such as (AAEENNVV, EEGGTTSS, KKKKIIII, XXNNLLNN and XXOOVVDD) are independently margined and settled separately. However, user can settle each IM and VM account together through Collateral auto-sweeping setup or by netting method.

This type of setup enables "Client Statement" and "Tabular Statement" to facilitate the features to ease FCM's who manages multiple client accounts (i.e. Investment banking services provider) and capture the account activity details together.

The Parent statement will show all the client account activities in consolidated manner with summarized Financial summary with parent account base currency and child account statements will provide account activity of its own account.

Parent/Child Setup with Single Legal Entity



🔏 Calypso Clearing - calypso_161010





🛃 Calypso Clearing - calypso_161010

CALYPSO [®] Clearing		
Clients & Counterparties Product Data Exchanges & Clearing Houses Ma	ppings	
Q- Filter Accounts	0	Client
🕆 🅎 Clients		Entity Name 12245-A ®
▼ 🕎 12345-A	12345-A	Long Name 12345-A
- T 12345-A0		Status Enabled
- 🔄 MG1		Active Active
🗎 12345-A1		External Ref none
🗎 12345-A2		Holidays none
🗎 12345-A22		Comment none
12345-A3		Contacts Default HONG KONG
12345-A4		Attributes none
🗎 12345-A42		
FIL CLIENT 1	Client 1	Account
FIL CLIENT 2 STD	Client 2 STD	
FILE ERROR	ERROR	Account Name 12345-A1 K
▶ 🖬 HOUSE	HOUSE ETD	External Name 12345-A1
PIMCO INVESTMENT BANKING	Bank LEUMI PLC	
т 🥌 РІМСО		
	IM and VM	I calculated at child account level
EEGGTTSS	and settle	d in parent account level, and
🗎 ккккіш		
XXNNLLNN	statement	can be generated on both levels
	(child and	parent levels)
▼ ■ Counterparties		Conjuterar
▶ 🛃 NEWEDGE	Newedge clearing Services P Ltd	
		Asset Contract N/A
		Requirement contract N/A
		Statements
		Furgues Daily Official Chatamarks 20 Jul 2010
		Frequency Daily Official Statements 29-Jul-2019 • Preview

In above illustration, the child account type – "Group Margined child account" indicates that the child account is handled in collateral manager at parent level to generate margin call and settle.

This type of setup enables "Client Statement" and "Tabular Statement" to facilitate the features to ease the FCM's who has one Client LE with Multiple Client Child account (one client has multiple accounts).



9.1 Clearing Account Configurations

9.1.1 Parent/Child Setup with Single Legal Entity

Parent Account Setup

4004E A			
🥖 Accounts Defir	ition - Authorization mode OFF 12345-A0 / 76269 - version 24		_
Account Utilities	Reports Process Help		
Account Statements	Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities C	Clearing Browse	
Account Name	12345-A0		
Processing Org	SETCLEAR V Ccy AUTO V Id 76269		
Туре	SETTLE V SubType Clearing V Auto/Template Acc	X	
External Name	12345-A0 Q Interface Rule Aggregate ~	Кеу	Value
		AccountName	
Description	12345-A0	AccountType	Ŧ
Legal Entity (E2)	12345-A Role Client V	CFTCAccountNumber	12345-A0_CFTC
		CFTCNetGrossReportingFlag	• Gross
Creation Date	09/01/19 07:03:19 Create by Acc Engine only	Clearing Book	
Clasing Assount		ExchangeCategory.EUREX	 Non-Member
Closing Account	Last Closing Date	JPM_ClientAccount	
Parent Account	Parent Id 0	JPM_CounterPartyAccount	
External Settl.	External Cash Account		

For an Illustration, here parent account name is setup as 12345-AO and Legal Entity (F2) is setup as 12345-A.

In this structure, Legal Entity (2) will be same for parent account and below child accounts.

🛃 Acco	unts Definition -	Authorizatio	n mode OFF 12	345-A0/7	76269 - \	version 24			- 1		\times
Account	Utilities Repo	rts Process	Help								
Account S	Statements Attribu	tes Interests	Limits Consolida	tion Tran	slation/Re	evaluation Legal Entities Cleari	ng Browse				
	Sta	tement Type	Clearing $$								_
Free	quency: Daily		\sim							Auc	
Positio	n Type: Theoretic	al			\sim					Upda	ite
Positio	n Date: Available	(Frozen)			\sim					Remo	ve
Active	e From:		To:							Gener	ate
Message	Config: 119265										
	Message T	ype: TABULA	R_ETD_STATEMEN	п							
	Temp	late: Tabulars	Statement.txt								
	For	mat: XLS									
	Galer	way: FILE									
	Last Statem	ient:									
Config Id	Statement Type	Numbering	Last Statement	Zero Bal	No Mvt	Client Statement Generation	Statement Active From	Statement Active To	Position Cash/Sec	Positio	on Class
119260	Clearing				ÌЦ	N/A			Cash	Client	
0	Clearing					N/A			Cash	Client	

This is the Parent account Statements setup snapshot. In this, user need to add Message config as shown. The same statements tab setup applies for child account.



Accounts Definition - Authorization mode OFF 12345-A0 / 76269 - version 25
Account Utilities Reports Process Help
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities Clearing Browse
Properties
Base Currency: USD V Activity Type: Speculator V Origin Code: Client V
Margining
🖋 Collateral 🛛 🖋 Has Children 🖋 is Grouping
Margin Mode: Realized VM V Margin Group For Children
Deposit: 12345-A_MASTER_VM(35301) 📮 🔀
Liability: 12345-A_MASTER_IM(35300) Name Multiplier Netting
MG1 1 Gross
Account Hierarchy
Parent:

In Parent account setup on clearing tab, tick collateral, Has Children and Is Grouping.

Define 'Margin Group For Children' name. e.g:MG1

Child Account Setup

In this account structure, the child and parent account Legal Entity (F2) are the same.

🛃 Accounts Defin	tion - Authorization mode OFF 12345-A1 SG / 76259 - version 19		_
Account Utilities	Reports Process Help		
Account Statements	Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities	Clearing Browse	
Account Name	12345-A1 SG		
Processing Org	SETCLEAR V Ccy AUTO V Id 76259		
Туре	SETTLE V SubType Clearing V Auto/Template Acc	×	
External Name	12345-A1 Q Interface Rule Aggregate V	Кеу	Value
Description		AccountName	
Description	12345-A1	AccountType	*
Legal Entity (F2)	12345-A Role Client 🗸	CFTCAccountNumber	12345-A0_CFTC
	Multi-Owner	CFTCNetGrossReportingFlag	 Gross
Creation Date	09/01/19 06:58:33 Create by Acc Engine only	CFTCSubAccount	12345-A1
Closing Account	Last Closing Date	Clearing Book	
closing / lecount	Last closing bate	ExchangeCategory.EUREX	 Non-Member
Parent Account	12345-A0 Parent Id 76269	JPM_ClientAccount	
External Settl.	External Cash Account		



42245 A
Accounts Definition - Authorization mode OFF 12345-A1 SG / 76259 - version 19
Account Utilities Reports Process Help
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities Clearing Browse
Properties
Base Currency: GBP V Activity Type: Speculator V Origin Code: Client V Margining Collateral
Account Hierarchy Parent: 12345-A0 (76269) V Parent Margin Group: MG1 V

Child account will be setup same as standard account, only difference is on clearing tab, select parent account and its group as shown above.

9.1.2 Parent/Child Setup with Multiple Legal Entities

Parent Account Setup

Accounts Definition - Authorization mode OFF PIMCC	/ 90768 - version 22		-
Account Utilities Reports Process Help			
Account Statements Attributes Interests Limits Consolidation	Translation/Revaluation Legal Entities C	learing Browse	
Account Name PIMCO			
Processing Org SETCLEAR V Co	y AUTO ~ Id 90768		
Type SETTLE V SubType Clearing	✓ ✓ Auto/Template Acc		
External Name INVESTEC POOL Account Q	Interface Rule Aggregate \vee	Кеу	Value
Description INVESTEC POOL Account		AccountName	
Description INVESTEC FOOL Account		AccountType	Ψ
Legal Entity (F2) PIMCO INVESTMENT BANKING	Role Client ~	CFTCAccountNumber	12345-A3_CFTC
	Multi-Owper	CFTCNetGrossReportingFlag	 Gross
Creation Date 01/08/19 13:38:45	gine only	Clearing Book	
Closing Account	et Clasica Data	ExchangeCategory.EUREX	 Non-Member
	ist Closing Date	JPM_ClientAccount	
Parent Account	Parent Id 0	JPM_CounterPartyAccount	
External Settl.	External Cash Account		



Accounts Definition - Authorization mode OFF PIMCO / 90768 - version 23	_	
Account Utilities Reports Process Help		
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities Clearing Browse		
Statement Type Clearing ~		
Frequency: Daily		Add
Position Type: Actual		Update
Position Date: Available (Frozen)		Remove
Active From: To:		Generate
Message Config: 119265		
Message Type: TABULAR_ETD_STATEMENT		
Template: TabularStatement.bt		
Format: XLS		
Gateway: FILE		
Last Statement:		
Config Id Statement Type Numbering Last Statement Zero Bal No Mvt Client Statement Generation Statement Active From Statement Active To	Position Cash/Se	c Position C
92771 Clearing 01/05/2020 01/0 N/A	Cash	Client
120783 Clearing N/A	Cash	Client
II.		
Accounts Definition - Authorization mode OEE PIMCO / 90768 - version 23		
Accounts Demittion - Authorization mode on Phylod 7 30700 - Version 23		
Account Utilities Reports Process Help		
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities Clearing Browse		
Properties		
Base Currency: GBP V Activity Type: Speculator V Origin Code: Client V		
Margining		
A Collectorel		
Has Chiuren		
Margin Mode: Realized VM V		
Deposit: PIMCO_MASTER_VM(83800)		

Liability: Bank LEUMI_MASTER_IM(50356) ... Account Hierarchy Parent:

Child Account Setup

Child account setup is the same as standard account, you only need to add Parent account in Clearing tab as shown below.



Accounts Definition - Authorization mode OFF AAEENNVV / 90775 - version 20
Account Utilities Reports Process Help
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities Clearing Browse
Properties
Base Currency: GBP \vee Activity Type: Speculator \vee Origin Code: Client \vee
Margining
✓ Collateral X Has Children
Margin Mode: Realized VM V Risk Setting
Deposit: GS Client 2_MASTER_VM(50324) Multiplier Netting
Liability: GS CLIENT 2_MASTER_IM(50358) 1 Gross
Account Hierarchy
Parent: PIMCO (90768) V Risk Setting For Parent Margining
Multiplier Netting
1 Gross

11



9.2 IM Deposit Accounts

9.2.1 Parent/Child Setup with Single Legal Entity

This is the IM deposit account setup for Parent with single LE:

Accounts Definition - Authorization mode OFF 12345-A0 - 12345-A- IM Deposit / 76268 - version 1

Account Utilities Reports Process Help		
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Legal	Entities Browse	
Account Name 12345-A0 - 12345-A- IM Deposit		
Processing Org SETCLEAR Ccy AUTO Id 76268		
Type SETTLE V SubType V Auto/Template Acc	×	
External Name 1345-A0 - 12345-A- IM Deposit 🖸 Interface Rule Aggregate 🗸	Key	Value
	AccountName	
Description 12345-A0 - 12345-A- IM Deposit	AccountType	Ŧ
Legal Entity (F2) 12345-A Role Client V	Clearing Book	
	JPM_ClientAccount	
Creation Date 09/01/19 07:01:33 Create by Acc Engine only	JPM_CounterPartyAccount	
	Propagate	true
Last closing Account	UBS_ClientAccount	
Parent Account Parent Id 0	UBS_CounterPartyAccount	
External Settl External Cash Account		

This is the IM deposit account setup for Child with single LE:

Accounts Defin	nition - Authorization mode OFF 12345-A2 - 12345-A- IM Deposit / 109783 -	version 0	_
Account Utilities	Reports Process Help		
Account Statements	Attributes Interests Limits Consolidation Translation/Revaluation Clearing Legal	Entities Browse	
Account Name	12345-A2 - 12345-A- IM Deposit		
Processing Org	SETCLEAR V Ccy AUTO V Id 109783		
Туре	SETTLE V SubType V Auto/Template Acc	X	
External Name	2345-A2 - 12345-A- IM Deposit 🖸 Interface Rule Aggregate 🗸	Кеу	Value
Description	12345-A2 - 12345-A- IM Denosit	AccountName	
beschpush		AccountType	*
Legal Entity (F2)	12345-A Role Client ~	Clearing Book	
Creation Date	16/04/20 12:55:06 Create by Acc Engine only	JPM_ClientAccount	
		Propagato	truo
Closing Account	··· Last Closing Date	UBS ClientAccount	uue
Parent Account	Parent Id 0	UBS_CounterPartyAccount	
External Settl.	External Cash Account		

For IM Deposit account, create SD filter with attribute ClientAccount.Account Name:



.

🛃 Static D	Data Filter Window [161043/calypso_161043/calypso_user]						\times
Name	12345-A0						
External Ref.	12345-A0						
Comment	12345-A0						
Groups	ANY						
🖓 Criteria						🖸 Sim	ulate
Attribute		Criteria		Filter Value(s)			
ClientAccount./	Account Name	▼ IN	Add	12345-A0		Remove	

9.2.2 Parent/Child Setup with Multiple Legal Entities

This is the Child account setup with multiple LE:

🔏 Accounts Definition - Authorization mode OFF AAEENNVV - Client A- IM Deposit / 91757 - version 1 🦳 —					
Account Utilities Reports Process Help					
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Legal Entities Browse					
Account Name AAEENNVV - Client A- IM Deposit					
Processing Org SETCLEAR V Ccy AUTO V Id 91757					
Type SETTLE V SubType V Auto/Template Acc					
External Name EENNVV - Client A- IM Deposit Q Interface Rule Aggregate V Key	Value				
Description AAEENNVV - Client A- IM Deposit					
Account ype	Ψ				
Legal Entity (F2) GS CLIENT 2 Role Client Clie					
Creation Date 04/08/19 11:18:23 Create by Acc Engine only Multi-Owner					
Propagate	true				
Closing Account Last Closing Date UBS ClientAccount					
Parent Account Parent Id 0 UBS_CounterPartyAccount					
External Settl External Cash Account					





9.3 Settlement Instructions

9.3.1 Parent/Child Setup with Single Legal Entity

This is the SDI setup for the parent with single LE:

∠ Settlemer Utilities Hel	nt Delivery Instruct	ions [161043/0	calypso_16104	3/calypso_user]	
Edit Attribute	s & Notes Browse				
SDI Id		77257			
Reference		77257	Cash/Security	BOTH \sim	
Role	Client	\sim	Contact	Default \sim	
Beneficiary	12345-A		Processing Org	SETCLEAR ~	
Benef. Na	12345-A0 Parent		Products	ANY	
Ссу	ANY		SD Filter		
Pay/Rec	BOTH	✓ Trac	de CounterParty	ALL	
Description	CLEARING/12345-A0)		Preferred Priority	1
Link SDI					
Method C	LEARING	Add	✓ Direct	Effective From	
Identifier				Effective To	
Identifier				by Trade Date	
[agent] [int	ermediary] [interme	ediary2] Direct			
DDA 1234	45-A0				

This is the margin call SDI setup for parent with single LE:



Settlement Delivery Instructions [161043/calypso_161043/calypso_usel		Settlement Delivery	¹ Instructions	[161043/calypso]	_161043/calypso_	user]
--	--	---------------------	---------------------------	------------------	------------------	-------

Utilities Hel	р				
Edit Attribute	s & Notes Browse	e			
SDI Id		76274			
Reference		76274	Cash/Security	BOTH	\sim
Role	Client	\sim	Contact	Default	· >>-
Beneficiary	12345-A		Processing Org	SETCLEAR	\sim
Benef. Na	12345-A		Products	MarginCall	
Ссу	ANY		SD Filter	12345-A0	
Pay/Rec	BOTH	✓ Trac	de CounterParty	ALL	
Description	CLEARING/12345	A0 - 12345-A- IM D	Deposit	Preferred Priority	2
Link SDI					
Method C	LEARING	∼ Add	✓ Direct	Effective From	
Identifier				Effective To	
adminur				by Trade Date	
[agent] [int	ermediary] [inter	mediary2] Direct			
DDA 1234	45-A0 - 12345-A-	M Deposit]	

This is the SDI setup for the child with single LE:

SDI Id	76288			
Reference	76288	Cash/Security	BOTH ~	,
Role	Client \vee	Contact	Default ~	
Beneficiary	12345-A	Processing Org	SETCLEAR ~	,
Benef. Na	12345-A2	Products	ANY	
Ссу	ANY	SD Filter		
Pay/Rec	BOTH \lor	Trade CounterParty	ALL	
Description	CLEARING/12345-A2 HK		Preferred Priority	11
Link SDI				
Method C	LEARING	Add 🗹 Direct	Effective From	
dentifier			Effective To	
			by Trade Date	

This is the margin call SDI setup for child with single LE:



Settlement Delivery Instructions [161043/calypso_161043/calypso_user]
Utilities Help
Edit Attributes & Notes Browse
SDI Id 109785
Reference 109785 Cash/Security BOTH ~
Role Client V Contact Default V
Beneficiary 12345-A Processing Org SETCLEAR ~
Benef. Na 12345-A2 Products MarginCall
Ccy ANY SD Filter 12345-A2
Pay/Rec BOTH V Trade CounterParty ALL
Description CLEARING/12345-A2 - 12345-A- IM Deposit Verferred Priority 5
Link SDI
Method CLEARING Add Direct Effective From
Identifier Effective To
[neart] [intermedian] [intermedian]] Direct
Lagenci Lincermeniaryi Lincermeniaryzi Direct
DDA 12345-A2 - 12345-A- IM Deposit

9.3.2 Parent/Child Setup with Multiple Legal Entities

In this structure, SDIs setup is the same as standard account SDIs.



9.4 Collateral Manager

The account definition and collateral manager setup enables the user as how to handle margin movements i.e. generate and settle on individual child account level or one consolidated movement on parent account level.

9.4.1 Parent LE & Account with Multiple Child LE's Accounts

A Collateral Manager [161021/calypso_161010/calypso_user]													
Collateral Manager Collateral Market Data Window Help													
📭 Load + 🏣 Price + 😚 Dispute + 🎲 Allocate + 🔀 Action + 🛃 Contract 🕴 📀 Optimize + 🛛 🔀 Reconciliation + 🛛 🎧 Market Data +													
Collateral Filter 🗗 🖗 Results													
# 2↓ == ■\$ ₹\$	7	- 🌄 🏎	-										
Process Date/Time Process Date 30/07/2019	Id	Contract Nam	e 🗖	Status	Action	Contract Currency	Global Required 🗸	ispute	Cpty Amount	Dispute Amount	Dispute Reason	Dispute Status	Acceptance Status
Collateral Context	0	GS Client 1_1/	ASTER IM	NONE	NEW	GBP	10,000.00		0.00	0.00	~	 None 	None
Collateral C default	0	GS CLIENT 2	MASTELIM	NONE	NEW	GBP	10,000.00		0.00	0.00	*	None	None
= Filter	0	GS Client 2_1	ASTER VM	NONE		GBP	-325,000.00		0.00	0.00		 None 	None
PO Name	0	GS Client 1_1/	ASTER VM	NONE	NEW	GBP	-325,000.00		0.00	0.00	*	None	None
LE Name													
Contract Ty													
Contract Gr													
Contract Fil													
Contract Ids 50316,50324,													
Status													
Processing													
Direction													
Position Filter													

This setup enables the collateral manager to generate margin call to each individual child account level.

The default collateral Manager handles IM and VM contract balance separately to generate the margin call to settle, but collateral Sweeping method allow user to auto transfer the VM balance into IM and generate one consolidated margin call from child account into the parent account.

9.4.2 Parent LE and Multiple Child Accounts

🛃 Collateral Manager [16102	21/calypso_161010/calypso_user]													
Collateral Manager Collater	ral Market Data Window Help													
🐺 Load 🔹 🏹 Price 🝷 😽 Di	spute 🔹 🧤 Allocate 🝷 🔀 Action 🝷 🛃 C	ontract 🤇 🧿	🔊 Optimi	ize 🝷 🚺 🕻 Reconcili	iation 🝷 📢 Marke	t Data 🝷								
Collateral Filter 🗗 🖗	Results													67 P
11 (1 m m m t m t	회학 💷 📑 🐮 🚺 🔐 - 🔂 🗤 - 🕞 🗤 - 😳 🗤 - 😳 🗤 -													
Process Date/Time	Id Contract Name	Statue	Action	Contract Currency	Clobal Required Mrg	Dienuto	Coby Amount	Dispute Amount	Dicrute Reaco	Dispute Status	Accentance Status	Dispute Comment	Agreed Am	ount Direction
= Collateral Context	OCLIENT & MASTER VM	NONE N		conduct currency .	alobal required	Dispute	Cpty Amount	Dispute Amount	Dispute recoord	V None	None	Dispute comment	Agreeusan	0.00 Pay
Collateral C default	OCLIENT A MASTER VM	NONE IN		GBP	0.00		0.0	0 0.0	0 -	 None 	None			0.00 Pay
🖻 Filter	OCLIENT A MASTER_VM CLIENT A UCD	NONE N		UED	0.00		0.0	0 0.0	0 -	* None	None		+	0.00 Pay
PO Name	OCUTENT & MASTER VM CLIENT & JDV	NONE N		102	0.00		0.0	0.0	0 -	 None 	None		+	0.00 Pay
LE Name	OCLIENT A MASTER VM CLIENT A AUD	NONE N		JPT AUD	0.00			0 0.0	0 -	* None	None		+	0 Pdy
Contract Ty	OCLIENT A MASTER_VM CLIENT A COD	NONE N		AUD	0.00		0.0	0 0.0	0 -	* None	None		+	0.00 Pay
Contract Gr	OCUTENT & MASTER VM CLEWI A UKD	NONE N		SGD	0.00		0.0	0 0.0	0 -	 None 	None		+	0.00 Pay
Contract Fil	OCLIENT A MASTER_VM CLIENT A FUD	NONE N		HKD	0.00		0.0	0 0.0	0 -	* None	None		+	0.00 Pay
Contract Ids 35300,35301,	OCLIENT A MASTER VM CLIENT A_EUK	NONE IN	IEVV E	EUR	0.00		0.0	0 0.0	0 -	v None	None			0.00 Pay
Status	DICLIENT & MASTER IN	NONE IN	IEVV C	GBP	20.000		0.0	0.0	0	▼ None	None			0.00 Pay
Processing	0 12345-A_MASTER_IM	NONE N	IEVV C	GBP	20,000.00		0.0	0.0	0 -	 None 	Norie			0.00 Receive
Direction	012345-A_MASTER_VM	NONE	IEW C	GBP	-049,988.00		0.0	0.0		 wone 	None			0.00 Pay
Position Filter	012345-A_MASTER_VM CLIENT A_GBP	NONE N	IEW C	GBP	0.00		0.0	0 0.0	0 -	 None 	None			0.00 Pay
Position Type	U12345-A_MASTER_VM CLIENT A_USU	NONE N	IEW L	USD	-049,988.00		0.0	0.0	•	* None	None			0.00 Pay
Cash	0 12345-A_MASTER_VM CLIENT A_JPT	NONE N	IEW 1	JPY	U	H	-	0	0 -	✓ None	None			0 Pay
Product Ty	0 12345-A_MASTER_VM CLIENT A_AUD	NONE N	IEW /	AUD	0.00		0.0	0.0	0 ~	None	None			0.00 Pay
Securities	0 12345-A_MASTER_VM CLIENT A_SGD	NONE N	IEW 1	SGD	0.00		0.0	0.0	0 ~	None	None			0.00 Pay
- Optimization	0 12345-A_MASTER_VM CLIENT A_HKD	NONE N	IEW P	HKD	0.00		0.0	0.0	0 -	✓ None	None			0.00 Pay
Configuration	0 12345-A_MASTER_VM CLIENT A_EUR	NONE N	IEW E	EUR	0.00		0.0	0.0	0 ×	 None 	None			0.00 Pay
Configuration	0 12345-A_MASTER_IM USD	NONE N	IEW I	USD	0.00		0.0	0.0	· 0	 None 	None			0.00 Pay
	0 12345-A_MASTER_IM GBP	NONE N	IEW C	GBP	0.00		0.0	0.0	· 0	 None 	None			0.00 Pay
	0 12345-A_MASTER_IM EUR	NONE N	IEW E	EUR	0.00		0.0	0.0	v 0	 None 	None			0.00 Pay
	<													>
	Results 🐻 History 🚰 Notification	Forward	4 🙀 N	Vorkflow Events										
	Underlyings													0.4 ×
	🝸 🔹 😚 Dispute 🔹 🔀 Matching 🔹	6										🔄 Report	• 📑 Data	Ob View
	Trade Id Product Type Descripti	on			Trade Date			Settle Date E	nd Date Curr	ency Initial Va	alue FX Rate	NPV Independen	t Amount	Net Balance
	52117 CollateralExposure Collatera	ExposureInit	tial Margi	in/USD/02/11/2017/OF	PEN 02/11/17 05:3	8:05.000	o'clock GMT	02/11/2017	USD		-1.00 1	0.00	0.00	20,000,00
	52143 CollateralExposure Collatera	ExposureInit	tial Margi	in/USD/02/11/2017/06	PEN 02/11/17 05:3	8:05.000	o'clock GMT	02/11/2017	USD		-1.00 1	0.00	0.01	0.00
	52144 CollateralExposure Collatera	ExposureInit	tial Margi	in/USD/02/11/2017/OF	PEN 02/11/17 05:3	8:05.000	o'clock GMT	02/11/2017	USD		-1.00 1	0.00	0.01	0.00
		the second s							and the second		A REAL PROPERTY AND ADDRESS OF AD			

When child account type is 'Grouped Margined child account' the collateral manager aggregates all the balances from child account into parent account level and allow user to generate the margin call for the same.



Importing and Capturing Trades

Out-of-the-box, the trades can be imported in real-time from ATEO's LISA or G-API.

The counterparty of the trades is the clearing house or the clearing broker.

The trades navigate the Calypso workflow based on their clearing status, using straight-through processing and exceptions monitoring. Once the trades are cleared, they are liquidated as applicable and update the accounts positions.

▶ Please refer to the Calypso ATEO LISA Integration Guide for complete details.

The trades can also be imported from other sources, or they can be manually entered using the Listed Derivatives Trade windows or using the Pricing Sheet.

10.1 Trade Workflow

Processing Org = ALL

Product Type = G.ETD

The workflow presented below is an example to outline the control on fees. This is for information only. Additional controls will have to be put in place when using the automatic feed from LISA, G-API or a Broker File. This workflow does not include Undo Action (to undo exercise, etc.) and will need to be enriched.

Orig Status	Action	Resulting Status	STP	Rules	Tas k	SDF	Pref
EXECUTIONONL Y	AMEND	EXECUTIONONL Y	fals e	AutomaticFee s CheckSDI	fals e		true
EXECUTIONONL Y	CANCEL	CANCELED	fals e		fals e		fals e
NONE	NEW	PENDING	fals e		fals e		fals e
PENDING	EXECUTE	EXECUTIONONL Y	true	CheckSDI Automatic Fees	fals e	ExecutionOnly	fals e
PENDING	AUTHORIZE	ZERO_COMM	true	CheckSDI Automatic Fees	fals e	NotExecutionOnl y	fals e



Orig Status	Action	Resulting Status	STP	Rules	Tas k	SDF	Pref
PENDING	CANCEL	CANCELED	fals e		fals e		fals e
PENDING	AMEND	PENDING	fals e		fals e		fals e
PENDING	UPDATE	PENDING	true		fals e		true
ZERO_COMM	EXECUTE	VERIFIED	true	ETDCheckFee	fals e		true
ZERO_COMM	BYPASS_FEE S	VERIFIED	fals e		fals e		true
ZERO_COMM	AMEND	PENDING	fals e		fals e		true
ZERO_COMM	UPDATE	PENDING	fals e		fals e		true
VERIFIED	AMEND	PENDING	fals e	AutomaticFee s	fals e		true
VERIFIED	CANCEL	CANCELED	fals e		fals e		fals e
VERIFIED	UPDATE	PENDING	fals e		fals e		fals e
CANCELED	UPDATE	CANCELED	fals e		fals e		fals e

The transition CANCELED - UPDATE - CANCELED allows removing the External Reference from the canceled trades.

Static Data Filter "ExecutionOnly". Not ExecutionOnly is the opposite filter. Please note your will have to filter the EXECUTIONONLY status from the Liquidation and Transfer Engine using the engine parameters.


-					
	ZStatic Data Filter Window [144003/CLEARING_40/] 👘				
	Name: ExecutionOnly		Attributes	.	Simula
	Comment:				Pending
	Groups: ANY]		
	Attribute	Criteria		Filte	er Value(s)
	KEYWORD.ClientAccount.AccountProperty.ExecutionOnly	⊤ IN	Add	true	



10.2 Sample Trades

In the Pricing Sheet, you need to set the following in the User Preferences:

🔏 Config	gure				
Defaults	Pricer Measures	Events	Toolbar	Display	Open Trades
Name				Valu	e
🗄 Gener	ral defaults				
Pricin	g				
🗄 Risk A	Analysis				
Misc					
🗄 Sales	Behavior				
Option	n expiry				
± XVA					
🗄 IM					
🗆 Advai	nced				
Use Di	spatcher				
Allocat	ed Trade Loading	Style		Repo	rt Style
Always	s use Bulk Terminat	tion Wind	ow	True	
Show F	PricingScript Script	Tab		False	
Defaul	t Listed Product St	rategy		Gene	ric
Cowbe					

Default Listed Product Strategy = Generic

To capture trades, you need to use the strategies Future (for Future trades) or Option (for Future Option and ETO trades).



Find Property	1	Name	Value
Strategy Name	Future	BusinessFlow	FCM
Price	Price	CCP	CME CLEARING GROUP
Save	Save	CCPClearedDatetime	2015-09-03T11:57:45.000-05:00
Solve	Don't Solve	CCPOriginCode	- CLIENT
Trade Id	7704	CCPStatus	Cleared
Trade Date	09/03/2015	CCPTradeID	100003
Trade Time	9:57:45 AM	Client	▼ EUROCORP
Book	US FCM Client Clearing	ClientAccount	EUROCORP-ACC-ST0001 (3804)
Status	VERIFIED	ContractSymbol	c
Action	AMEND	CounterPartyAccount	 CME Client Omnibus Account (3743)
Client Account	EUROCORP-ACC-ST0001 (38	ExecutingBroker	▼ US FCM
Counterparty Account	CME Client Omnibus Account	ExecutionType	Allocation,Execution
Counternarty	CME CLEARING GROUP	ExecutionTypeCode	3
Exchange	CBOT	FutOpt	FUT
 Contract 	CBOTI	NegotiatedCurrency	USD
Contract Date	Sep 15	OrderId	9517
🔊 Sattla Tuna	Physical 1	OrderQuantity	0
🖬 Bettle Type		PSStrategyName	Future
Settle Cty Susian Data	000	RateSide	Choice
Expiry Date	09/14/2015	RelatedProductType	ETD
Buy/Sell	Buy	SecondaryTradeType	1
Quantity	1	SecondaryTradeTypeCode	1
🛨 Price	200.0000	Service	ATEO
Price Format	PriceC	ServiceLevel	✓ Full Service
🛨 Market Price	0.0000	TradeSource	ATEO

Strategy Name	Option		
Price	Price		
Save	Save		
Solve	Don't Solve		
Trade Id	7601		
Trade Date	09/02/2015		
Trade Time	11:35:29 AM		
Book	US FCM Client Clearing	Name	Value
Status	VERIFIED	CabinetType	▼ Fixed
Action	AMEND	CCP	✓ EUREX CLEARING
Client Account	EUROCORP-ACC-ST0001 (CCPOriginCode	- CLIENT
Counterparty Account	EUREX A1 (3677)	CCPStatus	Cleared
Counterparty	EUREX CLEARING	Client	✓ EUROCORP
Exchange	EUREX	ClientAccount	▼ EUROCORP-ACC-ST0001
🗄 Contract	EUREX5040	ContractSymbol	5ABL
Contract Date	Sep 15	CounterPartyAccount	🔻 EUREX A1 (3677)
🛃 Settle Type	Physical	FutOpt	OPT
Settle Ccy	EUR	PSStrategyName	Option
Expiry Date	09/18/2015	RateSide	Choice
🛃 Strike	1	RegCode	04 - Non regulated
Put/Call	Call	RelatedProductType	ETD
Buy/Sell	Buy	ServiceLevel	✓ Full Service
Quantity	5	TradeSource	Manually Entered



10.3 Trade Report and Trade Open Quantity Report

You can set environment property ETD_SHOW_FILTER_PANEL = true to display a combo box which contains ETD criteria in the report criteria.

ort Data Vie		core Utilities Holo														
	w Export MarketData Pro	cess oundes they														
Criteria																
ria																-
slate Description												Undo Date				
Trade	Start		~ ~			End		* v 🔷 🔨	~			Trade Filter	ALL			
Settle	Start		~ ~			End		+ ~ ~	~			SD Filter				
Process	Start		~ ~			End		+ ~ ~	~			Filter Set				
Maturity	Start	•	~ ~			End		+ ~	 □ Open 			Currency				
Trade Id	ExtRef v			. Bundle			Id 🗸					Product Family				
Buy/set				V Nax Rows#								Product Type				
Processing Org				Include G	hid Legal Entities							Status	PENDING PRICING		ED ROLLOVERED MATU	IED EXERCIS
Custoria				Sec Code	AGENCY LEND BEN	ICH RATE				Exd. (Underlying products	Action		to a hoji ecotini		
Risk Explorie												- Cabin				
ETD				~												
rds	ClientAccount															
· 🦦	CounterPartyAccount Future/Call/Put															
rch	Contract Prompt Month / Expiry															
	Products Exchange						 									
	Trade Price															
		Ok	Cancel													
		Ok	Cancel													
		Ok	Cancel													
TradeOp	enQuantity Report (0	o k 6/08/21 09:42:57)	Cancel													
TradeOp	enQuantity Report (0	0k 6/08/21 09:42:57) Market Data P	/ etd	tilities He												
TradeOp eport Da	enQuantity Report (0 ta View Export	6/08/21 09:42:57) Market Data P	/ etd	Itilities He	łp		 									
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TradeOp eport Da Criteria Be Trace	enQuantity Report (0 ta View Export de de Ext Ref ~	6/08/21 09:42:57) Market Data P	/ etd	tilities He Securit Trade Sta	lp ies		TOQ Direction Trade Filter		~		Sec Co	X In de AGENC	clude Cancele Y_LEND_B	rd TOQ V		
TradeOp eport Da Criteria Iteria Ba Trac As of o	enQuantity Report (0 ta View Export Constant eide Ext Ref ~	6/08/21 09:42:57) Market Data P	/ etd / etd	ttilities He Securit Trade Sta Product Ty	ies pe		TOQ Direction Trade Filter SD Filter		~		Sec Co Liquidation Ke	X In de AGENC vs Name:	clude Cancele Y_LEND_B ETD Liq Keys	rd TOQ V		
TradeOp eport Da Criteria Be Trac As of c uidation Co	enQuantity Report (0 ta View Export de de d	6/08/21 09:42:57) Market Data P	/ etd / etd	ttilities He Securit Trade Sta Product Ty	ies ies ipe		TOQ Direction Trade Filter SD Filter		~		Sec Co Liquidation Ke	X In de AGENC ys Name: D	dude Cancele Y_LEND_B ETD Liq Keys	d TOQ V		
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TradeOp eport Da Criteria iteria Be Trac As of o Liquidation Settle Dat	enQuantity Report (0 ta View Export dia i dia i dia Ext Ref ETD Liq Config ETD Liq Config ETD Liq Config	6/08/21 09:42:57) Market Data P	/ etd rocess U	tilities He Securit Trade Sta Product Ty	ies tus pe v		TOQ Direction Trade Filter SD Filter		~		Sec Co Liquidation Ke	AGENC vs Name: D Fut Cor Pro Pro	dude Cancele Y_LEND_B ETD Liq Keys ure/Call/Put ttract mpt Month / E ducts	d TOQ ~		
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TradeOp eport Da Criteria teria Bio Trace As of e uidation Co Liquidatio Settle Dat	enQuantity Report (0 ta View Export da Galacian e id Ext Ref ETD Liq Config n End End	6/08/21 09:42:57) Market Data P	/ etd	tilities He Securit Trade Sta Product Ty	ies tus y		TOQ Direction Trade Filter SD Filter		~		Sec Co Liquidation Ke	X In AGENC Vys Name: D Pot Pro Pro Pro	dude Cancele Y_LEND_B ETD Liq Keys ure/Call/Put trract ducts hange	d TOQ ✓		
TradeOp sport Da Criteria teria Ba Trade As of d uidation Co Liquidation Settle Dat	enQuantity Report (0 ta View Export consecutive e id Ext Ref ~ fate EtD Liq Config n End _ e End _	6/08/21 09:42:57) Market Data P	/ etd	ttilities He Securit Trade Sta Product Ty	ies bus pe v		TOQ Direction Trade Filter SD Filter		~		Sec Co Liquidation Ke	X In AGENC ys Name: 1 D Fut Cor Pro Exc	clude Cancele Y_LEND_B ETD Liq Keys ure/Call/Put tract that tract hange	d TOQ V	Cancel	



10.4 Inventory Position

The concept of cash inventory "buckets" has been implemented to help classify activity in a given account by its source. This is used in our clearing solution to allow us to separate account balances and movements into business categories. The bucketing logic is triggered based on the transfer type of the transfer hitting the account and is designed to work either as a hardcoded rule or based on the users' determination of the bucket to be used for manually defined fees and commissions.

Bucket Name	Logic Description
Fees	Any manually defined fee which is designated as belonging to the "Fees" bucket in the Fee Definition.
Fee Definition	
	General Properties
	Type: EXCHANGE FEE Key
	Role: Client
	PnL Category: MTM
	Exchange Fee - Counterparty
	Trade fee parameters
	Fee Offset: 0 Cal
	Products: ALL ETD
	Default Calculator: FeeGrid
	Preferences: Image: Allocation Image: Transfer Settlement Amount
Brokerage	Any manually defined fee which is designated as belonging to the "Brokerage" bucket in the Fee Definition.
Commissions	Any manually defined fee which is designated as belonging to the "Commissions" bucket in the Fee Definition
Futures PL	Transfers of type REALIZED_PL
Option Premium	Transfers of type PREMIUM
Option Cash Settlement	Transfers of type EXERCISE_FEE and OPT_CASH_ADJ
Variation Margin Futures	Transfers of type NPVFUT and NPVFUT_REV
Variation Margin Options	Transfers of type NPVOPT and NPVOPT_REV

The bucket names, and the rules by which they are impacted, are defined in the table below



Bucket Name	Logic Description
Variation Margin	Variation Margin Futures + Variation Margin Options
OTE Futures	Transfers of type OTEFUT and OTEFUT_REV
OTE Options	Transfers of type OTEOPT and OTEOPT_REV
OTE	OTE Futures + OTE Options
SOV	Transfers of type SOV and SOV_REV
LOV	Transfers of type LOV and LOV_REV
NOV	SOV + LOV
NFA	Transfers of type NFA (National Futures Association)
Discounted OTE	Transfers of type DISC_FWD_OTE and DISC_FWD_OTE_REV
Cash Movements	Any transfer which doesn't fall into one of the buckets in the list above.

The same buckets are used as the basis of the Financial Summary of the Client Statement, based on a position date of "Available (Frozen)" which uses the later of the Available Date and the Booking Date of the transfer as the date on which it impacts the bucket.

Using the Movement Type field in the criteria panel of the Inventory Position report, you can select any of the buckets as a movement (daily change) and/or balance (cumulative total) to be displayed in the report.



🛃 InventoryP	osition			ĺ	Z Cash Movement Types			×
Report Data	a Viev	/ Export	Market Da	ita Proces	Available		Selected	
	<i>(</i> 3						0-	
	3					_		_
Criteria					Available Balance	•	Balance	(Ŧ)
		_			Balance Collateral Usable	÷	Balance Cash Movements	1
- × ×				Start 05/15/	Balance Discounted OTE		Balance Commissions	-
	-				Balance Margin Call		Balance Fees	
Class Type	Da	e			Balance Margin Call Book Owner		Balance Futures PL	
Client Theore	tical Ava	ilable (Froz	. Aggregati	on Book/A	Balance Margin Call Book Owner In	(7	Balance LOV	٢
			Counterpa	arty	Balance Margin Call Book Owner Out		Balance NOV	
					Balance Margin Call In		Balance Option Cash Settlement	
			Accou	unt Id 44563	Balance Margin Call Non Rehypothecable		Balance Option Premium	
Position Value	Duantity	•	Custom F	ilter	Balance Margin Call Non Rehypothecable In		Balance OTE	
					Balance Margin Call Non Rehypothecable Out		Balance OTE Futures	
Position Dire	All	Offs	et Cash/	Sec Both	Balance Margin Call Not Book Owner		Balance OTE Options	
Closing					Balance Margin Call Not Book Owner In		Balance SOV	
					Balance Margin Call Not Book Owner Out		Balance Variation Margin	
					Balance Margin Call Out		Balance Variation Margin Futures	
Cash					Balance Margin Call Rehypothecable		Balance Variation Margin Options	
					Balance Margin Call Rehypothecable In		Movements	
					Balance Margin Call Rehypothecable Out		Movements Cash Movements	
Durante in a Dura	Deals	0	1t	4	OpeningBalance		Movements Commissions	
ProcessingUrg	BOOK	Currency	Agent	Account	TotalCashBalance		Movements Discounted OTE	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	TotalLiquidatingValue		Movements Fees	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Collateral Usable		Movements Futures PL	
FCM_TEST	N/A N/A	EUR	FUM_TEST	GA TEST 2	Movements Margin Call		Movements LOV	
FCM_TEST	N/A	FUR	FCM_TEST	SA TEST 2	Movements Margin Call Book Owner		Movements NOV	
FCM TEST	N/A	EUR	FCM TEST	SA TEST 2	Movements Margin Call Book Owner In		Movements Option Cash Settlement	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Book Owner Out		Movements Option Premium	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call In		Movements OTE	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Non Rehypothecable		Movements OTE Futures	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Non Rehypothecable In		Movements OTE Options	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Non Rehypothecable Out		Movements SOV	
FUM_TEST	N/A N/A	EUR	FUM_TEST	SA TEST 2	Movements Margin Call Not Book Owner		Movements Variation Margin	
FCM TEST	N/A N/A	FUR	FCM_TEST	SA TEST 2	Movements Margin Call Not Book Owner In		Movements Variation Margin Futures	
FCM TEST	N/A	EUR	FCM TEST	SA TEST 2	Movements Margin Call Not Book Owner Out		Movements Variation Margin Options	
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Out			
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Rehypothecable			
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Rehypothecable In			
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	Movements Margin Call Rehypothecable Out			
FCM_TEST	N/A	EUR	FCM_TEST	SA TEST 2	OpeningBalance			

The user can also go to the Process menu of the Cash Inventory Report and create new balance or movement types using formulas based on available buckets. Once the balance or movement is created and the formula defined, it will be available for use in the report.

Composite Cash Position Definition : Cash Balance	Garmen	441.000	X
Variables	Conditions		
Basic Positions	If: Then:	Else:	Insert
Balance_Cash_Movements Balance_Collateral_Usable	Functions	1	Incert
Balance_Commissions Balance_Discussed OTE	Operators	· · · · ·	Insert
Balance_Fees Balance_Fees			Insert
Balance_Margin_Call	Formula		
 Balance_Margin_Call_Book_Owner Balance_Margin_Call_Book_Owner_In 	Balance_Cash_Movements+Balance_Commissions+Balance Option_Cash_Settlement+Balance_Option_Premium	Commissions +Balance_Fees +Balance_Futures	_PL+Balance_
Balance_Margin_Call_Book_Owner_Out Balance_Margin_Call_In			
Balance_Margin_Call_Non_Rehypothecable			
Insert			
	Position Value : Tem	nplate Position Value Check App	oly Cancel



10.5 Position Transfer Trade Keywords

The following domain needs to be defined to store trade keywords on Position Transfer Open and Close trades.

Domain Name = keywords2CopyPositionXfer

Value = <trade keyword>

Comment = <trade keyword value>

[NOTE: It is not supported to add system keywords to that domain]

Example:

Domain Values		_		×
🚸 Reload 📰 Save 🦏 Save All 🛛 🕸 Constraints Setup				0
Q ~ keywords2CopyPositionXfer 0 of 0 (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	Name: keywords2CopyPositionXfer Value: WorkflowSubType Comment: ETD << Add	A	dd & <u>S</u> av	e

Source trade:

On the source trade, "WorkflowSubType" is blank.

🟒 Trade Attributes		×
🛟 SetUp 🔹 🙀 🥹 🔍 🛛		Editable
Name	Value	
IrokedOut	false	
COP	CME_CCP	
CPOriginCode	- CLIENT	
CPStatus	Cleared	
ClearedTradeDate	2021-01-27	
Client	CLIENT 4	
ClientAccount	CL00010 (124777)	
ContractSymbol	K3	
CounterPartyAccount	 Newedge Client (7027 	(0)
CurrencyPair	EUR/GBP	
utOpt	FUT	
.iqConfigId	1111	
ongShort	Long	
^l osAggId	67508	
Position Generated	PLPosition	
ositionID	129963	
PositionTransferPrice	Average	
PositionTransferSrcPrice	100	
PositionTransferSrcRealized	0	
RegCode	03 - Secured	
RelatedProductType	ETD	
ROUND TURN	false	
ServiceLevel	 Full Service 	
IradeSource	Manually Entered	
NorkflowSubType		



Open and Close Trades

The open and close trades are created with WorkflowSubType = ETD" as defined in domain "keywords2CopyPositionXfer".

	^
🕸 SetUp 🔹 🔛 🚱 🔍	Editable
Name	Value
BrokedOut	false
CCP	* CME_CCP
CCPOriginCode	- CLIENT
CCPStatus	Cleared
ClearedTradeDate	2021-01-27
Client	✓ CLIENT 4
ClientAccount	- CL0009 (78260)
ContractSymbol	K3
CounterPartyAccount	 Newedge Client (70270)
CurrencyPair	EUR/GBP
FutOpt	FUT
LiqConfigId	1111
LongShort	Long
Position Generated	PLPosition
PositionID	129963
PositionTransferPrice	✓ Average
PositionTransferSrcPrice	100
PositionTransferSrcRealized	0
PosTransferDst	1
PosTransferId	2002
RegCode	03 - Secured
RelatedProductType	ETD
ROUND TURN	false
ServiceLevel	
TerminationReason	 ClientAccountTransfer
TradeSource	Manually Entered
WorkflowSubType	ETD



10.6 To Display Open (New) / Close Trades (created after position transfer process) in TOQ window for multiple liquidation config:

Notes:

- This enhancement is only available in V17 and available from Dec'22 release onwards.
- If a client has set up multiple Liquidation Config in their environment, then after position transfer, open/ Closed trades will reflect in the TOQ window for all the liquidation configurations.
- If client has set up single Liquidation Config in their environment, then after position transfer, open/ Closed trades will reflect in the TOQ window for Single Liquidation Config only.
- This enhancement will also allow user to select the default behavior (Single Liq Config ETD Liq Config) or enhanced behavior (Multiple Liq Config - All Liq Config) to view trades post Position transfer in the TOQ window as per their requirement.

This enhancement ignores some of the trade attribute validation (such as "LiquidableWith", "LiqConfigId" and "PosAggId") while processing the position transfer for ETD trades. This will allow to update the open/ Closed trades correctly in the TOQ window for all the liquidation configurations instead single liquidation configuration.

There is a new checkbox with the name "Close-out at Trade Level" available on criteria panel of the Position transfer window as shown in the below screenshot.

Note: This check box will appear only if the following field values have been selected:

- Transfer Type = Liquidation Keys
- Position Type = Open Trades

🛃 Position Transfer	A Position Transfer										
Report View Export Utilities Help											
Criteria											
									_		
Transfer Type	Liquidatio	n Keys	~		Pos Transfer Id	22004	Description				
Trade Filter	ALL		~		PricingEnv	ETD Pricing $ \smallsetminus $	Price Type	From Book	~		
Transfer Date	06/06/20	22 23:	:45:13		Effective Date	11/10/2022	Position Type	Open Trades	~		
Product Type					Product Id		Internal (Sup;	press Fees)	Close-out at Trade Level		
Source Book Names		EUREX (LS	E)								
Target Book Name		Global_Tra	de_1								
Source Liquidation Ke	eys	Name: ETD	D Liq Keys					~			
Target Liquidation Ke	ys	Name: ETC	O Liq Keys					~			

Note: This check box is ticked by default.

If the checkbox is ticked, then after position transfer process open/ close trades will only reflect under "ETD Liq Config" not for the rest of the liquidation config (such as DEFAULT, Internal and External) this is the default behavior.

Note: In this behavior after Position Transfer process, Liquidations will be reflected only for "ETD Liq Config" not for other liquidation config.



If the checkbox is un-ticked, then after position transfer process open/ close trades will reflect under all liquidation config. This is enhanced behavior.

Note: In this behavior after Position Transfer process, Liquidations will be reflected for all liquidation config.

The following example will illustrate that,

- How open & Close trades will reflect in TOQ window (for multiple Liquidation Config) under default & enhanced behavior.
- The comparison of total unrealized & realized P & L of default & enhanced behavior.

10.6.1 Configuration

Following configuration were used for this example.

1. Liquidation Info:

Liquidation Config	Liquidation Method	Liquidation Attributes	Aggregation Attributes	Pos Aggregation by
ETD Liq Config	FIFO	ETD Liq Config	ClientAccount, CounterPartyAccount	Book, Product, ClientAccount and CounterPartyAccount
DEFAULT	FIFO		Book, Product	Book and Product
ETD Liq Config_Externa I	FIFO	EXTERNAL	CounterPartyAccount	Book, Product and CounterPartyAccount
ETD Liq Config_Internal	FIFO	INTERNAL	ClientAccount	Book, Product and ClientAccount

1	日哈哈哈		 Type here to filter t 	table content XML •													
ook	Cross Book Pro	oduct T î	Product Sub Type	Liquidation Config	ClientAccount	Contract	CounterPartyAccount	Currency	Exchange	Liquidation Method	Comparator Method	Date Rule	Liquidation Attributes	Fee Positions	Fees Settlement Amount Posit	ons Snapshots	Va
.L	ALL	4		ETD Lig Config						FIFO	TradeDate	NONE	ETD Lig Keys				
LL	ALL			DEFAULT						FIFO	TradeDate	NONE					
LL	ALL			ETD Liq Config_External						FIFO	TradeDate	NONE	EXTERNAL				
LL	ALL			ETD Liq Config_Internal						FIFO	TradeDate	NONE	INTERNAL				
LL	Fut	tureBond		DEFAULT						FIFO	TradeDate	NONE					
LL	Fut	tureCommodity		DEFAULT						FIFO	TradeDate	NONE	INTERNAL				
ALL	Fut	tureMM		DEFAULT						FIFO	IradeDate	NONE	1100 1 L 14	H	H		
ALL .	Fut	uremm		ETD Liq Contig						FIFO	TradeDate	NONE	ETD Liq Keys			M	
Liqu	dation Config	guration													_	- ×	l
	Configu	uration Edito	r														
	Ger	neral															
	Nam	ne							ETD Liq C	Config							
	10 Rec	COFF													1,111		
	Liqu	idation Key							Book Pro	duct Aggregation							
	Info	Selector							Book, Pro	ductType, Produc	tSubType, Exchang	je, ClientA	ccount, CounterPart	Account, Co	ntract, Currency		
	Boo	king Date							POAttrib	ute							
	Liqu	uidation So	ope														
	Trac	de Filter															
ifigura	tions																
n f	l/Modify 🗙	Delete															
ame		Id	Liquidation	1 Kev	1	info Select	or						Trade Filter		Booking Date		
FAULT			0 Book Produ	ict: Book Product Aga	regation B	ook. Produ	uctType, ProductSub	Type					ALL	Α	ccounting		
D Liq (onfig_External	i i	1 Book Produ	ict Aggregation	В	ook, Produ	uctType, ProductSub	Type, Exc	hange, Co	ntract, CounterPa	rtyAccount, Curren	cy		P	OAttribute		
) Liq (onfig_Internal	1	2 Book Produ	uct Aggregation	В	ook, Produ	uctType, ProductSub	Type, Exc	hange, Co	ntract, ClientAccou	unt, Currency			P	OAttribute		
) Liq (onfig	1	, 111 Book Produ	ict Aggregation	В	ook, Produ	uctType, ProductSub	oType, Exc	hange, Clie	entAccount, Count	erPartyAccount, C	ontract, Cu	irrency	P	OAttribute		



2. Position/Liquidation Key Configuration:

/iew				
	Id	D	Name	
A	ttributes			
				Load
[d /		Name	Aggregation Attributes	
	6099	CurrencyPair	CCY_PAIR	
	33203	PM-Location	PreciousMetal-location	
	45250	Bundle Type	BUNDLE_ID	
	62199	TRADER	TRADER	
	68703	ETD Liq Keys	ClientAccount,CounterP	artyAccount
	116179	EXTERNAL	CounterPartyAccount	
	116180	INTERNAL	ClientAccount	

3. Position Specification:

🛃 Position Specification									
Configuration Ed	tor								
General									
Name					PM Invent	bry			
Used For					Liquidity				
Cash Position	By				Settle Date	2			
Liquidation/Po	sition Key				PM-Locatio	in			
Liquidation Co	nfig				DEFAULT				
FX Products									
Cash Type					Product Po	sition			
Reporting Cur	rency								
Configurations									
📑 Add/Modify 🗙 Delete									
Name	Lised For	Draduct Davition By	Carb Position Ry	Liquidation Position Key	Liquidation Coofig	Split Cay Pre by Cay	Co Non-Settled EV Trades by Settle Dt	Cash Turne	Reporting Ourreport
TNBINE .	osed for	Product Position by	Casil Fostdori by	Elquidadon/Posidon Ney	Equidation Contrig	Spic Ccy Fis by Ccy	ap won-sected in x mades by sected by	casiriype	Reporting currency
PM Inventory	Liquidity	Settle Date	Settle Date	PM-Location	DEFAULT	False	False	ProductPosition	
Book and Product Trader	Risk and PL	Trade Date	Settle Date	Book & Product	DEFAULT	True	False	ProductPosition	
ETD Pos Spec_External	Risk and PL	Irade Date	Settle Date	EXTERNAL	ETD Liq Config_External	False	False	ProductPosition	
ETD Pos Spec	Risk and PL	Trade Date	Settle Date	ETD Liq Keys	ETD Liq Config	False	False	ProductPosition	
Book and Product Ccy Pair	Risk and PL	Irade Date	Settle Date	Book & Product	DEFAULT	False	halse	ProductPosition	
Book and Product Ccy Pair FX Pos	Risk and PL	Trade Date	Settle Date	Book & Product	DEFAULT	False	True	ProductPosition	_
ETD Pos Spec_Internal	Risk and PL	Trade Date	Settle Date	INTERNAL	ETD Liq Config_Internal	False	False	ProductPosition	-
Book and Product	Risk and PL	Trade Date	Settle Date	Book & Product	DEFAULT	True	False	ProductPosition	
Book and Product FX Settle Pos	Risk and PL	Trade Date	Settle Date	Book & Product	DEFAULT	True	True	ProductPosition	
Bundle / Trade Date	Risk and PL	Trade Date	Settle Date	Bundle Type	DEFAULT	True	False	ProductPosition	
CurrencyPair	Spot Blotter	Settle Date	Settle Date	CurrencyPair	DEFAULT	False	False	ProductPosition	
Product Positions	Liquidity	Trade Date	Settle Date	Book & Product	DEFAULT	True	False	ProductPosition	
Trader 2	Risk and PL	Trade Date	Settle Date	CurrencyPair	DEFAULT	False	False	ProductPosition	

4. Trade Filter:

For ETD trades, User needs to select "ETD Liq Keys" under source & target liquidation keys field on criteria panel (as shown in below screenshot) while processing position transfer so ETD Pos Spec will be applied to all selected trades hence trade filter is not required for selection of trades for close out.



🥖 PositionTrans	fer							
Report View	Export U	Jtilities Help						
	30) 🔬 🗸 👱	8					
Criteria								
Criteria								
Transfer Type	Liquidation	Keys	\sim	Pos Transfer Id		Description		
Trade Filter	ALL		~	PricingEnv	ETD Pricing $ \smallsetminus $	Price Type	From Book	~
Transfer Date	06/06/2022	2 23:26:59		Effective Date	04/08/2022	Position Type	Open Trades	\sim
Product Type				Product Id		🗌 Internal (Su	ippress Fees)	
Source Book Name	s	EUREX (LSE)						
Target Book Name		Global_Trade_	1					
Source Liquidation	Keys	Name: ETD Liq	Keys				~	
Target Liquidation	Keys	Name: ETD Liq	Keys				~	

10.6.2 Trade Details

Below trades have been booked of total buy 100 & sell 50 Qty under different client accounts & with the same counterparty account.

Trade Id	Client Account	CounterParty Acc	Book	Product Description	Buy/Sell	Qty	Trade Price
22946 5	PECIFIC03	Newedge Client	EUREX (LSE)	XCME-SR1- O/CALL/98/JUN23	Buy	25	2.2
22946 6	PECIFIC03	Newedge Client	EUREX (LSE)	XCME-SR1- O/CALL/98/JUN23	Buy	20	2.3
22946 7	PECIFIC03	Newedge Client	EUREX (LSE)	XCME-SR1- O/CALL/98/JUN23	Buy	15	2.5
22946 8	PECIFIC03	Newedge Client	EUREX (LSE)	XCME-SR1- O/CALL/98/JUN23	Buy	40	2.6
22946 9	ATLANTICO 3	Newedge Client	EUREX (LSE)	XCME-SR1- O/CALL/98/JUN23	Sell	-25	2.7
22947 0	ATLANTICO 3	Newedge Client	EUREX (LSE)	XCME-SR1- O/CALL/98/JUN23	Sell	-20	2.8
22947 1	ATLANTICO 3	Newedge Client	EUREX (LSE)	XCME-SR1- O/CALL/98/JUN23	Sell	-5	2.4

10.6.3 Position Transfer Process:

Trades (with trade id 229467 & 229468) have been transferred from the Source book "EUREX (LSE)" to target book "Global_Trade_1" as per shown in below screenshot:





🔏 PositionTransf	fer												
Report View	Export Utilities Help												
🔁 🖳 📑	🎯 🗘 A 🗸 👱 🔕												
Criteria													
Transfer Type	Liquidation Keys ~	Pos Transfer Id	22004 Des	cription									
Trade Filter	ALL 🗸	PricingEnv	ETD Pricing V Price	e Type From Book	~								
Transfer Date	06/06/2022 23:45:13	Effective Date	11/10/2022 Posi	ition Type Open Trades	~								
Product Type		Product Id		Internal (Suppress Fees)	R	Close-out at Trade Level							
Source Book Name	s EUREX (LSE)												
Target Book Name	Global_Trade_1												
Source Liquidation	Keys Name: ETD Liq Keys			~									
Target Liquidation	Keys Name: ETD Lig Keys			~									
Source													
Trade Id	Product Description	Trade Date	Trade Settle Date	Entered Date	Entered Use	r Bundle Name	Bundle Type	Quantity	Trade Price	Book	CounterParty	Processing Org	TradeStatus
-229468 X	CME-SR1-O/CALL/98.0000/JUN23	Jun 06, 2022 11:45 PN	1 07/06/2022	Jun 14, 2022 11:12 AM				40.	2.6	50000 EUREX (LSE)	NEWEDGE	SETCLEAR	VERIFIED
-229467 X	CME-SR1-O/CALL/98.0000/JUN23	Jun 06, 2022 11:45 PN	1 07/06/2022	Jun 14, 2022 11:12 AM				15.	2.5	50000 EUREX (LSE)	NEWEDGE	SETCLEAR	VERIFIED
-229466 X	CME-SR 1-O/CALL/98.0000/JUN23	Jun 06, 2022 11:45 PN	1 07/06/2022	Jun 14, 2022 11:12 AM				20.	2.3	30000 EUREX (LSE)	NEWEDGE	SETCLEAR	VERIFIED
-229465 X	CME-SR1-O/CALL/98.0000/JUN23	Jun 06, 2022 11:45 PN	1 07/06/2022	Jun 14, 2022 11:12 AM				25.	2.2	20000 EUREX (LSE)	NEWEDGE	SETCLEAR	VERIFIED
Opening													
Trade Id D	roduct Description	Trada Data	Trada Sattle Date	Entered Date	Entered Liner	Rundle Name	Runda Tuna	Quantity	Trada Drica	Rock	CounterParty	Processing Ora	TradeStatus
1180E 10 P		11806 Date	11806 (2022	Orth 11, 2022 08:00 AM	chiefed user	Duricie Ivallie	buridie Type	Quantity	Trade Price	000 Clobal Trade 1	NEWEDOF	Processing org	Tradestatus
24445720	ME-SR1-0/CALL/98.0000/JUN23	3un 06, 2022 11:45 PM	07/06/2022	Oct 11, 2022 08:09 AM	calypso_user			40.00	2.60	000 Global_Trade_1	NEWEDGE	SETCLEAR	VERIFIED
244437 / 00	ME-5K1-0/CALL/98.0000/J01425	Jun 06, 2022 11:45 PM	07/06/2022	OCT 11, 2022 00:09 AM	carypso_user			15.00	2.30	000[Global_frade_1	NEWEDGE	DETOLEAR	VERIFIED
Closing													
Trade Id P	roduct Description	Trade Date	Trade Settle Date	Entered Date	Entered User	Bundle Name	Bundle Type	Quantity	Trade Price	Book	CounterParty	Processing Org	TradeStatus
244454	ME-SR 1-O/CALL/98.0000/11/N23	Jun 06, 2022 11:45 PM	07/06/2022	Oct 11, 2022 08:09 AM	calvoso user			(40.0	0) 2.6	SOODO ELIREX (LSE)	NEWEDGE	SETCLEAR	VERIFIED
244455 X	ME-SR1-O/CALL/98.0000/JUN23	Jun 06, 2022 11:45 PM	07/06/2022	Oct 11, 2022 08:09 AM	calvoso user			(15.0	2.5	50000 EUREX (LSE)	NEWEDGE	SETCLEAR	VERIFIED
								(1010	-21	and the set (every			

When position transfer process was completed, then following trades were created with different liquidation config in TOQ & Position keeper window.

10.6.4 Trade Open Quantity & Position Keeper window:

a. Position Transfer - Close-out at Trade Level – "Ticked" (Default Behavior):

i) Liquidation Config - ETD Liq Config:

Following (highlighted) new trades have been created with the target book "Global_Trade_1".

🛃 TradeOpenQuan	TradeOpenQuantity Report (11/10/22.0558:50) / etd													
Report Data Vi	ew Export Ma	rket Data Process Utilities Hel	p											
	3													
Criteria														
Client Account (F)	Counterparty	Security	Trade Id /	Entered Date	Quantity	Book	Liquidation Date	Liquidation Price	Avg Price	Liquidation Quantity	Remaining Quantity	Open Quantity	Liquidation Config	Liquidation Status
PECIFIC03	Newedge Client	XCME-SR 1-O/CALL/98.0000/JUN23	229465	14/06/22 11:12:41.173 o'dock BST	25.0	0 EUREX (LSE)	06/06/2022	2.20000			25	5	25 ETD Lig Config	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229466	i 14/06/22 11:12:41.203 o'dock BST	20.0	0 EUREX (LSE)	06/06/2022	2.30000			0 20		20 ETD Liq Config	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229469	14/06/22 11:12:41.254 o'dock BST	-25.0	0 EUREX (LSE)	06/06/2022	2.70000		(25	i -	25 ETD Liq Config	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229470	14/06/22 11:12:41.262 o'dock BST	-20.0	0 EUREX (LSE)	06/06/2022	2.80000			0 20		20 ETD Liq Config	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229471	14/06/22 11:12:41.272 o'dock BST	-5.0	0 EUREX (LSE)	06/06/2022	2.40000		(0 5	5	-5 ETD Liq Config	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	244456	11/10/22 08:09:59.536 o'clock BST	40.0	0 Global_Trade_1	06/06/2022	2.60000			0 40		40 ETD Liq Config	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/3LIN23	244457	11/10/22 08:09:59, 599 o'dock BST	15.0	Global Trade 1	06/06/2022	2,50000			0 15		15 FTD Lin Confin	Liquidable

Also following original trades (with trade ID 229467 & 229468) have been closed with source book "EUREX (LSE)". Based on the price difference between first price & second price "Realized" amount is calculated for each trade.

First Trade Id	Second Trade Id	Client Account	Counterparty	Book	First Price	SecondPric e	Liquidati on Qty	Reali zed
229467	244455	PECIFIC03	Newedge Client	EURE X (LSE)	2.5	2.5	15	0
229468	244454	PECIFIC03	Newedge Client	EURE X (LSE)	2.6	2.6	40	0





Note: This liquidation happened post position transfer.

As shown in below screenshot, position keeper window is showing total unrealized amount = 1,37,511.00 & realized amount = 0.



unrealized + realized = 1,37,511.00

ii. Liquidation Config - Default:

Following original trades remained unchanged with source book "EUREX (LSE)".

🔏 TradeOpenQuanti	TradeOpenQuantity Report (11/10/22 06:00:07) / etd													
Report Data View	irt Data View Export Market Data Process Utilities Help													
	1													
📑 Criteria	Criteria													
Client Account (F)	Counterparty	Security	Trade Id /	Entered Date	Quantity	Book	Liquidation Date	Liquidation Price	Avg Price	Liquidation Quantity	Remaining Quantity	Open Quantity	Liquidation Config	Liquidation Status
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229467	14/06/22 11:12:41.222 o'dock BST	15.00	EUREX (LSE)	06/06/2022	2.50000		5	10	1	0 DEFAULT	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229468	14/06/22 11:12:41.232 o'dock BST	40.00	EUREX (LSE)	06/06/2022	2.60000		C	40	4	10 DEFAULT	Liquidable

Also following trades were liquidated as per book and product aggregation criteria.

First Trade Id	Second Trade Id	Client Account	Counterp arty	Book	First Price	SecondP rice	Liquidation Qty	Realize d
229467	229471	-	-	EUREX (LSE)	2.5	2.4	5	- 2,083.5 0
229466	229470	-	-	EUREX (LSE)	2.3	2.8	20	41,670. 00
229465	229469	-	-	EUREX (LSE)	2.2	2.7	25	52,087. 50
							Total	91.674.

Note: This liquidation is due to buy & Sell and NOT because of position transfer.

As shown in below screenshot, position keeper window is showing total unrealized amount = 45,837.00 & realized amount = 91,674.00

00



🔏 Posi Tools	tion Keepe Market D	er Window Data Help																		
Va Trade	Date 11/	/10/2022 D_Default_B	23:50:40 pokProduct	Pro → Pricing	Env ETD I	Pricing Evrnmt	↓ ··· ↓ A	Hierarchy ggregation Bo o Positions Inc	v okName v Jude v	Position By Se	ttle Date osition	Liquidation Display Pre	Keys			~				
• B	ИРТҮ	\$	All PS Aggregation EUREX (LSE)	Product Id	Liq. Config	Liq. Aggregation	Liq. Aggregation ID	Position Id 0 22947	Description /	128	Quantity 50.00	Realized 91,674.00	Unrealized 45,837.0	Nominal	Currency	Average Price	Current Mkt Price	Current Quote	Amount -537,543.00	Total

unrealized + realized = 1,37,511.00

iii. Liquidation Config - Internal:

There were no new trades generated & original trades (with trade ID 229467 & 229468) remained unchanged with source book "EUREX (LSE)".

🔏 TradeOpenQuar	tity Report (11/10	/22 06:01:30) / etd													
Report Data Vi	ew Export Ma	rket Data Process Utilities Hel	р												
	4														
Criteria	y Criteria														
Client Account (F)	ent Account (F) Counterparty Security Trade 1d. Entered Date Quantity Book Liquidation Date Liquidation Price Avg Price Liquidation Quantity Remaining Quantity Uquidation Config Liquidation Status														
PECIFIC03	Newedge Client	XCME-SR 1-O/CALL/98.0000/JUN23	229465	14/06/22 11:12:41.173 o'dock BST	25.0	DO EUREX (LSE)	06/06/2022	2.20000		1	0 25	5	25 ETD Liq Config_Internal	Liquidable	
PECIFIC03	Newedge Client	XCME-SR 1-O/CALL/98.0000/JUN23	229466	14/06/22 11:12:41.203 o'dock BST	20.0	00 EUREX (LSE)	06/06/2022	2.30000			0 20)	20 ETD Liq Config_Internal	Liquidable	
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229467	14/06/22 11:12:41.222 o'dock BST	15.0	00 EUREX (LSE)	06/06/2022	2.50000			0 15	5	15 ETD Liq Config_Internal	Liquidable	
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229468	14/06/22 11:12:41.232 o'dock BST	40.0	00 EUREX (LSE)	06/06/2022	2.60000			0 40		40 ETD Liq Config_Internal	Liquidable	
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229469	14/06/22 11:12:41.254 o'dock BST	-25.0	00 EUREX (LSE)	06/06/2022	2.70000			0 25	5	-25 ETD Liq Config_Internal	Liquidable	
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229470	14/06/22 11:12:41.262 o'dock BST	-20.0	00 EUREX (LSE)	06/06/2022	2.80000			0 20)	-20 ETD Liq Config_Internal	Liquidable	
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229471	14/06/22 11:12:41.272 o'dock BST	-5.0	DO EUREX (LSE)	06/06/2022	2.40000			0 5	5	-5 ETD Liq Config_Internal	Liquidable	

Note: i. NO buy & Sell liquidation happened

ii. Also in default behavior, after position transfer liquidation is NOT happening.

As shown in below screenshot, position keeper window is showing total unrealized amount = 1,37,511.00 & realized amount = 0

A Pi	osition Keeper Windov	v																
Tool	s Market Data Hel	p																
	Val Date 06/06/2022	23:50:40	Pr	oduct		Hierarchy		~	Position By Settle Date	e Liq	uidation Keys				~			
Tra	de Filter ETD_Internal		 Pricin 	g Env ETD Pricing Evrnmt	~	Aggregation Boo	kName	~	Incl. Fees in Position	Dis	play Precision							
						Zero Positions Inc	ude	~	Tolerance 0.0									
٠	EMPTY	All PS																
		Aggregation	Product Id	Liq. Config	Liq. Aggregation	Liq. Aggregation II	Position Id	Description /		Quantity	Realized	Unrealized	Nominal	Currency	Average Price	Current Mkt Price	Current Quote	Amount
		EUREX (LSE)	259300	2/ETD Liq Config_Internal	ClientAccount:219840			XCME-SR1-O/C	CALL/98.0000/JUN23	-50.0	0.0	-18,751.50	-50.0	0 USD	2.71000	2.80000	2.80000	564,628.50
		EUREX (LSE)	259300	2/ETD Lig Config_Internal	ClientAccount:219785		05 229475	KCME-SR1-O/C	CALL/98.0000/JUN23	100.0	0.0	0 156,262.50	100.0	IO USD	2.42500	2.80000	2.80000	-1,010,497.50



iv. Liquidation Config - External:

Following original trades remained unchanged with source book "EUREX (LSE)".

🛃 TradeOpenQuant	ity Report (11/10/	22 06:02:47) / etd												
Report Data Vie	w Export Ma	rket Data Process Utilities Help	p											
	4													
Criteria														
Client Account (F)	Counterparty	Security	Trade Id /	Entered Date	Quantity	Book	Liquidation Date	Liquidation Price	Avg Price	Liquidation Quantity	Remaining Quantity	Open Quantity	Liquidation Config	Liquidation Status
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229467	14/06/22 11:12:41.222 o'clock BST	15.0	EUREX (LSE)	06/06/2022	2.50000		5	5 10	1	0 ETD Liq Config_External	Liquidable
PECIFIC03	Newedge Client	XCME-SR 1-O/CALL/98.0000/JUN23	229468	14/06/22 11:12:41.232 o'clock BST	40.0	EUREX (LSE)	06/06/2022	2.60000		0	40	4	0 ETD Liq Config_External	Liquidable

Also following trades were liquidated as per book, product, and Counterparty Account aggregation criteria.

First	Second	Client	Counterpar	Book	First	SecondP	Liquidation	Realize
Trade Id	Trade Id	Account	ty		Price	rice	Qty	d
229465	229469	-	Newedge Client	EUREX (LSE)	2.2	2.7	25	52,087. 50



First Trade Id	Second Trade Id	Client Account	Counterpar ty	Book	First Price	SecondP rice	Liquidation Qty	Realize d
229466	229470	-	Newedge Client	EUREX (LSE)	2.3	2.8	20	41,670. 00
229467	229471	-	Newedge Client	EUREX (LSE)	2.5	2.4	5	- 2,083.5 0
							Total	91,674. 00

Note: i. This liquidation is due to buy & Sell and NOT because of position transfer.

ii. In default behavior, after position transfer liquidation is NOT happening.

As shown in below screenshot, position keeper window is showing total unrealized amount = 45,837.00 & realized amount = 91,674.00

A Position Keeper Window																
Tools Market Data Hel	р															
Val Date 06/06/2022	23:50:40	Pro	oduct	Hie	rarchy		Position By Settle Date	Liquidation K	eys			~				
Trade Filter ETD_External		 Pricing 	Env ETD Pricing Evrnmt	✓ Aggre	gation BookName		 Incl. Fees in Position 	Display Precis	iion							
				Zero Po	sitions Include		✓ Tolerance 0.0									
EMPTY	All PS															
	Aggregation	Product Id	Liq. Config	Liq. Aggregation	Liq. Aggregation ID	Position Id	Description /	Quantity	Realized	Unrealized	Nominal	Currency	Average Price	Current Mkt Price	Current Quote	Amount
	EUREX (LSE)	259300	1/ETD Liq Config_External	CounterPartyAccount:70270	59501	229473	XCME-SR 1-O/CALL/98.0000/JUN23	50.00	91,674.00	45,837.00	0 5	0.00 USD	2.58000	2.80000	2.80000	-537,543.00

Total unrealized + realized = 1,37,511.00

b. Position Transfer - Close-out at Trade Level – "Un-Ticked" (Enhanced Behavior):

Impact on Trade Attributes in enhanced behavior:

System will remove following highlighted attribute from "Trade Attribute" window to show correct opening & closing trades in TOQ window.

Before Position transfer:



Closing trade (Trade ID 229468)

🍄 SetUp 🛛 🙀 🚱 🔍		Editable
Name	Value	
BrokedOut	false	~
CCP	CME_CCP	
CCPOriginCode	✓ CLIENT	
CCPStatus	Cleared	
ClearedTradeDate	2022-06-06	
Client	- PECIFICCLIENT3	
ClientAccount	 PECIFIC03 (219785) 	
ContractSymbol	SR1	
CounterPartyAccount	v Newedge Client (7027)	(0)
FutOpt	OPT	
LiqConfigId	1111	
LiquidableWith	229468	
DrderId	PositionTransfer	
PosAggId	133504	
Position Generated	TOQ	
PositionID	229472	
PositionTransferPrice	 From Book 	
PositionTransferSrcPrice	2.425	
PositionTransferSrcRealized	0	
PosTransferId	22004	
PSStrategyName	Future Option MM	
RateSide	Choice	
RegCode	03 - Secured	
RelatedProductType	ETD	
ServiceLevel	→ Full Service	
TerminationReason	 ClientAccountTransfer 	r
TradeSource	Manually Entered	~

Opening trade (Trade ID 229468)

🗱 SetUp 🔹 🙀 🕢 🔍 🗸		Editable
Name	Value	
rokedOut	false	^
CP	CME_CCP	
CPOriginCode	- CLIENT	
CPStatus	Cleared	
learedTradeDate	2022-06-06	
lient	- PECIFICCLIENT3	
lientAccount	 PECIFIC03 (219785) 	
ContractSymbol	SR1	
ounterPartyAccount	 Newedge Client (70270) 	
utOpt	OPT	
qConfigId	1111	
rderId	PositionTransfer	
osition Generated	TOQ	
ositionID	229472	
ositionTransferPrice	 From Book 	
ositionTransferSrcPrice	2.425	
ositionTransferSrcRealized	0	
ositionTransferSrcTrade	229468	
osTransferDst	1	
osTransferId	22004	
SStrategyName	Future Option MM	
ateSide	Choice	
egCode	03 - Secured	
elatedProductType	ETD	
erviceLevel	✓ Full Service	
erminationReason	 ClientAccountTransfer 	
radeSource	Manually Entered	~

Closing trade (Trade ID 229467)

▲ Trade Attributes ▲ ▲ Setub - ▲ ▲ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ ▲ ■ <

Opening trade (Trade ID 229467)

🔅 SetUp 🔹 🙀 🕢 🔍	Ed	table
Name	Value	
BrokedOut	false	^
CCP	CME_CCP	
CCPOriginCode	- CLIENT	
CCPStatus	Cleared	
ClearedTradeDate	2022-06-06	
Client	PECIFICCLIENT3	
ClientAccount	 PECIFIC03 (219785) 	
ContractSymbol	SR1	
CounterPartyAccount	 Newedge Client (70270) 	
FutOpt	OPT	
LiqConfigId	1111	
OrderId	PositionTransfer	
Position Generated	TOQ	
PositionID	229472	
PositionTransferPrice	 From Book 	
PositionTransferSrcPrice	2.425	
PositionTransferSrcRealized	0	
PositionTransferSrcTrade	229467	
PosTransferDst	1	
PosTransferId	22004	
PSStrategyName	Future Option MM	
RateSide	Choice	
RegCode	03 - Secured	
RelatedProductType	ETD	
ServiceLevel	 Full Service 	
TerminationReason	 ClientAccountTransfer 	
TradeSource	Manually Entered	~
	OK Cancel	

After Position transfer:

Closing trade	(Trade ID 229468)	Opening trade	e (Trade ID 229468)	Closing trade	(Trade ID 229467)	Opening trad	e (Trade ID 229467)
🛃 Trade Attributes	×	🟒 Trade Attributes	×	🔏 Trade Attributes	×	🛃 Trade Attributes	×
🕸 SetUp 👻 😭 😡	Editable	🕸 SetUp 🖌 🙀 🕢 🔍	Editable	: 🔅 SetUp - 🙀 🕢 Q~	Editable	🔅 SetUp 🛛 🙀 🥹 🔍	Editable
Name	Value	Name	Value	Name	Value	Name	Value
BrokedOut	false	BrokedOut	false	BrokedOut	false	BrokedOut	false
CCP	CME CCP	CCP	CME_CCP	CCP	CME_CCP	CCP	CME_CCP
CCPOriginCode	- CLIENT	CCPOriginCode	- CLIENT	CCPOriginCode	- CLIENT	CCPOriginCode	- CLIENT
CCPStatus	Cleared	CCPStatus	Cleared	CCPStatus	Cleared	CCPStatus	Cleared
ClearedTradeDate	2022-06-06	ClearedTradeDate	2022-06-06	ClearedTradeDate	2022-06-06	ClearedTradeDate	2022-06-06
Client	V PECIFICCLIENT3	Client	- PECIFICCLIENT3	Client	- PECIFICOLIENT3	Client	- PECIFICCLIENT3
ClientAccount	PECIFIC03 (219785)	ClientAccount	PECIFIC03 (219785)	ClientAccount	 PECIFIC03 (219785) 	ClientAccount	 PECIFIC03 (219785)
ContractSymbol	SR1	ContractSymbol	SR1	ContractSymbol	SR1	ContractSymbol	SR1
CounterPartyAccount	V Newedge Client (70270)	CounterPartyAccount	 Newedge Client (70270) 	CounterPartyAccount	 Newedge Client (70270) 	CounterPartyAccount	 Newedge Client (70270)
FutOnt	OPT	FutOpt	OPT	FutOpt	OPT	FutOpt	OPT
OrderId	PositionTransfer	OrderId	PositionTransfer	OrderId	PositionTransfer	OrderId	PositionTransfer
Position Generated	TOO	Position Generated	TOO	Position Generated	TOQ	Position Generated	TOQ
PositionID	229472	PositionID	229472	PositionID	229472	PositionID	229472
PositionTransferETDLigConfig	1111	PositionTransferPrice	- From Book	PositionTransferETDLigConfig	1111	PositionTransferPrice	 From Book
PositionTransferPrice	Y From Book	PositionTransferSrcPrice	2.425	PositionTransferPrice	 From Book 	PositionTransferSrcPrice	2.425
PositionTransferSrcPrice	2.425	PositionTransferSrcRealized	0	PositionTransferSrcPrice	2.425	PositionTransferSrcRealized	0
PositionTransferSrcRealized	0	PositionTransferSrcTrade	229468	PositionTransferSrcRealized	0	PositionTransferSrcTrade	229467
PositionTransferSrcTrade	229468	PosTransferDst	1	PositionTransferSrcTrade	229467	PosTransferDst	1
PosTransferId	22005	PosTransferId	22005	PosTransferId	22005	PosTransferId	22005
PSStrategyName	Future Option MM	PSStrategyName	Future Option MM	PSStrategyName	Future Option MM	PSStrategyName	Future Option MM
RateSide	Choice	RateSide	Choice	RateSide	Choice	RateSide	Choice
RegCode	03 - Secured	RegCode	03 - Secured	RegCode	03 - Secured	RegCode	03 - Secured
RelatedProductType	ETD	RelatedProductType	ETD	RelatedProductType	ETD	RelatedProductType	ETD
ServiceLevel	✓ Full Service	ServiceLevel	∀ Full Service	ServiceLevel	 Full Service 	ServiceLevel	→ Full Service
TerminationReason	 ClientAccountTransfer 	TerminationReason	 ClientAccountTransfer 	TerminationReason	 ClientAccountTransfer 	TerminationReason	 ClientAccountTransfer
TradeSource	Manually Entered	TradeSource	Manually Entered	TradeSource	Manually Entered	TradeSource	Manually Entered
<u></u>	OK Cancel		OK Cancel		OK Cancel		OK Cancel

New attribute will be visible with the name "PositionTransferSrcTrade" after position transfer. This attribute value will show trade id.

Note: "PositionTransferSrcTrade" attribute value will allow to close the trade with same trade id under "ETD Liq Config".

i) Liquidation Config - ETD Liq Config:

Following (highlighted) new trades have been created with the target book "Global_Trade_1".

A TradeOpenQuar	ntity Report (11/10	/22 05:58:50) / etd												
Report Data Vi	iew Export Ma	rket Data Process Utilities Hel	р											
	3													
Criteria														
Client Account (F)	Counterparty	Security	Trade Id /	Entered Date	Quantity	Book	Liquidation Date	Liquidation Price	Avg Price	Liquidation Quantity	Remaining Quantity	Open Quantity	Liquidation Config	Liquidation Statu
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229465	14/06/22 11:12:41.173 o'clock BST	25.0	0 EUREX (LSE)	06/06/2022	2.20000			0 25		25 ETD Lig Config	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229466	14/06/22 11:12:41.203 o'dock BST	20.0	0 EUREX (LSE)	06/06/2022	2.30000)		0 20		20 ETD Lig Config	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229469	14/06/22 11:12:41.254 o'clock BST	-25.0	0 EUREX (LSE)	06/06/2022	2.70000)	1. 1	0 25	8	-25 ETD Liq Config	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229470	14/06/22 11:12:41.262 o'clock BST	-20.0	0 EUREX (LSE)	06/06/2022	2.80000)		0 20		-20 ETD Liq Config	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229471	14/06/22 11:12:41.272 o'clock BST	-5.0	0 EUREX (LSE)	06/06/2022	2.40000)	1	0 5		-5 ETD Liq Config	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	244482	11/10/22 09:02: 14.613 o'clock BST	40.0	0 Global_Trade_1	06/06/2022	2.60000)		0 40		40 ETD Liq Config	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	244483	11/10/22 09:02:14.681 o'dock BST	15.0	0 Global Trade 1	06/06/2022	2.50000)		0 15		15 ETD Lig Config	Liquidable



Also following trades have been closed with source book "EUREX (LSE)". Based on price difference between first price & second price "Realized" amount is calculated for each trade.

First Trade Id	Second Trade Id	Client Account	Counterpar ty	Book	First Price	SecondP rice	Liquidation Qty	Realiz ed
229467	244481	PECIFIC03	Newedge Client	EUREX (LSE)	2.5	2.5	15	0
229468	244480	PECIFIC03	Newedge Client	EUREX (LSE)	2.6	2.6	40	0
						·	Total	0

Note: This liquidation happened in enhanced behavior.

As shown in below screenshot, position keeper window is showing total unrealized amount = 1,37,511 & realized amount = 0

🛃 Position Keeper Window																		-	
Tools Market Data Help																			
Val Date 06/06/2022	23:50:34	Product			Hierarchy		~	Position By Settle Date	Liquidation Keys				~						
Trade Filter ETD_Liq_Config_Te	est	Pricing Env	ETD Pricing Evr	nmt v	Aggregation BookNa	me	~ 🗆 I	Ind. Fees in Position	Display Precision										
					Zero Positions Include		 Toler 	ance 0.0											
EMPTY A	All PS																		
A	Aggregation	Product Id Liq. C	Config	Liq. Aggregation		Liq. Aggregation ID	Position Id	Description /		Quantity	Realized	Unrealized	Nominal	Currency	Average Price	Current Mkt Price	Current Quote	Amount	
EU	UREX (LSE)	259300 1111/	ETD Liq Config	ClientAccount: 219840Count	erPartyAccount:70270	133506	22952	7 XCME-SR1-O/CALL/98	0000/JUN23	-50.00	0.00	-18,751.50	-50.	00 USD	2.71000	2.80000	2.80000	564,628.50	1
EU	urex (lse)	259300 1111/	ETD Liq Config	ClientAccount: 219785Count	erPartyAccount:70270	133504		2 XCME-SR 1-O/CALL/98		45.00		104,175.00			2.24444			-420,867.00	
G	lobal Trade 1	259300 1111/	ETD Lia Confia	ClientAccount: 219785Count	erPartyAccount: 70270	133504		9 XCME-SR1-O/CALL/98	0000/JUN23	55.00	0.00	52.087.50		00 USD	2.57273			-589,630,50	Total

unrealized + realized = 1,37,511.00

ii. Liquidation Config - Default:

Following (highlighted) new trades have been created with the target book "Global_Trade_1".

🛃 TradeOpenQuant	tity Report (11/10/	(22 06:00:07) / etd												
Report Data Vie	ew Export Ma	rket Data Process Utilities Help	b											
	4													
Criteria														
Client Account (F)	Counterparty	Security	Trade Id /	Entered Date	Quantity	Book	Liquidation Date	Liquidation Price	Avg Price	Liquidation Quantity	Remaining Quantity	Open Quantity	Liquidation Config	Liquidation Status
PECIFIC03	Newedge Client	XCME-SR 1-O/CALL/98.0000/JUN23	244481	11/10/22 09:02:14.541 o'dock BST	-15.00	EUREX (LSE)	07/06/2022	2.50000		-10		5	-5 DEFAULT	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	244482	11/10/22 09:02:14.613 o'dock BST	40.00	Global_Trade_1	06/06/2022	2.60000		0	40	0	40 DEFAULT	Liquidable
PECIEIC03	Newadoe Client	VCME-SP1-O/CALL/98.0000/3LIN23	244493	11/10/22 00:02:14 681 o'dock BST	15.00	Global Trade 1	06/06/2022	2 50000			11		15 DEEALET	Licuidable

Also the following trades have been closed with source book "EUREX (LSE)".

First Trade Id	Second Trade Id	Client Account	Counterp arty	Book	First Price	SecondP rice	Liquidation Qty	Realize d
229465	229469	-	-	EUREX (LSE)	2.2	2.7	25	52,087. 50
229466	229470	-	-	EUREX (LSE)	2.3	2.8	20	41,670. 00
229467	229471	-	-	EUREX (LSE)	2.5	2.4	5	- 2,083.5 0



First Trade Id	Second Trade Id	Client Account	Counterp arty	Book	First Price	SecondP rice	Liquidation Qty	Realize d
229467	244480	-	-	EUREX (LSE)	2.5	2.6	10	4,167.0 0
229468	244480	-	-	EUREX (LSE)	2.6	2.6	30	-
229468	244481	-	-	EUREX (LSE)	2.6	2.5	10	- 4,167.0 0
							Total	91,674. 00

Note: This liquidation happened in enhanced behavior.

As shown in below screenshot, position keeper window is showing total unrealized amount = 45,837.00 & realized amount = 91,674.00

🛃 Position Keeper Window																
Tools Market Data Help																
Val Date 11/10/2022 23:50:	4 P	roduct			Hierarchy	~	Position By Se	ttle Date	Liquidation	n Keys			~			
Trade Filter ETD_Default_BookProduct	✓ Prici	ng Env ETD Pr	icing Evrnmt	~ Ag	gregation Boo	okName 🗸	Ind. Fees in F	Position	Display Pre	ecision						
				Zero	Positions Ind	lude 🗸 🗸	Tolerance 0.0									
EMPTY All PS																
Aggrega	ion Product Id	Liq. Config	Liq. Aggregation	Liq. Aggregation ID	Position Id	Description /		Quantity	Realized	Unrealized	Nominal	Currency	Average Price	Current Mkt Price	Current Quote	Amount
Global_Tr	ide_1 25930	0 0/DEFAULT				XCME-SR1-O/CALL/98.0000/JUN		55.00		52,087.50	55.0					-589,630.50
EUREX (L	E) 25930	0 0/DEFAULT		(229474	XCME-SR 1-O/CALL/98.0000/JUN	123	-5.00	91,674.00	-6,250.50	-5.0	USD	2.50000	2.80000	2.80000	52,087.50

Total unrealized + realized = 1,37,511.00

iii. Liquidation Config - Internal:

Following (highlighted) new trades have been created with the target book "Global_Trade_1".

🔏 TradeOpenQuar	ntity Report (11/10	0/22 06:01:30) / etd												
Report Data V	iew Export M	arket Data Process Utilities He	lp											
	3													
Criteria														
Client Account (F)	Counterparty	Security	Trade Id /	Entered Date	Quantity	Book	Liquidation Date	Liquidation Price	Avg Price	Liquidation Quantity	Remaining Quantity	Open Quantity	Liquidation Config	Liquidation Status
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229463	14/06/22 11:12:41.222 o'dock BST	15.	00 EUREX (LSE)	06/06/2022	2.50000		10		5	5 ETD Lig Config_Internal	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229468	14/06/22 11:12:41.232 o'dock BST	40.	00 EUREX (LSE)	06/06/2022	2.60000)	(4	0	40 ETD Lig Config_Internal	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229469	14/06/22 11:12:41.254 o'dock BST	-25.	00 EUREX (LSE)	06/06/2022	2.70000		(2	5	-25 ETD Lig Config_Internal	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	229470	14/06/22 11:12:41.262 o'dock BST	-20.	00 EUREX (LSE)	06/06/2022	2.80000		(21	0	-20 ETD Liq Config_Internal	Liquidable
ATLANTIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	22947	14/06/22 11:12:41.272 o'dock BST	-5.	00 EUREX (LSE)	06/06/2022	2.40000		(5	-5 ETD Liq Config_Internal	Liquidable
PECIFIC03	Newedge Client	XCME-SR 1-O/CALL/98.0000/JUN23	244483	11/10/22 09:02:14.613 o'dock BST	40.	00 Global_Trade_1	06/06/2022	2.60000		(4		40 ETD Liq Config_Internal	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	244483	11/10/22 09:02:14.681 o'clock BST	15.	00 Global Trade 1	06/06/2022	2.50000)	(1	5	15 ETD Lig Config Internal	Liquidable

Also following trades have been closed with source book "EUREX (LSE)".

First Trade Id	Second Trade Id	Client Account	Counterp arty	Book	First Price	SecondP rice	Liquidatio n Qty	Realized
229465	244480	PECIFIC03	-	EUREX (LSE)	2.2	2.6	25	41,670.00
229466	244480	PECIFIC03	-	EUREX (LSE)	2.3	2.6	15	18,751.50



First Trade Id	Second Trade Id	Client Account	Counterp arty	Book	First Price	SecondP rice	Liquidatio n Qty	Realized
229466	244481	PECIFIC03	-	EUREX (LSE)	2.3	2.5	5	4,167.00
229467	244481	PECIFIC03	-	EUREX (LSE)	2.5	2.5	10	-
				-			Total	64 588 50

Note: This liquidation happened in enhanced behavior.

As shown in below screenshot, position keeper window is showing total unrealized amount = 72,922.50 & realized amount = 64,588.50

A Position Keeper Win	dow																
Tools Market Data	Help																
Val Date 06/06/202	22 23:50:34	P	roduct		Hierarchy		~	Position By Settle Date	Liqu	idation Keys				~			
Trade Filter ETD_Inter	rnal	 Pricir 	ng Env ETD Pricing Evrnmt	~	Aggregation Bo	okName	~	Ind. Fees in Position	Disp	lay Precision							
					Zero Positions In	dude	~	Tolerance 0.0									
EMPTY	All PS																
	Aggregation	Product Id	Liq. Config	Liq. Aggregation	Liq. Aggregation I	D Position Id	Description /		Quantity	Realized	Unrealized	Nominal	Currency	Average Price	Current Mkt Price	Current Quote	Amount
	Global_Trade_1	25930	2/ETD Liq Config_Internal	ClientAccount:219785	133	505 23102	8 XCME-SR 1-O/C	ALL/98.0000/JUN23	55.00	0.00	52,087.50	55	i.00 USD	2.57273	2.80000	2.80000	-589,630.50
	EUREX (LSE)	25930	2/ETD Liq Config_Internal	ClientAccount:219840		507 22952	5 XCME-SR1-O/C	ALL/98.0000/JUN23	-50.00	0.00	-18,751.50			2.71000	2.80000	2.80000	564,628.50
	EUREX (LSE)		2/FTD Lie Config Internal	ClientAccount:219785		505 22947	5 XCME-SR 1-O/C	ALL/98.0000/1EN23	45.00	64,588,50	39,586,50		.00 USD	2,58889	2.80000	2.80000	-485,455,50

Total unrealized + realized = 1,37,511.00

iv. Liquidation Config - External:

Following (highlighted) new trades have been created with the target book "Global_Trade_1".

🦽 TradeOpenQuant	TradeOpenQuantity Report (11/10/22 06:02-47) / etd													
Report Data Vie	ew Export Ma	rket Data Process Utilities Hel	lp											
	4													
Criteria														
Client Account (F)	Counterparty	Security	Trade Id /	Entered Date	Quantity	Book	Liquidation Date	Liquidation Price	Avg Price	Liquidation Quantity	Remaining Quantity	Open Quantity	Liquidation Config	Liquidation Status
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	24448	11/10/22 09:02:14.541 o'dock BST	-15.0	EUREX (LSE)	07/06/2022	2.50000		-10		5	-5 ETD Liq Config_External	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	244482	2 11/10/22 09:02:14.613 o'dock BST	40.0	Global_Trade_1	06/06/2022	2.60000	0	() 4	D	40 ETD Liq Config_External	Liquidable
PECIFIC03	Newedge Client	XCME-SR1-O/CALL/98.0000/JUN23	244483	11/10/22 09:02:14.681 o'dock BST	15.0	Global_Trade_1	06/06/2022	2.50000		(1	S	15 ETD Liq Config_External	Liquidable

Also following trades have been closed with source book "EUREX (LSE)".

First Trade Id	Second Trade Id	Client Account	Counterpar ty	Book	First Price	SecondP rice	Liquidation Qty	Realize d
229465	229469	-	Newedge Client	EUREX (LSE)	2.2	2.7	25	52,087. 50
229466	229470	-	Newedge Client	EUREX (LSE)	2.3	2.8	20	41,670. 00
229467	229471	-	Newedge Client	EUREX (LSE)	2.5	2.4	5	- 2,083.5 0
229467	244480	-	Newedge Client	EUREX (LSE)	2.5	2.6	10	4,167.0 0



First Trade Id	Second Trade Id	Client Account	Counterpar ty	Book	First Price	SecondP rice	Liquidation Qty	Realize d
229468	244480	-	Newedge Client	EUREX (LSE)	2.6	2.6	30	-
229468	244481	-	Newedge Client	EUREX (LSE)	2.6	2.5	10	- 4,167.0 0
							Total	91,674. 00

Note: This liquidation happened in enhanced behavior.

As shown in below screenshot, position keeper window is showing total unrealized amount = 45,837.00 & realized amount = 91,674.00

🥖 Position Keeper Windo	w																	
Tools Market Data He	lp																	
Val Date 06/06/2022	23:50:34	Pr	oduct		Hiera	irchy		Position By Settle Date	Liquidat	ion Keys				~				
Trade Filter ETD_Extern	1	~ Pricin	g Env ETD Pricing Evrnmt	~	Aggreg	ation BookName		Ind. Fees in Position	Display I	Precision								
					Zero Pos	tions Include		V Tolerance 0.0										
EMPTY	All PS																	
	Aggregation	Product Id	Liq. Config	Liq. Aggregation		Liq. Aggregation ID	Position Id	Description /		Quantity	Realized	Unrealized	Nominal	Currency	Average Price	Current Mkt Price	Current Quote	Amount
	Global_Trade_1	25930	1/ETD Liq Config_External	CounterPartyAccount	70270	5950		XCME-SR1-O/CALL/98.0000/JUN23		55.0		52,087.50	D 5	5.00 USD			2.80000	-589,630.50
	EUREX (LSE)	25930	1/ETD Lig Config External	CounterPartyAccount			1 22947	XCME-SR1-O/CALL/98.0000/JUN23		-5.0	91,674.00	-6.250.50		5.00 USD				52.087.50

Total unrealized + realized = 1,37,511.00



Importing Market Data

The scheduled task SIMPLE_DATA_IMPORT is used to import end of day settle prices (for variation margin calculation) and FX quotes, and cabinet prices.

Task Description							
Task Type: SIMPLE_DATA_IMPORT							
External Reference: Settlement Price Import							
Comments: Depends on market data files stored locally	Comments: Depends on market data files stored locally						
Description: Settlement Price Import	scription: Settlement Price Import						
Execution Parameters							
Attempts: 1 Retry After: 0 minutes Expected Execution Time (SLA): 2 minutes							
JVM Settings: -Xms512m -Xmx1024m -XX:MaxPermSize=256m							
Log Settings:							
Task Notification Options							
Send Emails Publish Business Events To User:	•						
Common Attributes							
Task ID	6501						
Processing Org							
Trade Filter							
Filter Set							
Pricing Environment	default						
Timezone	Europe/Paris						
Valuation Time Hour 22							
Valuation Time Minute	0						
Undo Time Hour							
Undo Time Minute							
Valuation Date Offset							
From Days							
To Days							
Pricer Measures							
Business Holidays							
Task Attributes							
Resource	ETDSettlePricesImport.xml						
Endpoint	direct://start						
Parameters							

Attribute Name	Purpose/Impact
Task Type	SIMPLE_DATA_IMPORT
Processing Org	The name of the Clearing Broker running the EOD process.
Pricing Environment	The name of the PE from which to source the Closing Prices.
Timezone	The Time Zone in which the Clearing Broker operates.

The market data import process uses the same files as the risk calculation and relies on the folder structure described under Appendix – External Data Locations.

Variation Margin Calculation

12.1 Overview

The Variation Margin is defined as the change in valuation of a portfolio due to new trade activity, lifecycle events, and the daily changes in the settlement prices of futures and options across all exchanges in their settlement currencies. In market terminology, a portfolio's Open Trade Equity (OTE) represents the current valuation of all open positions based on their traded price and the most recent market closing price in each of the individual instruments. In addition, options are commonly valued using Net Option Value (NOV) which represents the options current value, long or short, based on closing prices but ignoring the initial traded price.

Realized gains or losses due to closing out of open positions, payment of option premium, fees, commissions and cash or physical settlement of future and option positions also contributes to the daily variation margin calculation, impacting the cash balance of the account.

The sum of OTE, NOV and Realized Cash at the end of each day results in that account's closing Cash Net Liquidating Value (NLV), with securities deposited as collateral making up the rest of the account's Total NLV.

The execution of the scheduled task CLEARING_VM_CALC will generate the daily OTE and NOV and present it in a way that the account balances are updated only with the day-to-day change in the account value.

Account Setting - Margin Mode

The PO must configure all client and counterparty collateral accounts to use one of two available VM Margin Modes – "OTE" or "Realized VM" - in order to specify how the unrealized profit or loss of their open positions behave.

• OTE Mode treats unrealized PL as a credit or debit to the account balance which can be used to cover Initial Margin Requirements but cannot be withdrawn from the account as cash. In other words, if an account accumulates a large positive OTE without ever realizing the profit by closing out the position, "OTE" margin mode would not make that amount available in the cash balance to transfer back to the client, however it would allow that amount to be used to cover the Initial Margin Requirements, likely eliminating the need for the client to post additional collateral.

Margining		
🛷 Collatera	I	
Margin Mode:	OTE 🗸	
Deposit:	Client CL7 Assets(13802)	
Liability:	Client CL7 Margin Requirements(13803)	

We model OTE Mode by calculating the VM in the standard way, creating a Clearing Transfer trade with OTE and NOV amounts.

More specifically, when using that mode, we attach OTEFUT (and its reversal) - to isolate the OTE portion linked to Futures - and OTEOPT (and its reversal) – to isolate the OTE portion linked to Future Style Options.



These technical fees are generating transfers that get associated to the account's VM Contract. In this mode, the OTE-like transfers are enriched with the VM Margin Call id linked to the Clearing Account, they feed the collateral position for that contract but are filtered from the total cash balance as it is not real cash that could be withdrawn.

In parallel, SOV (and its reversal) – for short option value – and LOV (and its reversal) – for long option value – technical fees are created and attached to the Clearing Transfer to impact the option value buckets (SOV, LOV and NOV) in the inventory. The related transfers attached to the Clearing Transfer are not enriched with any margin id. These fees and transfers are just computed to create a bucket for reconciliation and statement purposes. Option Value is only considered by the initial margin process (CLEARING_IM_CALC) to calculate the total margin requirement. Option Value is not real cash that can be withdrawn. The SOV, LOV, NOV flows only impact the related inventory bucket and do not impact the Inventory Cash Balance.

• Realized PL Mode treats unrealized PL the same as realized and is essentially the equivalent of closing out all open positions each night at the settlement price and reopening them the next day as a new position at the previous day's price. The unrealized can be used as a cash equivalent to cover IMR or to withdraw if the account is in excess.

This mode is triggered by selecting 'Realized VM' as the margin mode on the clearing account and works by generating NPV and NPV_REV transfers-like on the Clearing Transfer trade that get updated with the account's associated VM Collateral Contract, and therefore treated as cash assets.

More specifically, when using that mode, we attach NPVFUT (and its reversal) - to isolate the NPV portion linked to Futures - and NPVOPT (and its reversal) – to isolate the NPV portion linked to Future Style Options. These technical fees are generating transfers that get associated to the account's VM Contract. In this mode, the NPV-like transfers are enriched with the VM Margin Call id linked to the Clearing Account, they feed the collateral position for that contract and impact the total cash balance as it is real cash that could be withdrawn.

The behavior of the OTE or NPV is driven in part by the Fee definition. The highlighted 'Margin' field is set to "Account Level" in the standard system configuration, meaning that based on the setting of the Margin Mode on each account, the fee transfer may or may not get tagged with the MarginCall XferAttribute that is required for it to be considered as an asset in the Deposit contract.

Account Setting – Family Accounts

Variation Margin is calculated on open positions at the level of each account and contract that is eligible to hold positions – what we refer to as Standard Accounts and Child Accounts. When an account is a child, the OTE/NPV and NOV related transfers generated at the child account level & contract are duplicated to the parent account so that both accounts are equally impacted. This holds true for other transfer types as well, such as Premium, Realized PL and Option Cash Settlement. What this means is that for a parent child structure, the total VM at the parent level is the sum of all flows across all child accounts.

Settle Prices

To calculate the Variation Margin, the system requires that each instrument in the portfolio has a closing price saved under the CLOSE instance on the process date.



In case no price exists for the day, the latest available market price is used. You can define how many business days in the past the market price can be looked up using in the domain ProcessingConfig:

Value = ETDClearing.VM.PastQuoteDays

Comment = <number of business days>

In case no market price is found, the latest available trade price is used.

12.2 Scheduled Task CLEARING_VM_CALC

NOTE: If the domain "transferCanceledStatus" does not contain any value, the CLEARING_VM_CALC scheduled task ignores the existence of the "CANCELED" status clearing transfer and regenerates a new clearing transfer.

If the domain "transferCanceledStatus" contains any value other than "CANCELED" status for Collateral Manager usage or any other asset class usage, for example "WRITEOFF", the CLEARING_VM_CALC scheduled task will consider that a clearing transfer is already available for that day, even though the clearing transfer is in "CANCELED" status and the scheduled task fails to generate a new clearing transfer.

In order to avoid this, you need to add "CANCELED" to the domain "transferCanceledStatus" in order to ignore the "CANCELED" clearing transfer and generate new clearing transfers when the scheduled task runs again.

Q. ransferCanceledStatus	1 of 1 🙆 💿 🔲 Value	
TransferAgent.TransferType	^	Name: transferCanceledStatus
transferCanceledStatus		Value: CANCELED
		Comment:
WRITEOFF		

Tack	Tumar	CLEADING VM CAL	r			
1 dSK	type:	CLEARING_VIM_CAL	3			
External Refer	ence:	Calculate VM				
Comn	nents:	Calculate VM				
Descri	ption:	Calculate VM				
Execution Parame	eters					
Attempts:	1	Retry After:	0	minutes	Expected Execution Time (SLA):	10
JVM Settings:	-Xms5	512m -Xmx 1024m				
Log Settings:	-level	ALL -trace com.calyp	so.dear	ing.log.defaul	t	
Log Settings: Task Notification	-level	ALL -trace com.calyp	so.dear	ing.log.defaul	t	

Configuring the Scheduled Task

Task Notification Opti	ons			
Send Emails	Publish Business Events	To User:	~	
E Common Attrib	utes			
Task Attributes				
CCP/ClearingHous	e		EUREX_CCP	
Clearing Service			ETD	
Select Positions By	r		Client Account	
Accounts			GL0009	
Use Liquidation			false	

minutes

......



Attribute Name	Purpose/Impact			
Task Type	CLEARING_VM_CALC			
Processing Org	The name of the Clearing Broker running the EOD process.			
Pricing Environment	The name of the PE from which to source the Closing Prices.			
Timezone	The Time Zone in which the Clearing Broker operates.			
Valuation Time Hour/Minute	The Valuation Time of the scheduled task can be set to ensure that each time the task is run, it is run at the same Valuation Time regardless of the Execution Time. The ST should be run at a time in the specified Time Zone which is before the Book EOD time of all Books which hold positions for the accounts included in the run. If the scheduled task valuation time is after the Book EOD time on date 'T', the			
	task will be run as if it is running for EOD on T+1.			
CCP/ClearingHouse	This field indicates the list of markets to process. Allows the user to select a list from any Legal Entity with Role 'CounterParty', or to simply select 'ALL' to process all markets.			
Clearing Service	Always set to ETD for Listed Market processing. This uses the 'RelatedProductType' attribute of the trade to locate trades and positions related to ETD processing.			
Select Positions By	Allows the user to determine the Account Types that they may want to filter on in the next field.			
Accounts	Allows the user to select from a list of Standard and Child Accounts of the type selected in the previous field. Can be used to isolate specific accounts for processing or can be set to 'ALL' to process all accounts.			
Use Liquidation	True or false.			
	Default is false. Clearing transfers are created based on the average price of the position.			
	If set to true (not recommended), clearing transfers are created based on the liquidated price depending on the liquidation method defined in Liquidation Info.			
Clearing Transfer by Attribute	You can select the following:			
	• CONTRACT (or not set): Clearing transfer trades are created at the contract level (default behaviour) + Liquidation Key Config if any. The contract name stored in the trade keyword ContractName.			
	• BOOK: Clearing transfer trades are created at the Book level + Liquidation Key Config if any.			
	 BOOK_PRODUCT: Clearing transfer trades are created at Book + Product description level. The product description is stored in the trade keyword ProductDescription. 			



Attribute Name	Purpose/Impact
Liquidation Key Config	You can select a liquidation key config to create clearing transfers based on the selected aggregation key.

In the domain ProcessingConfig, setting the value = ETDClearing.VM.UseNativePricers to true or not defining that value at all will mean the CLEARING_VM_CALC scheduled task is using the standard Calypso pricers (pricers are more demanding in terms of market data but ensures consistency with numbers produced in accounting and TOQ report) to compute the option and future values.

To de-activate this feature, put that domain to false and the CLEARING_VM_CALC scheduled task will compute its own calculation, without having to set specific pricing configuration.

Clearing Transfer Trades

The VM flows generated through the task are stored on a Calypso product called a Clearing Transfer trade. Storing these calculated amounts on a trade allows us to leverage the robust support for trade workflow, transfer generation, settlement routing and reporting that is supported across all Calypso products. We simply use the Clearing Transfer product as a convenient container for the VM transfers.

Once the trade level valuations are complete, the results will be consolidated into a single OTEFUT/OTEOPT/NPVFUT/NPVOPT and a single SOV/LOV amount for each unique combination of CCP, Clearing Service, Client Account, Counterparty Account, Contract and Currency by default.

You can also elect to create those trades by CCP, Clearing Service, Client Account, Counterparty Account, Book or CCP, Clearing Service, Client Account, Counterparty Account, Book, Product Description using the following domain:

Domain = ProcessingConfig

Clearing Transfer Trades will then be formed to contain these flows and generate BO transfers. The current design removes the existing design of CT trade mirroring, and instead generates a single CT trade with fees and transfers facing both the client and counterparty.

Trade Element	Population Logic
Counterparty	The LE on the Counterparty Account associated to the trade.
Role	Hardcoded to Counterparty.
PO	The PO specified in the executed Scheduled Task.
Book	The default Client or House Clearing Book specified on the PO, based on the Origin of the Account to which the Margin Group is associated.
Trade Date	The Process Date of the Scheduled Task.

The Clearing Transfer trade is created with the following logic:



Trade Element	Population Logic
Settle Date	The Process Date of the Scheduled Task. Our Inventory balances will be built using Settle Date logic, and we need the CT trades generated on the processing date to impact the balances for that date.
Currency	The Currency of the CT trade will be taken from the currency of the aggregated transaction valuations.
Principal	The sum of the amounts of all of the counterparty flows included in the trade. We do not include all flows, because by definition these would always sum to zero.
Pay/Rec	This should be set based upon the sign of the Principal flow. A positive principal results in a setting of Receive and a negative principal amount results in a setting of Pay
Transfer Type	Hard coded to 'CASH_SETTLEMENT'
Client Account	The Client Account on the aggregated transaction valuations.
Counterparty Account	The Counterparty Account on the aggregated transaction valuations.
Trade Keywords	CCP - Taken from the CCP keyword of the trades whose valuation is contributing to the CT Trade. This is included because of the users' ability to run the task for a subset of all CCPs. If we did not uniquely identify the CT trade by CCP, the execution of the ST for one CCP would overwrite the flows for another previously executed CCP, and our finalization process would fail.
	CCPOriginCode - The Origin of the Client Account specified – House or Client.
	RelatedProductType - ETD.

We describe below the calculation mode implemented by the scheduled task when not using the native Calypso pricers. If Calypso pricers are used, flow types created will be the same as listed below. The calculation will depend on your pricing params, especially considering the difference between future (where you consider the trade price) and option value (where you only consider the current market quote).

OTEFUT/OPT related Cashflows

For Accounts in MarginMode = OTE, generate OTE flows as follows.

For the selected trade, if the product is a Future:

- Flow type = "OTEFUT"
- SettleCurrency = The settle currency defined on the product
- Flow Amount = Sum of {Round(Market Price * Tick Size * Tick Value) Round(Traded Price * Tick Size * Tick Value)}* Quantity} for the open quantity of each transaction that comprises the open position, where the sign of the Quantity follows these rules



For the selected trade, if the product is an Option with the PremiumPaymentConvention attribute = 'VariationMargined':

- Flow type = "OTEOPT"
- SettleCurrency = The settle currency defined on the product
- Flow Amount = Sum of {Round(Market Price * Tick Size * Tick Value) Round(Traded Price * Tick Size * Tick Value)}* Quantity} for the open quantity of each transaction that comprises the open position, where the sign of the Quantity follows these rules

If the product is an option with the PremiumPaymentConvention attribute not equal to 'VariationMargined', the system will generate a SOV or LOV flow, no OTE or NPV.

OTEFUT/OPT_REV related Cashflows

For accounts in Margin Mode of OTE, generate as follows:

Will be equal but opposite direction to the OTEFUT/OTEOPT amount on the previous day's CT trade with the equivalent trade attributes. If no CT trade is found, the amount will equal 0.

The previous day is the preceding business day subject to the holiday calendar designated on the PO under the "Clearing Business Calendar" attribute.

NPVFUT/OPT related Cashflows

For Accounts in MarginMode = Realized VM, generate NPV flows as follows.

For the selected trade, if the product is a Future:

- Flow type = "NPVFUT"
- SettleCurrency = The settle currency defined on the product
- Flow Amount = Sum of {Round(Market Price * Tick Size * Tick Value) Round(Traded Price * Tick Size * Tick Value)}* Quantity} for the open quantity of each transaction that comprises the open position, where the sign of the Quantity follows these rules

For the selected trade, if the product is an Option with the PremiumPaymentConvention attribute = 'VariationMargined':

- Flow type = "NPVOPT"
- SettleCurrency = The settle currency defined on the product
- Flow Amount = Sum of {Round(Market Price * Tick Size * Tick Value) Round(Traded Price * Tick Size * Tick Value)}* Quantity} for the open quantity of each transaction that comprises the open position, where the sign of the Quantity follows these rules

If the product is an option with the PremiumPaymentConvention attribute not equal to 'VariationMargined', the system will generate a SOV or LOV flow, no OTE or NPV.



NPVFUT/OPT_REV related Cashflows

For accounts in Margin Mode Realized VM, generate as follows:

Will be equal but opposite direction to the NPVFUT/NPVOPT amount on the previous day's CT trade with the equivalent trade attributes. If no CT trade is found, the amount will equal 0.

The previous day is the preceding business day subject to the holiday calendar designated on the PO under the "Clearing Business Calendar" attribute.

SOV/LOV related Cashflows

If the product is an Option with the PremiumPaymentConvention attribute = 'Conventional':

- Flow type = "LOV" if long position or "SOV" if short position globally for the CT aggregation level
- SettleCurrency = The settle currency defined on the product
- Amount = Sum of {Market Price * Tick Size * Tick Value * Quantity} for the open quantity of each individual transaction that comprises the open position

SOV/LOV_REV related Cashflows

Will be equal but opposite direction to the SOV/LOV amount on the previous day's CT trade with the equivalent trade attributes. If no CT trade is found, the amount will equal 0.

The previous day is the preceding business day subject to the holiday calendar designated on the PO under the "Clearing Business Calendar" attribute.

FWD_DISC_OTE Cashflow

For Accounts in MarginMode = OTE, generate an OTE flow as follows.

For the selected trade, if the product is a Future with the PremiumPaymentConvention attribute = 'VariationMargined' and the Exchange set to a LE with a MIC value of "LME":

- Flow type = "OTE"
- SettleCurrency = The settle currency defined on the product
- Flow Amount = Sum of {Round(Market Price * Tick Size * Tick Value) Round(Traded Price * Tick Size * Tick Value)}* Quantity} for the open quantity of each transaction that comprises the open position, where the sign of the Quantity follows these rules

You can select the date used to calculate the LME discount factor based on domain "ProcessingConfig" and "Value = ETDClearing.LME.DF.CTLevel".

The Comment can be set as:

- Expiry_Date Discount Factor as of the expiry date of the future
- First_Delivery_Date Discount Factor as of the First Delivery Date of the future
- Last_Delivery_Date Discount Factor as of the Last Delivery Date of the future



• CCP_Date - Discount Factor as of the CCP Date of the future.

If the domain is not added or if left empty, the default date for is Expiry Date.

FWD_DISC_OTE_REV Cashflow

Will be equal but opposite direction to the OTE amount on the previous day's CT trade with the equivalent trade attributes. If no CT trade is found, the amount will equal 0.

The previous day is the preceding business day subject to the holiday calendar designated on the PO under the "Clearing Business Calendar" attribute.

Managing Clearing Transfers for Daily Realized MTM Contracts

For certain markets, such as the Brazilian exchange's rate-based futures, contracts utilizing Daily Realized Mark-to-Market (MTM) can lead to frequent daily Variation Margin (VM) exchanges. To streamline this process and avoid generating daily clearing transfers, the system now utilizes a new calculation method to generate both realized and unrealized VM.

To identify contracts that use Daily Realized MTM and therefore should not generate daily clearing transfers, a contract definition attribute called "IsDailyRealizedPL" has been introduced.

- IsDailyRealizedPL = True: If this attribute is set to "True" for a contract, the system will recognize it as a
 Daily Realized MTM product and will not generate daily clearing transfers for it. Instead, realized and
 unrealized VM will be calculated using the new method.
- IsDailyRealizedPL = False or Blank: If this attribute is set to "False" or left blank, the system will identify the contract as a standard VM-based product and will generate Clearing Transfers as per the usual process.

Search	FV/CBOT			Ŧ				
Details	Underlying							
Name		Value						
Con	tract Summary			_				
Exch	ange	CBOT						
Curr	ency	USD						
Nam	e	FV						
Type	1	Bond						
🗆 Gen	eral							
Quo	te Type	Price32						
Quot	te Decimals	6						
Is Co	ontract Size Variable							
Cont	tract Size	100,000						
No. (of Futures in Contract	6						
Sett	e Type	Physical						
Nega	ative Price Liquidation							
Attri	Attributes FV/CBOT							
	🙀 Clear 🛛 🕸 Domain Setup 🤣 Reload Attributes (Domain)							
Nar	me	Value						
ISIN								
ISVN	4InBaseCCY							
IS_N	NEXT_DAY_CASH_SETTLE							
🗆 IsDa	allyRealizedPL	True						
IsDe	faultDeliverableFutureCo							
IsDi	scountedVM							
LOP	RReportingCode							
LOP	RReportingLimit							
MAR	GIN_SETTLE_CCY							
Mat	urityType							
NEA	RBY_ROLL_LAG							
PU_	FROM_CURVE							
Pren	niumPaymentConvention							
Proc	ductMarginCode							
Proc	luctType							
Quo	teType			~				
		ОК	Cancel					
				_				



12.3 Recording Daily Value Changes

The EOD_FUTURES_MARKING scheduled task allows recording daily value changes as the difference between pricer measures OPEN_PRICE and PRICE.

Task Description											
Task Type:	EOD_FUTURES_MARKING										
External Reference:											
Comments:											
Description:											
Execution Parameters											
Attempts:	Attempts: Retry After: minutes Expected Execution Time (SLA): minutes										
JVM Settings: -Xms	512m -Xmx1024m										
Log Settings:											
Task Notification Options											
Send Emails	Publish Business Events	To Use	r:	\sim							
Common Attribute	S										
Task Attributes											
Opening Price			OPEN_PRICE								
Closing Price			PRICE								
Rebuild Positions By	SettleDate										
Counterparty											
THREAD COUNT											

Select a trade filter and a pricing environment in the common attributes. This only applies to trade filters with the position specification defined in domain "DefaultETDPosSpec".

Task Attributes

- Opening Price: Enter the opening rice pricer measure.
- Closing Price: Enter the closing price pricer measure.
- **Rebuild Positions By SettleDate**: Select true to rebuild the positions by settle date as needed.
- Counterparty: Select a counterparty as needed.
- THREAD COUNT: Enter a number of threads to run the scheduled task on multiple threads.

The scheduled task creates trades to close the positions at Opening Price and open the positions as Closing Price in order to record the daily value change as realized P&L.



Trade Back Offi	ce Future	Analytics Pricing Env	Market Data Utilities Help			
Trade Details Fee	s History					^
Cpty NEWEDG Book APL-9561	E	Cour Cour	terParty Status VERIFIE	D ID 289445 Template NONE	•	
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	Nominal	11,700,000	CounterPartyAccount	 Newedge Client (70270) 		
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ε			LongShort	Long		>
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			Position Generated	PLPosition		
			PositionID	288962		
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			Reporting-PrimaryAssetClass	InterestRate		
			ROUND TURN	false		
			TerminationType	CloseOut		
			TradeClassification	Price roll, closing		
			13CTimeIndication			
Val Date	15/01/2025	20:37:00	26T	T		
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🔌 BVMF-DAP-F/AUG26 -PO is Setclear Technology and Services P Ltd (289445) - Version : 0 Mod Us... — 🛛 🗌 🛛 🗙



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🔌 Trade Open quantity

Liquidated Positions Classical Report															
First Trade	Id Second	Trade Id	Туре	Quantity	Nominal	First Price	First Accrual	Second Price	Second Accrual	Date			Realized	Effective	Date
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Open Pos	itions	1													
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Initial Margin Calculation

▶ For Initial Margin Calculation and Reporting, please refer to the Calypso ETD Clearing Margin User Guide.




Listed Derivatives Contracts

From the Calypso Navigator, navigate to Configuration > Listed Derivatives > Future Contracts (menu action refdata.FutureDefinitionWindow) for creating future contracts, and future products.

From the Calypso Navigator, navigate to Configuration > Listed Derivatives > Future Option Contracts (menu action refdata.FutureOptionDefinitionWindow) for creating future option contracts, and future option products.

From the Calypso Navigator, navigate to Configuration > Listed Derivatives > Option Contracts (menu action refdata.ETOContractWindow) for creating ETO contracts, and ETO products.

You can also access contract information from the Clearing Dashboard > Product Data tab.

14.1 Contract Attributes

To be included in the 3 type domain names:

- FutureContractAttributes
- FutureOptionContractAttributes
- ETOContractAttributes

The following contract attributes are used for processing future and options:

Attribute Name	Purpose/Impact
CascadeFrom	After the creation of the shorter-duration contracts, this attribute will reference the 'ContractName' of the longer-duration contract the contract cascading from. Since there can be a "one to many" ratio of the longer to the shorter duration contracts, it makes sense to place the reference on the latter.
	Note that in the case that a quarterly product is created from the cascading of an annual contract, and will cascade itself into a monthly contract, that quarterly contract would reference the annual contract in the 'CascadeFrom' attribute, while the monthly contract would reference the quarterly contract name. Mandatory
CascadeTo	In the cascading process, this is an attribute stored on a long duration contract that references the shorter duration contract that will get cascaded to. Mandatory
ContractStrategyMargin	A specific margin strategy stored on unique contracts that differ from the contract's exchange margin methodology. Mandatory for unique contracts.



Attribute Name	Purpose/Impact
CascadePriceType	For longer duration contracts, this attribute dictates how the prices of the trades created during the cascade process will be set.
	When the attribute is set to 'Closing', the trade price of the close out trade and the newly generated opening trade in the shorter duration product(s) will be set to the closing price of the parent product on the cascade date. This price is taken from the Instance Type (Close, Last, etc.) set in the Quote Set from the Pricing Environment selected on the Scheduled Task.
	When the attribute is set to 'Trade', the trade price of the close out trade and the newly generated opening trade in the shorter duration product(s) will be set to the traded price of the parent trades that form the open position. This implies that the cascade process could generate multiple trades in the same product with different traded prices.
	If this field is empty or has an unrecognizable value, the process will run with a default value of 'Trade'.
CascadeDateLag	A positive integer value that represents the number of business days, according to the calendar in the 'Holidays' field on the contract, prior to the product's First Delivery Date that the cascading event will occur. The business days will be according to the calendar set on the Contract definition. An empty value in this field will be considered a lag of zero by default.
ContractCode	Populated by FOW. The short name code for the contract.
ContractStrategyRate	When calculating Initial Margin for a position in this contract using the 'Strategy' method, this attribute will set the IM requirement amount per lot in the contract settlement currency. If the attribute is empty, we will use the default value of 1,000.
CabinetPrice	Lowest tradeable value for a specific option contract. Only is used to close out option positions that are very deep out of the money. Optional
SettlementDateLag	Number of business days, according to the calendar(s) in the Holidays field of the contract, after the expiration date that the future or option settles.
	You can customize the settlement date of future expiry closeout trades using the following currency attributes:
	" <counterparty>ETDExpirySettleDate" - Select the date to be used for the settlement date per counterparty.</counterparty>
	" <counterparty>ClearingTransferSettleLag" - Enter a number of days lag per counteparty over the selected date as needed.</counterparty>



Attribute Name	Purpose/Impact
	If these attributes are not set, then attributes "ETDExpirySettleDate" and "ClearingTransferSettleLag" are used instead. They apply to all counterparties.
ProductMarginCode	Identifies the contract symbol used in the risk array files when calculating Initial Margin. Required when the symbol used in the risk file is different than the ClearingExchangeSymbol.

Please refer to Calypso Futures and Future Options Trading documentation for details on setting up future and future option contracts.

Please refer to Calypso Equity Derivatives Trading documentation for details on setting up ETO contracts.

14.2 Flex Options

Exchanges such as Eurex offer "Flex" future and option contracts which allow members to submit specifications for bespoke products to be traded on the exchange and cleared on the clearinghouse. These contracts need to adhere to the general guidelines of the contract framework – contract size, underlying asset, contract symbol – but the parties involved in the trade are able to choose their own 'flexible' expiration date, delivery type (physical/cash) and exercise type (American/European). Importantly, this means that it is a valid use case to have a single ETO or future option contract with multiple expiries in the same month.

To defined Flex Options, you need to set the Contract Date Format to 'Daily', triggering the display of the contract date in the trade capture screen and the generation of the quote name to include the day, month and year when describing the product.

The user also has to set the formatting of the contract date in the trade capture screen by populating the "DateFormat" contract attribute with a java-compatible format value. Recommended approach is to use the value of "dd MMM yyyy".

14.3 Import

Listed Derivatives Contracts can be imported using the FOW Trade Data interface through the scheduled task FOW_REFERENCE_DATA_IMPORT.

Please refer to the Calypso FOW Integration Guide for complete details.

[IMPORTANT NOTE: Once the contracts are created, you need to generate the actual products that will be traded]



14.4 Introduction

This feature will allow the user to generate Clearing Transfer & Expiry close trade with settle date as a First or last delivery date for Nasdaq OMX future product as per exchange requirement therefore user can be able to settle NPVFUT + NPVFUT_REV (CT) & REALIZED_PL (Expiry close trade) on a First or last delivery day as per exchange requirements.

14.5 Important features

- Existing Currency Default attributes "ETDCloseoutSettleDate" and "NEWEDGEETDCloseoutSettleDate" have been replaced with new contract level attribute "ETDExpirySettleDate" for Nasdaq OMX future.
- New date logic has been introduced for last (Nasdaq OMX future) CT & future expiry closeout trade as when Processing Date/Booking date = Expiry Date then the system will look for the Contract attribute " ETDExpirySettleDate " to update the Settle Date value.

Note: V.17 MR September 2023 onward, the system will not consider Currency Default attributes *"ETDCloseoutSettleDate" and "NEWEDGEETDCloseoutSettleDate" to set settle date value on future expiry closeout* trade.

User will have to set this new contract attribute "ETDExpirySettleDate" under Future Contract Specification window for all contracts where settle date value on last Clearing transfer and Future expiry closeout trade needs to set as "First Delivery Date" or "Last Delivery Date" etc.

14.6 Configuration

Following values needs to be configure under Domain values:





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There will be three options to choose the value of contract attribute as shown in the below screenshot.

First Delivery Date: When user selects this value in attribute then settle date value on Last CT trade & Expiry closeout trade will be taken from column "First Delivery Date" under "Future Contract Specification Window".

Last Delivery Date: When user selects this value in attribute then settle date value on last CT trade & Expiry closeout trade will be taken from column "Last Delivery Date" under "Future Contract Specification Window".

Blank: If the attribute value is blank or attribute not set, then system will look for attribute value *"ClearingTransferSettleLag"* and *"NEWEDGEClearingTransferSettleLag"* to capture settle date value for last CT trade & Expiry closeout trade.

Note: Above mentioned logic has been introduced for Nasdaq OMX future trades only. Other exchanges trades will generate last CT trades and Future expiry closeout trades based on default behavior means based on attribute value *"ClearingTransferSettleLag"* and *"NEWEDGEClearingTransferSettleLag"*.

Date Logic Attributes Name Description Contract Attribute Value Processing Date/Booking Contract attribute -First Delivery Date If Processing Date/ Booking Date date = Expiry Date "ETDExpirySettleDate" Last Delivery Date is equal to Expiry Date, then Blank system will look for contract attribute " ETDExpirytradeSettleDate " to update Settle Date value on last CT trade & future expiry closeout trade. Note: If attribute value is blank or attribute not set then Settle date value will be taken from "ClearingTransferSettlelag" or

Following date logic have been introduced:



Date Logic	Attributes Name	Contract Attribute Value	Description
			"NEWEDGEClearingTransferSettle Lag" attribute value.
Processing Date/Booking date <> (not equal to) Expiry Date	Currency default attribute – "ClearingTransferSettleL ag" or "NEWEDGEClearingTran sferSettleLag"	Any numerical value	If Processing Date/Booking date is not equal to Expiry Date, then system will look for currency Default attribute "ClearingTransferSettleLag" or "NEWEDGEClearingTransferSettle Lag" attribute value to update Settle Date value on last CT trade.

Note:

- This logic will be applicable for (expiry date) last Clearing Transfer trade generated through ST "CLEARING_VM_CALC" & Future expiry close trades generated through ST or Calypso GUI.
- This feature is only applicable when user generates CT trade at "BOOK_PRODUCT" level. User needs to select "BOOK_PRODUCT" value under task attribute "Clearing Transfer by attribute" to generate CT at Book & Product level.

14.7 Expected Result

As shown in below screenshot, system has captured "Trade Settle Date" value as "First Delivery Date" i.e., 19 Dec 2023 for last CT & expiry closeout trade as per contract attribute "ETDExpirytradeSettleDate" on expiry date.

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	Window SEK Value T			

Future Contract Specification Window

File	Futures H	lelp						
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Details Underlying				Expiration Date /	Prompt Month	Last Trade Date	Quote Name	First Delivery Date
Nam	e		Value	13/06/2022	202206	13/06/2022	Future.SEK.OMX.XSTO-RIBA-F.JUN.22	13/06/2022
	Contract Summary			19/09/2022	202209	19/09/2022	Future.SEK.OMX.XSTO-RIBA-F.SEP.22	19/09/2022
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N	ame		XSTO-RIBA-F					
T	/pe		MM					



Cascading Process

Important: In order to properly execute the cascading process, we require that the shorter-duration contracts are created in the database and the underlying futures are saved as products prior to the execution of the cascading process.

15.1 Triggering the Cascade Process

The cascade process will be run each day through the execution of a scheduled task called FUTURE_CASCADE. This task should be run at EOD after all offsetting is run, but before IM and VM calculation and statements are generated. Products which are eligible for cascading are determined by the list of values of the CascadeFrom attribute across all contracts. The cascade process will be triggered only on the open positions in these products where the First Delivery Date adjusted by the CascadeDateLag, and the ST process date are equal.

The cascading process only needs to be applied to open positions in cascading products. If transactions in a cascading contract have been cleared, and have since all been closed out, the cascading process does not need to be triggered.

Although it is not expected, this task can be run backdated. If the cascade process has already been run, by definition all positions will be closed, so there will be no impact of running it on a date for which it has already been run.

Task Description								
Task Type	FUTURE_CASCADE							
External Reference	: Future Cascade Process							
Comments								
Description								
Description								
Execution Parameters								
Attempts: 1	Retry After: 0 minutes Expected Execution Time (SLA): minutes							
JVM Settings: -Xm	s512m -Xmx1024m -XX:MaxPermSize=256m							
Log Settings:								
Task Notification Optic	ne							
Sond Empile	Dublish Dusiness Suppts To Lloca							
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🗆 Common Attribu	tes							
Task ID								
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To Davs								
Pricer Measures								
Business Holidays								
Task Attributes								
Exchange	FLIREY							
exchange	LONER							



Attribute Name	Purpose/Impact
Processing Org	Processing Org in order to indicate which entities positions should be considered
Pricing Environment	Pricing Environment to source the closing price of the cascaded contract
Exchange	Exchange Attribute field which can be used to select one, several or all exchanges on which to run the process. This will be useful to run the process in a "follow the sun" mode. The pick list should be limited to LE's with a Role of 'MarketPlace'

15.2 Results of the Cascade Process

Running the cascade scheduled task on a day when open positions exist in a product which is linked to one or more other contracts by their CascadeFrom attribute will result in 1) the close out of the open position at either the closing price that day or the original trade price and 2) the generation of open positions in all of the existing products on the contracts which were pointing to the original position. If a contract exists, but the underlying future products have not been saved, new positions will not be generated.



Listed Derivatives Fees & Commissions

This section recommends the market standard configuration that a Clearing Broker could use for their daily activities. Of course, the system is configurable and can be adapted to any client or user to best meet their needs.

There are 2 supported charging strategies for ETD products – "Trade Fees" for daily billing and detailed on the client statement and "Billing Fee" for period to date billing, typically accrued for the calendar month and billed a set number of days into the next month.

16.1 Inventory Buckets

Inventory Buckets are used aggregating different fee types into balance buckets for viewing and reporting in the system via the Inventory Position Report and for reporting on the client statement. The following two buckets are recommended

- Domain Value
- feeDefinitionAttributes

ETD.InventoryBucket – to enable the user to configure which buckets the different fee types can be grouped together

feeDefinitionAttributes.ETD.InventoryBucket

Commissions - for the FCM's add-on charge for its services

Fees – for the pass-through charges of an exchange or 3rd party broker, which the FCM will need to pay out





16.2 Fee Definition

Configuration > Fees, Haircuts & Margin Calls > Fee Definition

The following Fee Definitions are recommended

Fee Туре	Role	Calculator	Inventory Bucket	Notes
COMMISSION	Client	FeeGrid	Commission	Client Commission
EXCHANGE_FEE	Counterparty	FeeGrid	Fees	Exchange fee payable to counterparty
EXCHANGE FEE	Client	FeeGrid	Fees	Exchange fee passed onto the client
CLEARING_FEE	Counterparty	FeeGrid	Fees	Clearing house fee payable to counterparty
CLEARING FEE	Client	FeeGrid	Fees	Clearing house fee passed onto the client
EXECUTION_FEE	ExecutingBroker	FeeGrid	Fees	Execution fee (Cleared Only / Give Ins) to pay to the Executing Broker
EXECUTION FEE	Client	FeeGrid	Brokerage	Execution fee (Cleared Only / Give In) passed onto the client
EXECUTION BROKERAGE	Counterparty	FeeGrid	Fees	Execution fee (Execution Only / Give Ups) to receive from the clearing broker counterparty
FLOOR_BROKERAGE	Counterparty	FeeGrid	Fees	Floor brokerage payable to the counterparty
FLOOR BROKERAGE	Client	FeeGrid	Fees	Floor brokerage passed onto the client
NFA_FEE	NFA	FeeGrid	Fees	NFA fee payable to the National Futures Association
NFA FEE	Client	FeeGrid	Fees	NFA fee passed onto the client

neral			Properties		
Type:	NFA FEE		X		
Role:	Client ~		Key		
PnL Category:			Amortization net of interests		
			Exclude from EIR		
Include:	Pricing		FeeDate		
	NFA Fee		FeeEndDate		
Comments:			FeeKnownDate		
			FeeStartDate		
			MarginCall.Cateend		
de fee parame	ters		UseFeeDiscountRate		
Fee Offse	t: 0 Cal		XVA Desk		
Product	s: ALL		ETD		
efault Calculato	r: FeeGrid	~	Inventory Bucket: NFA V		
Preference	s: Accounting Allocation		🔀 Duplicate Transfer		
			Margin: Never V ProcessingOrg:		
	✓ Transfer Settlement Amount				



Margin - For all POs one can define whether to generate Margin in Account level or Always or Never

ProcessingOrg - when configuring this, it will enables to select certain POs that do not follow the same Margin selection which is selected all POs in "Margin" field and the value which is select on "PO Margin" will be considered for these POs.

PO Margin - This Option is applicable for Specific PO which is mentioned on the field "ProcessingOrg" to enable and select option to generate Margin in Account level or Always or Never.

16.3 Fee Grid

Configuration > Fees, Haircuts & Margin Calls > Fee Grid

The following Fee Grid configurations are recommended

16.3.1 Client Commission Example

COMMISSION

Attribute: TRADE_DATE_TYPE = SETTLE DATE

Trade Fee Grid Billi	ng Grid Browse					
Grid Id		44644		Round Turn		
Processing Org	ALL			WithHoldingTax		
Legal Entity	SA_TEST		Role	Client	•	
Fee Туре	COMMISSION	•	SD Filter			
Valid from						
Exchange	ALL	🛃 Fee Grid	Attributes	Window		8
Products	edFlows,FutureSwap	Name			Value	
Security Fee Details Amount		RELATED_FE RelatedFeeC RelatedFeeR TRADE_DATE ZeroAmount	E heckRole ecomputeDa E_TYPE	68	SETTLE DATE	
Description Co	mmission					
Min Amount. 0	M					
		Anniv	Refre	sh ClearAll		Cancel

16.3.2 Counterparty Fees Example

EXCHANGE_FEE & CLEARING_FEE

Associated FeeConfigs required (EXCHANGE_FEE & CLEARING_FEE)

- To set exchange, product, formula and rates

Attribute: TRADE_DATE_TYPE = DATE RULE + DateRuleName

- fee settle date will be set by the date rule, typically for End of Month settled fees



ade Fee Grid Biling (Grid Browse								
Grid Id	15	5218		🕅 Ro	und Turn				
Processing Org	ALL			III Wi	thHoldingTax			Fee Grid Attributes V	lindow
Legal Entity	ALL		. Role	e Count	erParty		•		
Eee Turoe	EVOLUTION FEE	_	CD Filter					Name	Value
ree type	EXCHANGE_FEE	.	SD Hitter					AdjustmentRelatedFees	
Valid from			Valid to					DateRuleName	BILLING SETTLEMENT
							_	FEE_PAYREC	
Exchange	ALL	.						FeeCurrency	
			_					RELATED_FEE	
Products	G.Futures,G.Option		. Ccy	ANY				RelatedFeeCheckRole	
			- 		1			RelatedFeeRecomputeDat	e
Security			. Lag	0	Bus 👻	NO_CHANGE	-	TRADE_DATE_TYPE	DATE RULE
Fee Details								ZeroAmount	false
Amount	0				At	tributes			
Description EXC	CHANGE_FEE								
		•							

16.3.3 Client Fees (Copied from the Counterparty) Example

EXCHANGE FEE & CLEARING FEE

No FeeConfigs required, as taken from the Counterparty FeeConfig (above) Attributes

- RELATED_FEE = Fee Type to copy
- RelatedFeeCheckRole = false, allows to copy from a different role (from Counterparty to Client)
- RelatedFeeRecomputeDate = true, tells the system to rework the fee dates after the copy
- TRADE_DATE_TYPE = TRADE DATE, changing from the End of Month (CtPty) to Daily (Client)

Trade Fee Grid Billi	ng Grid Browse						
Grid Id		44693		R	ound Turn /ithHoldingTax		
Processing Org	ALL				-		
Legal Entity	SA_TEST		Role Client				
Fee Туре	EXCHANGE FEE	•	SD Filter				
Valid from			<u> </u>				
Exchange	ALL	🥖 Fee G	irid Attribu	tes W	indow		×
Products	ALL	Name			Value		
Security Fee Details		RELATED RelatedFe RelatedFe	_FEE eeCheckRole eeRecompute	eDate	EXCHANGE_FEE false true		
Amount	-1	TRADE_D ZeroAmo	ATE_TYPE unt		SETTLE DATE true		
Description Exc	tion Exchange Fee						
Min Amount. 0	Max .						

16.3.4 Recommended Fee Grids

Fee Туре	Grid Type	Legal Entity	Role	Attributes	Calculator	SD Filte r
COMMISSION	Trad e Fee	One per clearing client LE	Client	TRADE_DATE_TYPE = SETTLE DATE ZeroAmount = true	FeeConfig	



Fee Туре	Grid Type	Legal Entity	Role	Attributes	Calculator	SD Filte r
EXCHANGE_FEE	Trad e Fee	ALL	Counterparty	DateRuleName = BILLING SETTLEMENT TRADE_DATE_TYPE = DATE RULE ZeroAmount = true	FeeConfig	
EXCHANGE FEE	Trad e Fee	One per clearing client LE	Client	RELATED_FEE = EXCHANGE_FEE RelatedFeeCheckRole = false RelatedFeeRecomputeDat e = true TRADE_DATE_TYPE = SETTLE DATE	FeePercentag e @ -100	
CLEARING_FEE	Trad e Fee	ALL	Counterparty	DateRuleName = BILLING SETTLEMENT TRADE_DATE_TYPE = DATE RULE ZeroAmount = true	FeeConfig	
CLEARING FEE	Trad e Fee	One per clearing client LE	Client	RELATED_FEE = CLEARING_FEE RelatedFeeCheckRole = false RelatedFeeRecomputeDat e = true TRADE_DATE_TYPE = SETTLE DATE	FeePercentag e @ -100	
EXECUTION_FEE	Trad e Fee	One per Executin g Broker LE	ExecutingBroke r	DateRuleName = BILLING SETTLEMENT TRADE_DATE_TYPE = DATE RULE ZeroAmount = true	FeeConfig	
EXECUTION FEE	Trad e Fee	One per clearing client LE	Client	RELATED_FEE = EXECUTION_FEE RelatedFeeCheckRole = false	FeePercentag e @ -100	



Fee Туре	Grid Type	Legal Entity	Role	Attributes	Calculator	SD Filte r
				RelatedFeeRecomputeDat e = true		
				TRADE_DATE_TYPE = SETTLE DATE		
EXECUTION BROKERAGE	Billin g Fee	One per Give up Clearing Broker	Counterparty		FeeGrid	Fees
FLOOR_BROKERAG E			Counterparty		FeeGrid	Fees
FLOOR BROKERAGE			Client		FeeGrid	Fees



16.4 Fee Config

Configuration > Fees, Haircuts & Margin Calls > Fee Configuration

Example 1

COMMISSION for All Clients for Exchange = Eurex

🔀 Fee Config									
🐬 🕒 😫 🖶 👘 E	P 💀								
Edit Browse									
References		Filtering		ö -	Formula				
Config ID	26002	Filter Catagory	Client Comm		1 - L A 44		_		
Name	All Clients Eurex Commi	Filter Category	Client Comm		Lag. Add 2	Car X Delea	2		
Config Type	Trade Fee	Filters	A11		Min Amt	Max Amt	Min Dave	Max Dave	Formula
Rule Type	Volume	Legal Enuty	ALL		Pill And	Pilox Allin	1-iii Daya	Indx Doys	
Scale By	Quantity	Role	Client			0	000	18000	1.1°Quantity
Range by Tenor		гее туре	COMMISSION						
Range by ResidualM	at 📃	Exchange	EUREX						
Tiered		Product Type							
Event Type	Trade	SD Filter							
Fee Currency		Future contract							
Day Count		FutureOption contract							
Effective From		ETO contract							
Effective To		Contract group							
Description		Attributes	l	+ x					
Rebate		1							
🖩 Rebate									

For subsets of clients, SD Filter is required

Example 2

EXCHANGE_FEE for All Counterparty for a specific ETO contracts

🔀 Fee Config			Example	• 1						
Fdit Browse	2 🔹									
References	21608	Filtering	\$	•	Formula					
Name	Eurex LHA, ROY, EXCH	Filter Category	Manual Fees		📮 Add	🥖 Edit 🛛 🙀 Dele	ete			
Config Type	Trade Fee	Legal Entity	ALL		Min Amt	Max Amt	Min Days	Max Days	Formula	Cal
Scale By	Quantity	Role	CounterParty			0	∞ 0	18000	-0.05*Quantity	
Range by Tenor		Fee Type Exchange	EXCHANGE_FEE	_						
Range by ResidualMat Tiered		Exchange Category								
Event Type	Trade	Future contract FutureOption contract		_						
Fee Currency Day Count		ETO contract	XEUR-ROY-O/EUREX,>							
Effective From		Contract group		_						
Effective To	Lielended via TEM Teter	Attributes	4	×						
Description	opioaded via IPM Inter									
Rebate										



16.5 Advanced Fee Methodology – Overall Minimum Total Fee

In addition to standard fees, an Overall Minimum fee can be calculated.

The system will check for any other additional fees that have been applied to that Legal Entity and check if the Overall Minimum Total has been exceeded.

If not, then the Fee Type (COMMISSION) is recalculated so the Overall Minimum Total is met.

Use Fee Config formula Variables – 'RelatedFeesAmount' to define the formula & rate of the Overall Minimum Fee.

Use Fee Grid attribute 'AdjustmentRelatedFees' > fee types, comma separated

E.g. AdjustmentRelatedFees = EXCHANGE FEE, CLEARING FEE

If empty, then no adjustment needed

Calculation logic example:

Applicable fees for this trade are COMMISSION (client), EXCHANGE_FEE (counterparty), EXCHANGE FEE (client – copied from EXCHANGE_FEE)

Fee config COMMISSION (client)

- 3.10 * Quantity
- Overall Minimum Total = 3.50 * Quantity
- Formula would be
 - Max(3.10*Quantity + RelatedFeesAmount, 3.50*Quantity) RelatedFeesAmount

Fee config EXCHANGE_FEE (counterparty)

• 0.20 * Quantity

16.6 NFA Fees

Make sure that NFA is added to the domain "feeDefinitionAttributes.ETD.InventoryBuket.

urucoc Unloce you nood to adut it's cator to stay in	Urotoctod Viow	Looplo Editio			
🛃 Domain Values				_	×
🔗 Reload 📓 Save 🦏 Save All 🛛 🕸 Constraints Setup					0
Q- commissions	1 of 3 🛇 🗸 Valu <u>e</u>				
e-B feeDefinitionAttributes.ETD.InventoryBucket	~	Name:	reeDefinitionAttributes.ETD.InventoryBucket		
- 🐓 Commissions		Value:	NFA		
- Fees		Commont			
		<u>c</u> omment.			

Fee definition for Client



🛃 Fee Definition

General			Properties
Туре:	NFA FEE		X
Role:	Client ~		Кеу
PnL Category:			Exclude from EIR
5 /			FeeDate
Include:	Pricing		FeeEndDate
			FeeKnownDate
Comments:			FeeStartDate
			MarginCall.Cateend
Trade fee parame	ters		
Fee Offse	et: 0 Cal		
Product	s: ALL		ETD
Default Calculato	r: FeeGrid	\sim	Inventory Bucket: NFA
Preference	s: 🔽 Accounting 🗌 Allocation		🗙 Duplicate Transfer
	✓ Transfer Settlement Amount		Margin: Never

Fee definition for Counterparty

Fee Definition		
General		Properties
Туре:	NFA_FEE	_
Role:	CounterParty ~	Кеу
PnL Category:		Exclude from EIR
		FeeDate
Include:	✓ Pricing	FeeEndDate
		FeeKnownDate
Comments:		FeeStartDate
		MarginCall.Cateend
Trade fee parame	ters	_
		ETD
Product	S: ALL	
Default Calculate	r: FeeGrid V	Inventory Bucket: NFA ~
Preference	s: 🗹 Accounting 🗌 Allocation	🔀 Duplicate Transfer
	Transfer Settlement Amount	Margin: Never \vee

🔏 Fee Set Up

- 0

Fee Config Fee Gr	rid Billing Grid Brows	e															
	a 🖬 🖬 🖬 🕫	bi	Description	¹ Processing Org	Legal Entity	Role	SD Filter	Currency	Config Type	Event Type	Fee Type	Fee Amount	Calculator	Rule Type	Rebate Type	Effective From	Effective To
			78,762 Clearing fee	ALL	CLIENT 3 STD	Client		ANY	Trade Fee Grid	CLEARING FEE	CLEARING FEE		-100 FeePercentage				
ProcessingOrg	ALL		105,759 Clearing fee	ALL	CLIENT 4 STD NON	Client		ANY	Trade Fee Grid	CLEARING FEE	CLEARING FEE		-100 FeePercentage				
Legal Entity	ALL		77,265 Clearing fee	ALL	12345-A	Client		ANY	Trade Fee Grid	CLEARING FEE	CLEARING FEE		-100 FeePercentage				
Role	ALL		77,262 Clearing fee	ALL	CLIENT 1	Client		ANY	Trade Fee Grid	CLEARING FEE	CLEARING FEE		-100 FeePercentage				
Grid/Contig Type	ALL		73,769 CLEARING_FEE	ALL	ALL	CounterParty		ANY	Trade Fee Grid	CLEARING_FEE	CLEARING_FEE		0 FeeConfig				
Currency			74,259 CLEARING_FEE,XEU	. ALL	ALL	CounterParty		ANY	Trade Fee Config	Trade	CLEARING_FEE			Volume		07/12/2017	
Fee Type			73,766 COMMISSIONS	ALL	CLIENT 1	Client		ANY	Trade Fee Grid	COMMISSION	COMMISSION		0 FeeConfig				
Event Type			105,757 COMMISSIONs	ALL	CLIENT 4 STD NON	Client		ANY	Trade Fee Grid	COMMISSION	COMMISSION		0 FeeConfig				
SD Filter			76,281 COMMISSIONs	ALL	12345-A	Client		ANY	Trade Fee Grid	COMMISSION	COMMISSION		0 FeeConfig				
Account			78,268 COMMISSIONS	ALL	CLIENT 3 STD	Client		ANY	Trade Fee Grid	COMMISSION	COMMISSION		0 FeeConfig				
Security	<u>u</u>		78,761 Exchange fee	ALL	CLIENT 3 STD	Client		ANY	Trade Fee Grid	EXCHANGE FEE	EXCHANGE FEE		-100 FeePercentage				
WithHoldingTax			105,758 Exchange fee	ALL	CLIENT 4 STD NON	Client		ANY	Trade Fee Grid	EXCHANGE FEE	EXCHANGE FEE		-100 FeePercentage				
Active On	16/01/2020		73,770 Exchange fee	ALL	CLIENT 1	Client		ANY	Trade Fee Grid	EXCHANGE FEE	EXCHANGE FEE		-100 FeePercentage				
Calculator	ALL		76,285 Exchange fee	ALL	12345-A	Client		ANY	Trade Fee Grid	EXCHANGE FEE	EXCHANGE FEE		-100 FeePercentage				
Rule Type			73,771 EXCHANGE_FEE	ALL	ALL	CounterParty		ANY	Trade Fee Grid	EXCHANGE_FEE	EXCHANGE_FEE		0 FeeConfig				
Rebate Type			74,257 EXCHANGE_FEE,XEU.	ALL	ALL	CounterParty		ANY	Trade Fee Config	Trade	EXCHANGE_FEE			Volume		05/10/2017	
			72 767 Eas casha far Com	ALL	AU	Client	_	ANV	Trada Eso Cosfig	Trado	COMMISSION	_		Volumo	Dofault	_	
			104,768 NFA FEE	ALL	CLIENT 3 STD	Client		ANY	Trade Fee Config	Trade	NFA FEE			Volume		07/12/2017	
			104,771 NFA FEE	ALL	CLIENT 3 STD	Client		ANY	Trade Fee Grid	NFA FEE	NFA FEE		0 FeeConfig				
			104,772 NFA_FEE	ALL	NEWEDGE	CounterParty		ANY	Trade Fee Grid	NFA_FEE	NFA_FEE		-100 FeePercentage				

 \sim

Above are the feeGrid, FeeConfig required to auto apply NFA fees in trades.



🥖 Fee Set Up									-	٥	Х
🗊 O 🐿 🖬 🖬 🖬											0
Fee Config Fee Grid	Billing Grid Browse										
References		Filtering	ō -	Formula							
Config ID Name	104768 NFA FEE	Filter Category		🚽 Add 🥖 Edit 😠 Delete							
Config Type Rule Type	Trade Fee Volume	ProcessingOrg Legal Entity	ALL CLIENT 3 STD	Min Amt	Max Amt	Min Days	Max Days	Formula	Calc Unit		
Scale By Range by Tenor	Quantity	Role Fee Type	Client NFA FEE		U I	20	18000	1-0.01-Quantity			0
Tiered	Trade	Exchange Product Type	EUREX G.Futures, G.Listed								
Fee Currency Day Count		Security ID Book									
Effective From Effective To	07/12/2017	Book Attr Currency									
Description	NFA FEE	Fee Date SD Filter									
III Rebate		Attributes	ų x								

Setup Fee Config for role "Client" with Formula.

🥖 Fee Set Up			- 🗆 X
3 O 😫 🖬 🖷 😪 📭			
Fee Config Fee Grid Billing Grid Browse			
General			
Id	104771		
ProcessingOrg	ALL		
Legal Entity	CLIENT 3 ST	D	
Role	Client		
Fee Type	NFA FEE		
Round Turn			
WithHoldingTax			
Exchange	ALL		
Products	G.Listed Deri	vatives, G.Futures, G.Options	
Security			
Currency	ANY		
SD Filter			
Lag	0D Bus NO_0	CHANGE	
Valid From			
Valid To		🛛 🛃 Attributes Window	×
			_
		🔅 SetUp 🝷 🙀	-
Fee Value Calculation		Name	Value
Amount	0	Nume	Volue
Description	NFA FEE	TRADE_DATE_TYPE	TRADE DATE
Min Amount	0	ZeroAmount	Taise
Max Amount	0		
Calculator	FeeContin	Apply	Cancel
Attributes	2 Attributes	-	
	Read O Pending Authorization		Caus All EQ Caus As Now To Dala

Setup FeeGrid for role "Client"



			-7	L L	1.			- 9 .	
Fee Set Up							-		×
9 🖬 🖶 🎼 👯 🌇									
Config Fee Grid Billing Grid	id Browse								
eral									
t			1047	72					
rocessingOrg			ALL						
agal Entity			NEW	EDGE					
ole			Cour	nterParty					
e Type			NFA	FEE					
und Turn									
ithHoldingTax									
change			ALL						
oducts			G.Lis	ted Derivatives,	G.Futures, G.Options				
curity									
irrency			ANY						
Filter									
p			OD B	us NO_CHANGE					
alid From					1				
alid To					Attributes Window				- 2
					A Callin - A				
					Setup + 🖂			_	
					Name	Value			
					RELATED_FEE	NFA FEE			
/alue Calculation					RelatedFeeCheckRole	false			
oust			-100		RelatedFeeRecomputeDate	true			
scription			-100	CCC.	TRADE_DATE_TYPE	SETTLE DATE		_	
scription			NFA,	FEE	ZeroAmount	true			
n Amount			0						
ax Amount			0 EeeF	Percentage					
tributor			5.48	ributos					
uibutes			<u>3 A</u>	induces	Apply			Cance	ol
								Curice	-
									-

Setup FeeGrid for role "Counterparty" and link the Client Fee Definition Type in Attributes RELATED_FEE field.

Sample NFA fees

1	Back Office Window for Trade 81057	2					
4	BO Trade Browser • 😠 😿 🍇 BO	Trade Browser	(81057) ×				
Trad	le Id ID 🗸 81057 🗮 🙀	22 8	• SDI Transfers M	Messages Postings Cl	REs Tasks Diary		
Tr	ansfers						
R	eport Data View Export Wind	ow 🖪 🗔 6	i.				
	Transfer_id XferAttributes.MarginCall	Transfer T	Xfer Product Type	Transfer Amount	Xfer Other Amount	SettleCurrency	Xfer Pay/Rec
100	81322 37832	CLEARING FEE	FutureBond	2,099.30	0.00	EUR	RECEIVE
in	81321 28316	CLEARING_FEE	FutureBond	(2,099.30)	0.00	EUR	PAY
13	81324 37832	COMMISSION	FutureBond	1,799.40	0.00	EUR	RECEIVE
	81320 37832	EXCHANGE FEE	FutureBond	1,499.50	0.00	EUR	RECEIVE
	81325 28316	EXCHENCE FEE	Pataresona	(1,499.50)	0.00	EUR	PAT
	81323 37832	NFA FEE	FutureBond	29.99	0.00	EUR	RECEIVE
	81319 28316	NFA_FEE	FutureBond	(29,99)	0.00	EUR	PAY

16.7 Automatic Fees Override

When viewing automatic fees, you can override the fee amount.

Select an automatic fee and enter the modified amount in the Amount field. Then click Modify.

The 'Manual Amount' column will appear checked.

To prevent the fee from being automatically recomputed upon saving the trade, clear the Override column. Save the trade.



16.8 Check Fees Workflow Rule

Workflow rule 'ETDCheckFees' will block a trade in the workflow and raise a task station exception when one of the Legal Entities on the trade doesn't have at least one fee generated.

To control this workflow the following are required

Domain Value: ETD.Fee Roles

- tells the system which LE to check for fees
- default settings are



Legal Entity Attribute

ETD.Allow No Fees <true/false>

If this LE attribute is missing or 'false' and the trade has no fees for this LE, then the trade will be blocked If this LE attribute is 'true' and the trade has no fees for this LE, then the trade will NOT be blocked

Example #1

Counterparty LE has ETD.Allow No Fees = false

Legal Entity		UBS CTPTY			(449)	Role	ALL	
Proces	sing Org	ALL		•				
Attri	bute Type	ETD.Allo	w No Fees	•		Value	e faise	
Id	Process	ing Org	Legal Entity		Role		Attribute Type /	Attribute Value
9	104 ALL		LIBS CTPTY		ALL		ETD. Allow No Fees	false

Trade entered and Trade Fees shows fees only for the Client, none for the Counterparty



*	1000		-		_	_				-
Future	Ente	A Trade Fees	Details							
5ave										
Don't Solve		Тур	AMOUNT	•	PAY	-		Fee Date	05/04/2017	7
BANK ALPHA			Consideration and the second							
05/04/2017		Amount	01	0	FUR	- 1		Start Date	05/04/2017	7
BA001_A (8904)			dia tan	-				-		
UBS CTPTY		Manual J	Imount	With	Override			End Date	05/04/2017	<i>r</i>
UBS Clients (8813)	1.1	CTT IL DOCALCO					100	and College	-	
		Method	NONE		•	2		egai cruity	L	
							K	own Date		
EUREX		Input		0.00	Calc		100	o mi buib	-	
EUR				in second and			De	scription		
XEUR-FDAX-F		Role	CounterPar	ty .						
	1.1				- 13					
Mar 18	- 10	No. Concerne			-		1.7		-	
BUY	1.0	Genera	10	Add	Mo	odify	Rei	nove	Automat	DC F
70										
11225.00		Type	Date	Start Dat	te End	Date	Currency	Amount	Legal Entity	P
10207	-	COMMISSION	05/04/2012	7 (05/04/20)	17 05/0	4/2017	R.R.	252.00	84001	iRE
DENDING	1		Seate days	lasta des.	an lanta	10000				-
ALTHOUSE										
- seriest.										

Trade is blocked as PENDING

Task Station exception raised

AUTHORISE	BANK ALPHA	No fees found for UBS CTPTY Role=CounterParty/[ETDCheckFees]	05/04/17 14:25:41.116 o'clock BST	PSEventTrade	PENDING_TRADE	UBS CTPTY

Example #2

Counterparty LE has ETD.Allow No Fees = true

Attribute Type Attribute Value ETD.Allow No Fees true

Now allow the trade to go to VERIFED even though no Counterparty fees



	-							-
Future 4	🔀 Trade Fees	Details						
Price								1
Save		·						
Don't Solve	Туре	AMOUNT	- F	PAY 👻		Fee Date	05/04/2017	ł
BANK ALPHA								
05/04/2017	Amount		0 F			Start Date	05/04/2017	t
BA001_A (8904)								
UBS CTPTY	Manual A	Amount	With Ov	erride		End Date	05/04/2017	1
UBS Clients (8813)							-	
	Mothod	NONE			L	egal Entity		_
	Metilou	NONE						
EUREX	Input		0.00	Calc	K	iown Date		
EUR	11par	L			De	scription		
XEUR-FDAX-F	Role	CounterPart	v 🚽			•		
			· · ·					
Mar 18								
Buy	Genera	te	Add	Modify	Rei	nove	Automati	ic
80								
3,333.00	1							
25	Туре	Date	Start Date	End Date	Currency	Amount	Legal Entity	
10207	COMMISSION	05/04/2017	05/04/2017	05/04/2017	EUR	288.00	BA001	
/ERIFIED								
AMEND	1							
14:08:00	1							

16.9 Static Data Filters

Filters required to suppress the specific Fee Grid being triggered by the AutomaticFees workflow rule for the following

- 'Closeout' trade for an Option exercise, assignment or expiry
- 'Closeout' trade for a Futures expiry
- 'Closeout' trade used in the Corporate Action process to close the old trades, which are replaced by the new transformed trades
- Internal "cross" trades

SD Filters needed, see screenshots on configuration details

• NoFeesOnCashORPhysicalExCorpAction

Name	NoFeesO	nCashORPhysica	lExCorpAction	
External Ref.				
Comment				
Groups	ANY			
Criteria	a			
Attribute		Criteria		Filter Value(s)
IN Static Data F	ilter	ALL TN	Add	NoFeesOnCashORPhysicalEx.NoFeesOnCorpActionTrades.NoFeesOnLiquidationTrade

• NoFeesOnCashORPhysicalEx



Name	NoFeesOnCash	ORPhysicalEx		
External Ref.				
Comment				
Groups	ANY			
Criteria	a			
Attribute		Criteria		Filter Value(s)
IN Static Data F	Filter	ALL_IN	Add	ExercisedOptionNULL,NoFeeInternal,NoFeesOnLiquidationTrade

• NoFeesOnCorpActionTrades

Name	NoFeesOnCorpActionTrades							
External Ref.								
Comment								
Groups	ANY							
Criteria	a							
Attribute		Criteria		Filter Value(s)				
EVWORD Trac	eClassification	V NOT IN	Add	ASSIMILATION				

• NoFeesOnLiquidationTrade

Name NoFeesOpl iguidationT	rade		
Name Nor eeson Eigilia donn	Tauc		
External Ref.			
Comment			
Groups ANY			
Criteria			
Attribute	Criteria		Filter Value(s)
EYWORD TerminationType	V NOT IN	Add	CloseOut

• ExercisedOptionNULL

Name	ExercisedOptionNULL			
External Ref.				
Comment				
Groups	ANY			
🏹 Criteria	a			
Attribute		Criteria		Filter Value(s)
EYWORD Ever	rcisedOption	TS NULL	1	

• NoFeeInternal



Static Data Filter Window [150008/coreclearing/]									
Name	Name NoFeeInternal								
External Ref.									
Comment									
Groups	ANY								
Criteria	a								
Attribute		Criteria	Filter Value(s)						
KEYWORD.Inte	ernal	✓ NOT_LIKE	true						

16.10 Billing Date Rule

Example End of Month billing rule

Name	BILLING SETTLEMENT	Type RELATIVE
Day	0 Add Days 1	WeekDay NONE
Month	JAN 👻	Rank NONE
Sele	ect All UnSelect All	Date Roll END_MONTH
Jan Apr Jul Oct	Feb Mar May Jun Add Relative Months 0 Aug Sep Nov Dec	 Bus Cal Bus Days Holidays EUR Check Holiday
Rela Descriț	ative BILLING PERIOD	8005
From Date	Generate	

16.11 Trade + Fees Examples

Example of set-up and results

Trade with

- Client Commission, via FeeConfig
- Client Exchange Fees, via RELATED_FEE from CounterParty, with fee date = settle date (05/10/2016)
- Counterparty Fee, via FeeConfig, with fee date = end of month (01/11/2016)



-														
Find Property	1	Trade Fees	Details											
Strategy Name	Future													
Price	Price	Type			v -	F	ee Date	06/10/2016						
Save	Save	lithe	ADJUJTINE		u •		ce Dute	00/10/2010						
Solve	Don't Solve	Amount		0 EU	R 🔻	Sta	art Date	06/10/2016						
Book	FCM1			-		-	ad Data	0014012040						
Trade Date	05/10/2016	Manual Ar	nount	With Over	ride	E	nd Date	06/10/2016						
Client Account	ABC STD 001 (6317)					Leg	al Entity							
Counterparty	EUREX CLEARING	Method	NONE	•	?				1					
Counterparty Account	EUREX A1 (6309)	Input		0.00	alc	Knov	vn Date							
Executing Broker		input				Desc	ription							
Product ID		Role	CounterParty	-										
Exchange	EUREX													
Settle Ccy	EUR	Generat		td bt	Modify	Remo	ve	Automatic Fee	•					
Contract	XEUR-1COF-F	Generat			mouny			Automatici ee	J					
SVN		Tree	Data	Charle Date	End Date	0	A	Level Catthe	Devillage	Kasun Data	Marken d	Transist	Colored I.d.	Dala
Contract Date	Nov 16	COMMISSION	05/10/2016	05/10/2016	05/10/2016	currency	Amount	ABC 122	hay/Kec	Known Date	FooOrid	Input	external tu	4 Client
Buy/Sell	Buy	EXCHANGE FEE	05/10/2016	05/10/2016	05/10/2016	FUR	1.0	0 ABC123	REC		FeeGrid	0	1350	6 Client
Quantity	12	EXCHANGE FEE	01/11/2016	01/11/2016	01/11/2016	EUR	-1.8	EUREX CLEARING	PAY		FeeGrid	0	1550	8 CounterParty
Price	25.0000							1		1				
Contract Size	100													
Trade Id	52901													

Client COMMISSION FeeConfig

/										
🛃 Fee Config	Counterparty Fee	and the second section								
📮 O 😫 🖶 👘 I	£ 💀									
Edit Browse										
References		Filtering	*	5 - 1	Formula					
Config ID	22793			-	1 A					
Name	ALL Eurex Commission	Filter Category	Client Comm		📑 🖓 Add	Edit Ly	Delete			
Config Type	Trade Fee	Filters			Aller Arest		Mary Arek	Mar Davia	Mau Davia	Consula
Rule Type	Volume	Legal Entity	ALL		MITAIL		Max Antic	Min Days	Max Days	Formula
Scale By	Quantity	Role	Client					co ()	18000	0.4*Quantity
Range by Tenor		Fee Type	COMMISSION							
Range by ResidualM	lat 🕅	Exchange								
Tiered		Product Type								
Event Type	Trade	SD Filter								
Event type	Houe	Future contract								
Pee Currency		FutureOption contra	ct							
Day Count		ETO contract								
Effective From		Contract group								
Effective To										
Description		Attributes	4	×						
Rebate										
E Dobata	[m]	-								

Trade Quantity = 12 @ 0.4 = 4.8, to 'REC' receive from the client

Counterparty EXCHANGE_FEE FeeConfig (replicating the Eurex Fee Structure)

Fee Config	F0 =1							
Edit Browse	E. E.S							
References		Filtering	ö-	Formula				
Config ID Name	26004 XEUR_1COF-F	Filter Category	Manual Fees	📮 Add 🥖 i	Edit 🙀 Delete			
Config Type Rule Type	Trade Fee Volume	Legal Entity	ALL	Min Amt	Max Amt	Min Days	Max Days	Formula
Scale By	Quantity	Role Fee Type	CounterParty EXCHANGE_FEE		0 2,000	2,000 0	18000 18000	-0.15*Quantity -0.05*Ouantity
Range by Tenor Range by Residua	Mat 📃	Exchange Exchange Category	_					
Tiered Event Type	Trade	Future contract	XEUR-1COF-F/EUREX					
Fee Currency		ETO contract	ct					
Effective From	19/11/2014	Contract group						
Effective To Description	Set-up manually	Attributes	L# L×					
Rebate		-						
🔳 Rebate								

Trade Quantity = 12 (Tier 1, quantity less than 2000)



Trade Quantity = 12 @ 0.15 = 1.8, to 'PAY' to the Counterparty

Client EXCHANGE FEE

No FeeConfig, Fee Grid with RELATED_FEE to the Counterparty EXCHANGE_FEE

With Calculator = FeePercentage, Amount = -100 to reverse the REC/PAY

rade Fee Grid Billing	Grid Browse			
Grid Id	13506			🕅 Round Turn
Processing Org	ALL			WithHoldingTax
Legal Entity	ABC123		Role	Client -
Fee Type	EXCHANGE FEE	1	SD Filter	NoFeesOnCashORPhysicalExCorpAction
Valid from			Valid to	
Exchange	ALL			
Products	G.ETD		Coy	ANY
Security			Lag	0 Bus • NO_CHANGE
Fee Details				
Amount	-100			Attributes
Description CC	IPY EXCHANGE FEE			
	May Amount 0			Colo Inter ExcRementant

Fee attributes

Name	Value
RELATED_FEE	EXCHANGE_FEE
RelatedFeeCheckRole	false
RelatedFeeRecomputeDate	true
TRADE_DATE_TYPE	SETTLE DATE
ZeroAmount	true

1.8 to REC from Client

For additional information on fee configuration, please refer to the general Calypso Fee User Guide.



ETD Clearing Multi region B2B Trade Support

17.1 Introduction

If a client executes a trade on non-domicile Exchanges, the system generates B2B trades between Domicile PO of Exchange to Non-Domicile PO and to end client.

To transfer this position, we are creating equal B2B trades between the respective POs to reflect the position in the end client A/c.

Position transfer is supported between 2 countries only.

Below is the trade flow which is supported.











17.2 Use Case

We will take the following use case as a base to document this enhancement.

- End Client 'STRATEGY02' is domiciled in UK, onboarded on UK PO: SETCLEAR (ISO country code GB)
- Client executed trade on CME EXCH, domiciled in US connected with Clearing Broker US PO: NETWEST
- Position will be transferred from US PO Netwest to UK PO Set clear using resp Omnibus Accounts (Client & Cpty role Accounts) and then finally to End Client A/c.

Step 1: UK Client executes trade on CME Exchange (i.e. EXCH is domiciled in USA), US PO - NETWEST is the Clearing Broker at CME EXCH.

Step 2: CME EXCH sends the trade message to CB NETWEST.

Config 1: User must enable below Calypso mapping to create Inter-entity trades for the respective module. If this mapping is not added, then B2B trades will not be created. (Currently, we are failing the trade message and not booking the trade to any error A/c if the mapping is missing)

E.g. If the user wants to enable B2B trades for Eurex EXCH then this mapping should be added in Eurex ETD node.



Name:	EurexETD/Translator
Interface Value:	EnableB2B
Calypso Value:	Yes
Reverse Default:	

B2B is currently supported through FCM trade Interface framework only. Interfaces such as EurexETD, UBS, LmeETD, NasdaqETD which are built using the FCM trade interface framework will support B2B. (CME *Clear connect to be checked) - Pricing sheet behavior to be checked. /csv file upload)

Step 3: After the above check, system will look for the resp 'ClearingMemberID' from the trade message (Tag Pty Id : 4) and fetch the resp Clearing Broker PO.

• If memberfirmId is **not** found then create exception 'MemberId not found'. User must fix the config and reprocess the trade message.

Step 4: Post the 'ClearingMemberID' is identified, system will search for 'ClientAccount' from the trade message.

• If 'ClientAccount' is not found then create exception 'ClientAccount not found'. User must fix the config and reprocess the trade message. *Currently, we are not supporting trade booking to error account considering the complexity of the enhancement.



Step 5: If the ClientAccount' is found then identify the Client PO and 'CCPOriginCode' from the A/c.

Here we check the domiciled country of Client PO LE and match it with the domiciled country of EXCH LE.

- If it matches, then it's confirmed that the trade is not 'Interentity', and the trade is booked as a normal trade flow.
- If the country does not match, then it is confirmed that these are 'Interentity Trades' and B2B trade creation is triggered.





- The trade is enriched with keywords:
 - InterEntity = True
 - InterEntityAccRef = <ClientAccountId>
 - InterEntityTradeType = "Child_EndClient" for an end client child trade, "Child_OmniClient for an intermediary client child trade, "Parent" for a parent trade

Step 6: Before booking the B2B trades, system will check Client LE attribute 'TransferEntity'

- If this is set as 'True' then the position is to be transferred via multiple countries i.e. multihopping to transfer it to the end client. (not currently supported)
- If set as 'False' then it is considered that only 2 countries are involved i.e. the Clearing Broker (CB) PO and the End client PO Only option currently supported.



Legal Entity- Version - 1 [17231201/ETDB2BAPL7485/calypso_user]

Utilities H	lelp								
Short Nan	ne STRATEGY0	2		Status	Enabled		\sim		
Full Nan	ne STRATEGY0	1 Pvt Ltd 0002		Role	Clearer				
Pare	ent				Client	,			
Count	try UNITED KING	DOM	~		Counterrart	/			
Inactive As Fr		User caly	/pso_user						
Entered Da	te 18/06/2020	12:55:01	L						
External R	ef Acc-STRATE	GY02		-1					
Holida	ys LON		Non Fin	aı Jancial					
· · · · · · · · · · · · · · · · · · ·			0						
Legal Entity	Attributes Window	v					-		
Q- Search									
Legal Entity	STRATEGY02		→ Rol	e ALL	 ✓ Pro 	cessing Org	ALL	\sim	
Attribute Group		\sim	→ Attribute Typ	e ACCOUNTING	~ 🗲	Value		Ð	Ð
Id Pr	rocessing Org	Legal Entity	Role A	ttribute Group	Attribute Type		Attribu	ite Value	
115771 SE	TCLEAR	STRATEGY02	ALL		ClearingReport	ngCurrency	GBP		
220268 NE	TWEST	STRATEGY02	ALL		ClearingReport	ngCurrency	GBP		
245262 AL	L	STRATEGY02	ALL		ransferEntity		False		_

17.2.1 Logic for 1st Trade

• To identify CPTY A/c:

As this is the 1st trade, CB PO is receiving the trade message from EXCH, thus Exchange A/c with Cpty role will be the Cpty for the 1st trade.

For e.g. In this case, CME EXCH A/c will be the cpty A/c:

Trade message:





1	xr</th <th>al version="1.0" encoding="UTF-8"?></th>	al version="1.0" encoding="UTF-8"?>
2	- <fix< th=""><th><pre>KML xmlns="www.eurexchange.com/technology"></pre></th></fix<>	<pre>KML xmlns="www.eurexchange.com/technology"></pre>
3	E	<trdcaptrpt rptid="171Av" rpttyp="0" th="" transtyp="0" trdhandlinst="0" trdtyp="0" trnsfrr:<=""></trdcaptrpt>
4		<pre><hdr sid="ECAG" snt="2022-06-23T02:34:36.796+00:00" tid="CMEXV"></hdr></pre>
5		<pre><pty id="CMEXV" r="4"></pty></pre>
6		<pty id="CMEXV" r="1"></pty>
7		<pty id="C2C" r="38"></pty>
8		<pre><pty id="SIM001" r="12"></pty></pre>
9		<pty id="CALXVSIM001" r="11"></pty>
0	Ē	<instrmt exer:<="" matdt="" mmy="202311" optat="0" settlmeth="P" strkpx="100" sym="48" th=""></instrmt>
1		<aid altid="500205414" altidsrc="M"></aid>
2	-	
3		<amt amt="0" typ="PREM"></amt>
4		<trdregts ts="2022-06-23T02:34:36.723+00:00" typ="1"></trdregts>
5		<trdregts ts="2022-06-23T02:34:36.738+00:00" typ="2"></trdregts>
6		<trdregts ts="2022-06-23T02:34:36.788+00:00" typ="7"></trdregts>
7		<pre><rptside agrsr:<="" allocind="0" posefct="0" pre="" side="2" trdid="318767307" txt2="1001C2C"></rptside></pre>
8		<trdregts ts="2022-06-23T02:34:36.723+00:00" typ="8"></trdregts>
9		<qty long="20" short="0" typ="TOT"></qty>
0		<qty long="0" short="0" typ="ALC"></qty>
1		<qty long="20" short="0" typ="PA"></qty>
2		<trdrptorddetl ordid="1648000" ordstat="2" ordtyp="2"></trdrptorddetl>
3		<pre><ordqty qty="20"></ordqty></pre>
4	-	
5		<reltdpos id="Q6DAD" src="3"></reltdpos>
6	-	
7	-	
8	└ <td>IXML></td>	IXML>

& Accounts Definition - Authorization mode OFF CME NETWEST / 245258 - version 6

Ac	count Utilities	Reports Process Help		
Ac	count Statements	Attributes Interests Limits Consolidation Translation/Revaluation Clearing Lega	I Entities Browse	
	Account Name	CME NETWEST	tody	
	Processing Org	NETWEST Ccy AUTO V Id 245258		
	Туре	SETTLE V SubType Clearing V Auto/Template Acc		
	External Name	Q Interface Rule Aggregate \vee	Key Value	
			EurexETD_ClientAccount	
	Description		EurexETD_CounterPartyAccount C2C	
	Legal Entity (F2)	CME Role CounterParty ~	EurexETD_Member_ID CMEXV	
		Multi-Owner	ExchangeCategory.EUREX	
	Creation Date	10/10/23 14:24:13 Create by Acc Engine only	JPM_ClientAccount	
		· · · · · · · · · · · · · · · · · · ·	JPM_CounterPartyAccount	

• To identify Client A/c:

As this trade is to be transferred from NETWEST to SETCLEAR, SETCLEAR is the client for NETWEST. Thus, for such Inter-entity trades, we use OMNIBUS A/c's to transfer the position.

Therefore, to identify the Omnibus A/c for the trade, we 1st check the Client PO ISO country code and CCP Origin code.

Based on the origin code, the Omni Client A/c attribute is selected.

- If the CCP Origin code = Client, then refer CB PO LE attribute OMNI_CLIENT_CLNT_XX
- If the CCP Origin code = House, then refer CB PO LE attribute OMNI_CLIENT_HS_XX

where HS stands for 'House' & CLNT stands for 'Client'.

In the Clearing Tab, user defines whether the CCP Origin Code is House or Client from which it identifies whether it's Client or House.





Margining

Accounts Definition - Authorization mode OFF ACC-STRATEGY02 CLIENT / 115778 - version 10									
Account Utilities Reports Process Help									
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Legal Entities Browse									
Account Name ACC-STRATEGY02 CLIENT Custody									
Processing Org SETCLEAR V Ccy AUTO V Id 115778									
Type SETTLE V SubType Clearing V Auto/Template Acc									
External Name ACC-STRATEGY02 Q Interface Rule Aggregate V Key	Value								
EUREXDirect_ClientAccount									
EUREXDirect_CounterPartyAccount									
Legal Entity (F2) STRATEGY02 Role Client V EUREXDirect_Member_ID									
Creation Date Create by Acc Engine only	1001C2C								
Accounts Definition - Authorization mode OFF ACC-STRATEGY02 CLIENT / 115778 - version 10 Account Utilities Reports Process Help									
Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Clearing Legal Entities Brows	se								
Properties									
Base Currency: GBP V Activity Type: Speculator V Origin Code: Client V									

To identify the 'XX' country code, XX stands for the end client PO LE country code.

Thus, in this e.g. we consider CCP Origin code = Client and End Client PO country code is 'GB'

Legal Entity- Version - 13 [17231201/ETDB2BAPL7485/calypso_user]

Utilities Hel	р					
Short Name	SETCLEAR			Status	Enabled	\sim
Full Name Parent	Setclear Technolog	gy and Services P Ltd		Role	Agent Clearer CounterParty	
Country	UNITED KINGDOM	~			ExecutingBroker	
Inactive As Fr		User calypso_user			ProcessingOrg	
Entered Date	21/11/2018	11:28:56				
External Ref			- 1			
Holidays	ECB	O Non Fi	ıaı nancial			

Therefore, the system will refer attribute 'OMNI_CLIENT_CLNT_GB' on Clearing Broker: NETWEST



OMNI UK CLIENT NETWEST BOOK

entity Attributes Win	dow - Version - 1						_	-		×
ntity NETWEST		€	Role	ALL	\sim	Processing	Org ALL		\sim	
oup		~ €	Attribute Type	OMNI_CPTY_CLNT	. ∨ €	V	alue)MNI U	K CPTY N	ETWEST	€
Processing Org	Legal Entity	Role	Attribute Gro	up Attribute 1	Гуре 🗸		Attribute Va	lue		
ALL	NETWEST	ALL		TransferEr	itity_GB		NETWEST,H	KPO,SET	CLEAR	~
ALL	NETWEST	ALL		TimeZone			America/Nev	v_York		
ALL	NETWEST	ALL		OMNI_CPT	Y_CLNT_U	S	OMNI US CP	TY NETW	/EST	
ALL	NETWEST	ALL		OMNI_CPT	Y_CLNT_H	К	OMNI HK CP	TY UKPO		
ALL	NETWEST	ALL		OMNI_CPT	Y_CLNT_G	В	OMNI UK CP	TY NETW	/EST	
ALL	NETWEST	ALL		OMNI_CLIE	NT_CLNT_	HK	OMNI HK CLI	ENT NET	WEST	
ALL	NETWEST	ALL		OMNI_CLIE	NT_CLNT_	GB	OMNI UK CLI	ENT NET	WEST	
ALL	NETWEST	ALL		House Exe	cution Bool	¢ (Global2022			
ALL	NETWEST	ALL		House Clea	aring Book		Global2022			
	ntity Attributes Win tity NETWEST oup Processing Org ALL ALL ALL ALL ALL ALL ALL ALL ALL AL	Intity Attributes Window - Version - 1 Intity NETWEST OUP Processing Org Legal Entity ALL NETWEST	intity Attributes Window - Version - 1	intity Attributes Window - Version - 1	intity Attributes Window - Version - 1 The second	intity Attributes Window - Version - 1 TransferEntity Processing Org Legal Entity Role Attribute Type OMNI_CPTY_CLNT Processing Org Legal Entity Role Attribute Group Attribute Type Processing Org Legal Entity Role Attribute Group Attribute Type A	Entity Attributes Window - Version - 1 This are an analyzed attribute Window - Version - 1 This are an analyzed attribute Type OMNI_CPTY_CLNT ✓ Processing Processing Org Legal Entity Role Attribute Group Attribute Type Processing Org Legal Entity Role Attribute Group Attribute Type Processing Org Legal Entity Role Attribute Group Attribute Type Processing Org Attribute Type Processing Org Attribute Type Attribute Type Processing Org Attribute Type Attribute Type Processing Org Attribute Type Attribute Typ	intity Attributes Window - Version - 1 TransferEntity Processing Org ALL Processing Org Legal Entity Role Attribute Type OMNI_CCPTY_CLNT ✓ Э Value MNI UI Processing Org Legal Entity Role Attribute Group Attribute Type ← Attribute Va ALL NETWEST ALL NETWEST ALL NETWEST ALL OMNI_CCPTY_CLNT_US MIL NETWEST ALL OMNI_CCPTY_CLNT_US MIL NETWEST ALL OMNI_CCPTY_CLNT_HK OMNI US CP ALL NETWEST ALL OMNI_CCPTY_CLNT_HK OMNI US CP ALL NETWEST ALL OMNI_CCPTY_CLNT_HK OMNI US CP ALL NETWEST ALL OMNI_CCPTY_CLNT_HK OMNI UK CP ALL NETWEST ALL House Execution Book Global2022 ALL NETWEST ALL House Clearing Book Global2022	Entity Attributes Window - Version - 1 Thity NETWEST OUP STALL OMNI_CPTY_CLNT → Processing Org ALL Processing Org Legal Entity Role Attribute Type OMNI_CPTY_CLNT → Value JMNI UK CPTY N Processing Org Legal Entity Role Attribute Group Attribute Type Attribute Value JMNI UK CPTY N ALL NETWEST ALL TransferEntity_GB NETWEST,HKPO,SET ALL NETWEST ALL OMNI_CPTY_CLNT_US OMNI US CPTY NETW ALL NETWEST ALL OMNI_CPTY_CLNT_US OMNI US CPTY NETW ALL NETWEST ALL OMNI_CPTY_CLNT_HK OMNI HK CPTY UKPO ALL NETWEST ALL OMNI_CPTY_CLNT_HK OMNI HK CPTY NETW ALL NETWEST ALL OMNI_CLIENT_CLNT_GB OMNI UK CPTY NETW ALL NETWEST ALL OMNI_CLIENT_CLNT_GB OMNI UK CLIENT NET ALL NETWEST ALL HOUSE Execution Book Global2022	initiy Attributes Window - Version - 1 –

Legal Entity- Version - 2 [17231201/ETDB2BAPL7485/calypso_user]

Utilities Hel	р									
Short Name	OMNI UK					Status	Enabled	\sim		
Full Name	OMNI UK					Role	Clearer			
Parent]	Client			
Country	UNITED KINGDOM		\sim							
Inactive As Fr		User	calypso_use	r						
Entered Date	12/06/2023	13:23	3:10							
External Ref										
Holidays	LON			n Finar	ncial					
			0							
Accounts Definitio	on - Authorization mode (OFF OM	NI UK CLIENT NE	TWEST /	/ 24526	54 - versio	n 1		_	>
Account Utilities R	eports Process Help									
Account Statements Att	tributes Interests Limits C	onsolidati	on Translation/R	evaluation	Clear	ing Legal E	ntities Browse			
Account Name	INI UK CLIENT NETWEST					Custod	у			
Processing Org	TWEST	\sim	Ccy AUTO \sim	Id 245	264					
Type SE	TTLE 🗸 SubType Cl	earing	\sim	Auto/	Templa	te Acc	X			
External Name		Q	Interface Rul	e Aggre	gate	\sim	Кеу	Value		☆
Description							CMEEX_CounterPartyAccount CMEEX_Member_ID			 - ^

So, once the client A/c for the 1st trade is identified, the system will book the 1st trade.

Role Client

...

to /10/22 14/27/45

Legal Entity	Client Account	CounterParty Acc	Trade Id	External Reference /	Book	Product Type	Trade Date	Product Description
OMNI UK	OMNI UK CLIENT NETWEST	CME NETWEST	253571	EUREX 167Av	OMNI UK CLIENT NETWEST BOOK	FutureOptionCommodity	Jun 23, 2022 07:34 AM	XCME-48-0/PUT/100.00000/NOV23

Clearing Book

EUREXDirect_ClientAccount

 \sim

Legal Entity (F2) OMNI UK



& XCME-48-O/PUT/100.00000/NOV23 -PO is Netwest Global Investment Se	ervices Ltd (253571) - Version	n · 0 Mod User ·(calvoso user	177221201/ETDR2RAPI 74851	
Trade Back Office FutureOption Analytics Pricing Env. Market Data L	Itilities Help	Trade Attributes		\times
	andes help	🔅 SetUp 🕶 🙀 🕢 🔍	[Editable
Trade Details Fees				_
		Name	value	
CME VERIFIED	Ext Ref ~ EUREX_167Av	BrokedOut	false	^
Rock OMNTUK CLIENT NUX	omplato NONE			.00
	sinplate NONE ~	CCPClearedDatetime	2022-06-23102:34:36.788+00	:00
		CCPRotID	167Av	
Contract Selection		CCPStatus	Cleared	
Exchange CME V Currency USD V Ontion Contract XCME-48-0	Y Futu. Nov 23 Y	ClearedTradeDate	2022-06-23	
		Client	- OMNI UK	
Id Type AU_OTC_E V Value		ClientAccount	 OMNI UK CLIENT NETWEST 	(245
		ContractSymbol	48	
	1	CounterPartyAccount	 CME NETWEST (245258) 	
Option XCME-48-O/PUT/100.00000/NOV23	Show	ExecutionType	Execution	
	Chave	FeeSource	CALYPSO	
Underlying XCME-48-F/AUG24	Snow	FutOpt	OPT	
Trade		InterEntity	Y LOOM CROOM	
Strike 100.00000 100.00000 V		InterEntityClientAccount		
SELL V Quantity 10		NegotiatedCurrency		
		OnenClose	0	
Price 18.00000 Price V AvgP	rice	OrderId	1648000	
PUT V Nominal 400 000		RegCode	01 - Regulated	
		RelatedProductType	ETD	
		ReportType	000	
Market Data Pricer Params Results		ROUND TURN	false	
DIS LME-DF-CurveZero-USD/USD(R)CLOSE 29/09/21 10:30:00.000 o'clock BST		ServiceLevel	 Full Service 	
		TradeSource	EurexETD	
		TradeType	 Regular Trade 	
		13CI imeIndication		~
		201		
			ОК	Cancel

17.2.2 Logic for 2nd Trade

Post the 1st trade is booked; system will now trigger the mirror trade which is equal in all economic parameters.

For Trade 2, we refer the 2nd PO in the sequence i.e. SETCLEAR. To locate the client and cpty for this trade, system will refer to attributes on the SETCLEAR PO.

• To identify CPTY A/c:

Now the trade is being transferred from US to UK entity i.e. NETWEST to SETCLEAR. Thus, US entity will have the counterparty role here.

As mentioned earlier, for such position transfers we use Omnibus Cpty A/c's of the respective country.

Therefore, to identify the Omnibus **Cpty** A/c for the trade, we 1st check the CB PO country code and have noted the CCP Origin code from End Client A/c.

Legal Entity- Version - 4 [17231201/ETDB2BAPL7485/calypso_user]

Utilities Hel	р						
Short Name	NETWEST				Status	Enabled	\sim
Full Name	Netwest Global Inv	estment Servi	ces Ltd		Role		
Parent						Clearer CounterParty	
Country	UNITED STATES		~			ExecutingBroker	
Inactive As Fr		User calypso	user			ProcessingOrg	
Entered Date	04/07/2022	10:54:23					
External Ref							
Holidays	NYC) Financial) Non Finan	ncial			

Based on the origin code, the Omni Cpty A/c attribute is selected.

If the CCP Origin code = Client, then refer End Client PO LE attribute OMNI_CPTY_CLNT_XX


• If the CCP Origin code = House, then refer CB PO LE attribute OMNI_CPTY_HS_XX

where HS stands for 'House' & CLNT stands for 'Client'.

In the Clearing Tab, user defines whether the CCP Origin Code is House or Client from which it identifies whether it's Client or House.

To identify the 'XX' country code, XX stands for the CB PO LE country code.

Thus, in this e.g. we consider CCP Origin code = Client and End Client PO country code is 'US

Therefore, the system will refer attribute 'OMNI_CPTY_CLNT_US on End Client PO: SETCLEAR

al Entity Attributes	Window - Vers	ion - 0					_		×
rch									[
Legal Entity SETCLEAR			Э	Role	ALL \sim	Processing Org	ALL	~	
Group		\sim	Attrib	ute Type	OMNI_CPTY_CLNT ∨ Đ	Value	I US CPTY S	ETCLEAR US	€
Processing Org	Legal Entity	Role	Attribute G	Group	Attribute Type 🗸	Attribute Value	9		,
01 ALL	SETCLEAR	ALL			PCSID	660			
57 ALL	SETCLEAR	ALL			OMNI_CPTY_CLNT_US	OMNI US CPTY	SETCLEAR I	JS	
58 ALL	SETCLEAR	ALL			OMNI_CPTY_CLNT_HK	OMNI HK CPTY	SETCLEAR		
59 ALL	SETCLEAR	ALL			OMNI_CLIENT_CLNT_US	OMNI US CLIEN	IT SETCLEAF	R US	_
50 ALL	SETCLEAR	ALL			OMNI_CLIENT_CLNT_HK	OMNI HK CLIEN	IT SETCLEAR	2	_
D1 ALL	SETCLEAR	ALL			OMNI_CLIENI_CLNI_GB	OMNI UK CLIEN	IT SETCLEAR	ł.	_
Help ame OMNI US ame OMNIBUS US rent Intry UNITED STATES Fr	v	Status Role	Enabled Clearer Client CounterParty	Account Account Account Acc	Utilities Reports Process I Statements Attributes Interests Li count Name OMNI US CPTY SETCLEA	Help imits Consolidation Tr IR US V Ccy	anslation/Reval	uation Clearing [d 245271	Legal En
Entered Date 12/06/2023 13:24:43 External Ref					Type SETTLE V SubT	Type Clearing ~	/	Auto/Template	Acc
lays NYC	Financia	d		Exte	ernal Name	Q	nterface Rule	Aggregate	\sim
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				Legal	Entity (F2) OMNI US		Role Counte	erParty	~ (
				Cr	eation Date 10/10/23 15:34:22	Create by Acc Engine	only	ti-Owner	(
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				Pare	ent Account		Parent Id 0		¢
	al Entity Attributes irch il Entity SETCLEAR e Group Processing Org D1 ALL 77 ALL 78 ALL 79 ALL 79 ALL 77 A	al Entity Attributes Window - Vers	al Entity Attributes Window - Version - 0 rch al Entity SETCLEAR e Group Processing Org Legal Entity Role D1 ALL SETCLEAR ALL STALL SETCLEAR STALL SETCLEAR ALL STALL SETCLEAR STALL SETCLEAR STALL SETCLEAR STALL SETCLEAR ALL STALL SETCLEAR STAL	al Entity Attributes Window - Version - 0	al Entity Attributes Window - Version - 0	al Entity Attributes Window - Version - 0 rrch al Entity SETCLEAR e Group Processing Org Legal Entity Role Attribute Type OMNL_CPTY_CLNT	al Entity Attributes Window - Version - 0 Irch Il Entity SETCLEAR Il Entity SETCLEAR Il Entity SETCLEAR Il I SETCLEAR ALL INTER ALL INT	Al Entity Attributes Window - Version - 0 Trch Inch Inch Inch	al Entity Attributes Window - Version - 0 rch Ichtly SETCLEAR Ichtly SETCLEAR Ichtly SETCLEAR Ichtly SETCLEAR Ichtly SETCLEAR Ichtly Role Attribute Type OMNL_CPTY_CLNT Ichtly SETCLEAR US OMNL US SETCLEAR Ichtly SETC

• To identify Client A/c:

For the 2nd trade, as the position is being transferred from US to UK and end client is based in UK, then the client A/c will be the actual End client A/c.

Thus, Cpty and Client both are identified, and trade can be booked.



Accounts Definition - Authorization mode OFF ACC-STRATEGY02 0	CLIENT / 115778 - versior	n 10	-		
Account Utilities Reports Process Help					
Account Statements Attributes Interests Limits Consolidation Translation/R	Revaluation Clearing Legal	Entities Browse			
	conduction cloaning	STOTICE			
Account Name ACC-STRATEGY02 CLIENT	Custo	ody			
Processing Org SETCLEAR V Ccy AUTO V	Id 115778				
Type SETTLE V SubType Clearing V	Auto/Template Acc	×			
External Name ACC-STRATEGY02 Q Interface Ru	ule Aggregate ~	Кеу	Value		
Description (EUREXDirect_Member_ID			
Description		EurexETD_ClientAccount	1001C2C		
Legal Entity (F2) STRATEGY02 Role C	lient v	EurexETD_CounterPartyAccount			
	Multi Oumen	EurexETD_Member_ID			
Croation Data	j Mulu-Owner		i i		
Logal Entity Cligat Account CounterParty Acc Trade Id External Reference , Rook	Product Tuno	Trado Dato Product Description	Trada Brico, TradoStatus, Buy/Soll		
OMNI UK OMNI UK CLIENT NETWEST CME NETWEST 253571 EUREX_167Av OMNI UK CLIENT	NT NETWEST BOOK FutureOptionCommodi	ty Jun 23, 2022 07:34 AM XCME-48-O/PUT/10	0.00000/NOV23 18.00000 VERIFIED Sell		
Trade Back Office FutureOption Analytics Pricing Env Market Data O	tilities Help	▲ Irade Attributes	Ed		
		Name	Value		
	BrokedOut	false			
Book END CLIENT BOOK Broker Remove Te	CCP CME_CCP				
		CCPClearedDatetime	2022-06-23T02:34:36.788+00:00		
Contract Selection		CCPRptID	167Av		
Exchange CME v Currency USD v Option Contract XCME-48-0	✓ Futu Nov 23 ✓	CCPStatus	Cleared		
	ClearedTradeDate	2022-06-23			
	ClientAccount	ACC-STRATEGY02 CLIENT (11)			
		ContractSymbol	48		
Option XCME-48-O/PUT/100.00000/NOV23	Show	CounterPartyAccount	OMNI US CPTY SETCLEAR US (2.)		
Underlying XCME-48-F/AUG24	Show	FeeSource	CALYPSO		
Trade		FutOpt	OPT		
Strike 100.00000 100.00000 V		InterEntity	Y		
SELL V Quantity 10		InterEntityClientAccount	1001C2C		
	NegotiatedCurrency	USD			
Price 18.00000 Price AvgPr	OpenClose	0			
Nominal 400,000	OrderId	1648000			
		RelatedProductType	ETD		
Market Data Pricer Params Results	ReportType	000			
DIS LME-DF-CurveZero-USD/USD(R)CLOSE 29/09/21 10:30:00.000 o'clock BST	OUND TURN false				
		ServiceLevel	Full Service FurexETD		
		TradeType	▼ Regular Trade		
		13CTimeIndication			

This completes the trade flow for trade transfer between 2 countries.

17.3 ETD Clearing Multi region B2B Trade Support

This is an extension to the B2B trade support feature to support more than 2 POs to transfer the trade to the end client.

If a client is domiciled in Hongkong and has executed trade on CME Exchange, domiciled US. Due to regulatory restrictions, the positions cannot be transferred directly from US to HK, Country route is followed. Positions will be 1st received by the USPO then it will be transferred to the UK PO, then to the SG PO and finally to the HKPO - end client A/c.

Before booking the B2B trades, system checks Client LE attribute 'TransferEntity'.



- If this is set as 'True' then the position is to be transferred via multiple countries i.e. multihopping to transfer it to the end client.
- If set as 'False' then it is considered that only 2 countries are involved i.e. the Clearing Broker (CB) PO and the End client PO

Once the route is identified, logic of suffix / prefix country code is followed.

Below is the trade flow:













17.3.1 Logic for 1st Trade

In this case, 1st PO which is mentioned in the sequence is the country in which the Exchange is located.

So, the logic is defined as cpty for the 1st trade will be the Exchange A/c i.e. CME Exchange A/c.

Now, to locate the client A/c to this 1st trade, system will refer the subsequent PO country code i.e. UKPO in this case, so the country is GB.

Thus, the position will be transferred to the Omnibus A/c of the subsequent PO.

We will be using Omnibus A/c with roles defined as Counterparty and Client to transfer the positions from one PO to another.

Now that GB is the suffix country it is playing the client role, thus, we will be using UK Omnibus A/c with Client role.

Thus, system will look for the attribute OMNI_CLIENT_CLNT_XX where 'XX' will be GB i.e. attribute is OMNI_CLIENT_CLNT_GB. Attribute value is the resp Client Account name. Thus, trade 1 is booked.

17.3.2 Logic for 2nd Trade

Now the position will be transferred from US PO to UK PO,

For the trade 2, we refer the 2nd PO in the sequence i.e. UK PO. To locate the client and cpty for this trade, system will refer to attributes on the UK PO.

OMNI_CLIENT_CLNT_XX & OMNI_CPTY_CLNT_XX

Thus, to locate the cpty A/c, system must refer 2nd PO LE Attribute : OMNI_CPTY_CLNT_XX where XX in this case is prefix PO country code i.e. in this case it is USPO, US

Therefore, system will look for the attribute as OMNI_CPTY_CLNT_US.

For client to be identified, we refer OMNI_CLIENT_CLNT_XX, for XX to be identified we will refer the subsequent PO in the sequence after UK PO, In this case, we have SG PO mentioned after UK PO. So, the domiciled country for SGPO is Singapore with country ISO code as SG.

Therefore, we will look for OMNI_CLIENT_CLNT_SG on UK PO LE attribute. Thus, the Trade 2 is also booked.

Note: This trade sequence is followed until the trade is booked to the end client A/c. Now the position will be transferred from UK PO to SG PO, so the prefix country -Omnibus A/c will be the cpty.

17.3.3 Logic for 3rd Trade

For the trade 3, we refer the 3rd PO in the sequence i.e. SG PO. To locate the client and cpty for this trade, system will refer to attributes on the SG PO.

OMNI_CLIENT_CLNT_XX & OMNI_CPTY_CLNT_XX

For client to be identified, we refer OMNI_CLIENT_CLNT_XX, for XX to be identified we will refer the subsequent PO in the sequence after SG PO, in this case, we have HK PO mentioned after SG PO. So, the domiciled country for HKPO is Hongkong with country ISO code as HK.

Thus, to locate the cpty A/c, system must refer OMNI_CPTY_CLNT_XX where XX in this case will prefix PO country code i.e. in this case it is UKPO, UK



Therefore, system will look for the attribute as OMNI_CPTY_CLNT_UK. Thus, the Trade 3 is also booked.

This trade sequence is followed until the trade is booked to the end client A/c.

17.3.4 Logic for 4th Trade

For the trade 4, we refer the 4th PO in the sequence i.e. HK PO. To locate the client and cpty for this trade, system will refer to attributes on the HK PO.

OMNI_CLIENT_CLNT_XX & OMNI_CPTY_CLNT_XX

Now to identify the client and cpty Ac country codes

For client to be identified, we refer OMNI_CLIENT_CLNT_XX, for XX to be identified we will refer the subsequent PO in the sequence after HK PO.

In this case, we have no PO mentioned after HK PO which indicates that end client is domiciled in this PO country and the client A/c used will be End client A/c.

For the cpty A/c to be identified, we refer the prefix PO updated prior the current PO. In this case, its SGPO mentioned before HKPO. Therefore, we set XX as SG for the cpty a/c attribute OMNI_CPTY_CLNT_XX i.e. attribute is OMNI_CPTY_CLNT_SG.

Now, the client and cpty A/c's have been identified, system will book the Trade 4, and the mirroring process stops here.

17.4 Configuration

Additional mapping: PO LE Shortname sequence.



Appendix – External Data Locations

This section describes how external data locations can be configured.

General Conventions

- All paths are case-sensitive
- All dates are represented in ISO 8601 compact format, yyyyMMDD (e.g. 20160331)

External Data Import



- 1 When some external data is required, the configured external data locations are probed
 - 1a External data locations are iterated in order, jumping to the next one if the file is missing
 - 1b Eventually, the file is found at Location N
- 2 The file is cached in case it is needed in the future. Its origin (Location N) is stored too for audit purposes.
- 3 After processing, the data are stored in DB in different formats:
 - 3a Risk parameters are stored in the CLEARING_MARGIN_DATA table
 - 3b IM calculation log output is stored in the CLEARING_MARGIN_OUTPUT table



- 3c Computed margin numbers are stored as Collateral Exposure P&L Marks
- 3d Contracts are stored in standard Calypso format (X_CONTRACT tables)
- 3e Entities are stored as regular Legal Entities

18.1 External Data Locations

You can specify multiple locations for the external data.

If a location successfully provides a file, subsequent locations are ignored. Only when a location fails to provide a file is the next one probed.

Locations can be asset as file:C:/<path> on Windows platforms or file:/<path> on *nix platforms, and are probed in the following order:

1. Environment property CLEARING_EXTERNAL_DATA_LOCATIONS

You can specify multiple locations in the environment property. The locations are probed from left to right.

Example: CLEARING_EXTERNAL_DATA_LOCATIONS=file:/home/jdoe/MIRROR,file:/home/jdoe/MIRROR2

2. Domain "Clearing.ExternalData.locations"

You can specify multiple locations in the domain. The locations are probed from top to bottom.

Example:

- 💷 Clearing.ExternalData.locations

- 🐓 file:/home/ecorral/Desktop/AWS/MIRROR
 - 1 file:/home/ecorral/Desktop/AWS/MIRROR2
- 3. <user home>/Calypso

The default location is <user home>/Calypso if no other location is specified.

It corresponds to:

- Windows platforms file:C:/Users/<username>/Calypso
- *nix platforms file:/home/<username>/Calypso

18.2 Local Cache Locations

Before being imported into the system, external data are copied to a local cache.

Local cache locations can be set as C:/<path> on Windows platforms or /<path> on *nix platforms, and are probed in the following order:

1. Environment property CLEARING_EXTERNAL_DATA_LOCAL_CACHE

CLEARING_EXTERNAL_DATA_LOCAL_CACHE=/home/jdoe/cache



2. Domain "Clearing.ExternalData.localCache"

Clearing ExternalData.localCache
/home/ecorral/Calypso/CACHE

3. <user home>/Calypso/clearing

It corresponds to:

- Windows platforms /home/<username>/Calypso/clearing
- *nix platforms C:/Users/<username>/Calypso/clearing

18.3 File Naming Conventions

This section describes how the system builds the relative paths to locate external data. These paths are appended to the external data locations described above.

FOW Exchange Files

FOW files are **zipped csv files**, containing only one exchange per file, and stored with the following naming convention.

reference-data/<date>/exchange_<ISOMIC code>_<date>.zip

Risk Arrays

SPAN/PRISMA files are **zipped text files** (one exchange per file) and stored with the following naming convention.

risk-arrays/<date>/<SPAN/PRISMA zip>