



# Nasdaq Calypso

## Clearing Member User Guide

Version Suite 17 and Suite 18

Revision 1.0

February 2024

Approved

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### ***Document History***

Revision	Published	Summary of Changes
1.0	February 2024	First revision for version 18.

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# 1. Overview

This user guide describes the tasks of a typical day at the clearing member when using the Calypso Clearing module:

- Completing the processes of the previous day
- Importing the trades of the current day
- Generating intraday margin calls
- Computing account positions
- Computing fees
- Importing the CCP files
- Running regulatory reporting
- Replicating initial margins

## ***Before you Begin***

You first need to install and configure the Clearing module.

▶ Refer to the *Calypso Clearing Member Setup Guide* for installation and configuration details.

## 2. Daily Tasks

### 2.1 Completing the Processes of the Previous Day

The following tasks need to be performed in order to complete the processes of the previous day :

- Checking that the EOD processes were successfully executed
- Sending the client statements to the clients
- Processing the margin calls

Make sure that the following engines and services are running:

- Exchange Feed Bridge engine
- Import Message engine
- Transfer engine
- Inventory engine
- Message engine
- Sender engine
- Margin Call engine
- Billing engine
- Scheduler engine
- ERS Web Services
- Limits engines

#### 2.1.1 Verifying Scheduled Tasks Execution

You first need to check that the EOD processes of the previous day were successfully executed.

You can view scheduled tasks exceptions in the Task Station.

The screenshot shows a task list at the top with tabs for 'Bridge Messages [2216]', 'Gateway Errors and Warnings [721]', and 'Clearing ST Exceptions [67]'. Below the tabs is a table with columns for 'Date & Time' and 'Task Status'. A blue arrow points to the 'Clearing ST Exceptions' tab. Below the table is a configuration panel for the selected tab. The panel includes a 'Tab Name' field set to 'Clearing ST Exceptions', an 'Event Class' dropdown set to 'Exception', and a list of 'Event Types' including 'EX\_CLEARING\_BO\_MARGIN', 'EX\_CLEARING\_DOWNLOAD', 'EX\_CLEARING\_IMPORT\_MARKET\_DATA', 'EX\_CLEARING\_MARKS', 'EX\_CLEARING\_SETTLEMENT', 'EX\_EOD\_CMF\_MC\_STATEMENT', and 'EX\_CLEARING\_LOAD'. To the right is a 'List of Defined Tabs' with items like 'Trades', 'All Messages', 'All Exceptions', 'MW Messages', 'MW E...', 'Bridge', 'Gateway Errors and Warnings', 'Clearing ST Exceptions', and 'Consent Rejected'. A blue callout box labeled 'PANEL CONFIGURATION' points to the configuration panel.

You can also select the "WARNING" exceptions to monitor warnings that will give you more details about the execution.

Possible errors and solutions include the following:

- Missing CCP files - Make sure that the files are in the right location, and run the scheduled tasks again.
  - ▶ Refer to the *Calypso Clearing Member Setup Guide* for information on the files expected by the scheduled tasks.
- Missing Data, like accounts, margin call contracts, attributes - Define the missing data, and run the scheduled tasks again.
  - ▶ Refer to the *Calypso Clearing Member Setup Guide* for information on configuration requirements.

### 2.1.2 Sending Client Statements

If the client statements were successfully generated, you need to send them to the clients.

▶ See [Generating the Client Statements](#) for details on the client statements generation.

From the Calypso Navigator, navigate to **Reports > Message Reports > Message Report** to view the client statements that have been generated.

Select the message type "CLEARING\_STATEMENT" for the previous day, and load the messages. They should appear in status TO\_BE\_SENT.

MESSAGE_TYPE	Msg Status	Message Legal Entity
CLEARING_STATEMENT	TO_BE_SENT	CUSTOMER_B
CLEARING_STATEMENT	TO_BE_SENT	CUSTOMER_A

- » Right-click the statements you want to send, and choose **Action > SEND**.

The statements will be sent to the clients electronically.

### 2.1.3 Processing Margin Calls

Once the clients receive their statement for the previous day's activity, they can determine if there is a margin deficit in their account which would require the deposit of additional funds. They will contact you (the clearing member) during the day to let you know how they will meet the call: with cash, securities, or a combination of both.

On the clearing member side, margin call trades have been generated for each client by the COLLATERAL\_MANAGEMENT scheduled task for the previous day as part of the EOD process on the IM and VM contracts, and have been posted to the client statements.

These margin call trades are generated by default for the exact amount of the excess or deficit in the currency in which it is reported. The currency is driven by the configuration of the Margin Call contracts for each client.

► See [Computing Margin Calls](#) for details on margin call trade generation.

When you (the clearing member) are contacted by the client with the details of how the margin calls will be met, you can use the Collateral Manager to update the margin call trades according to the client's request.

Clients can choose to meet the margin calls that appear in the statement as follows:

- Scenario 1 - Meet the margin calls with cash for the exact amount and the same currency.
- Scenario 2 - Meet the margin calls with an excess of cash in the same currency (the client may want to keep an excess of cash to avoid daily margin calls).
- Scenario 3 - Meet the margin calls in a different currency.
- Scenario 4 - Meet the margin calls by posting collateral securities (this only applies to IM margin calls).
- Scenario 5 - Meet the margin calls with a combination of cash and collateral securities (this only applies to IM margin calls).

Scenario 1 only requires settling the margin call trades already generated.

The other scenarios require using the Collateral Manager to modify the margin call trades.

The scenarios are detailed below.

### Scenario 1

Meet the margin calls with cash for the exact amount and the same currency.

In this case, you just need to settle the margin calls that have been generated as of the day before. You can do this using the Transfer Report, or the Task Station.

For example, navigate to **Reports > Fees & Settlements > Transfer Report** from the Calypso Navigator.

Set the start and end date to the client statement's date, and select the MarginCall product type, then load the corresponding transfers.

Transfer_id	EventType	Transfer Status	Transfer Type	Transfer Amount	SettleCurrency	Contract Name	Value Date	Payer.Code
16669	PAYMENT	VERIFIED	COLLATERAL	(145,600.00)	USD	Client B VM USD	11/01/2012	CGM LLC
16670	RECEIPT	VERIFIED	COLLATERAL	145,600.00	USD	Client B VM USD	11/01/2012	CLIENT B
17164	RECEIPT	VERIFIED	COLLATERAL	150,700.00	GBP	Client B VM GBP	11/01/2012	CLIENT B
18165	RECEIPT	VERIFIED	COLLATERAL	300,000.00	USD	Client B IM Swaps CME	11/01/2012	CLIENT B
18166	PAYMENT	VERIFIED	COLLATERAL	(300,000.00)	USD	Client B IM Swaps CME	11/01/2012	CGM LLC
18167	RECEIPT	VERIFIED	COLLATERAL	300,000.00	USD	Client A IM Swaps CME	11/01/2012	CLIENT A
18168	PAYMENT	VERIFIED	COLLATERAL	(300,000.00)	USD	Client A IM Swaps CME	11/01/2012	CGM LLC
18169	RECEIPT	VERIFIED	COLLATERAL	226,192.00	USD	Client A VM Base Currency	11/01/2012	CLIENT A
18170	PAYMENT	VERIFIED	COLLATERAL	(226,192.00)	USD	Client A VM Base Currency	11/01/2012	CGM LLC

» Right-click the margin call transfers that you want to settle, and choose **Action > SETTLE**.

### Scenario 2

Meet the margin calls with an excess of cash in the same currency (the client may want to keep an excess of cash to avoid daily margin calls).

From the Calypso Navigator, navigate to **Processing > Collateral Management > Collateral Manager**.

Set the process date to the client statement's date (the previous day), and load the Collateral Manager report template used to run the COLLATERAL\_MANAGER scheduled task.

**Collateral Manager : Clearing-CGM (User: calypso\_user)**

File Margin Call Data View Export Market Data Window Help

Load Price Allocate Optimize Action Config Reconciliation

Margin Call Filter Results

Process Date/Time  
 Process Date 11/01/2012  
 Process time 5:58:35 PM

Value Date/Time  
 Value Date 10/31/2012  
 Value time 5:58:35 PM

Filter  
 ProcessingOrg CGM LLC

Id	Contract Name	Status	Contract Currency	Global Required Mrg
100503	Client A IM Swaps CME	EXECUTED	USD	300,000.00
100504	Client B IM Swaps CME	EXECUTED	USD	300,000.00
100505	Client A VM Base Currency	EXECUTED	USD	452,384.19
100506	Client B VM USD	EXECUTED	USD	-145,600.00
100507	Client B VM GBP	EXECUTED	GBP	150,700.00
100508	Client B VM EUR	VALIDATED	EUR	0.00

Select the contract you want to modify, it will show additional panels at the bottom of the Collateral Manager. Select the Allocation panel to view the actual margin call trade.

101003	Client A IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101004	Client B IM Swaps CME	EXECUTED	AMEND	USD	300,000.00

Results History Forward Notification

Allocation

Direction	Underlying	Type	Description	Value	AllInValue	Currency	FX Rate	Contract
Receive	Cash	Margin	USD	300,000.00	300,000.00	USD	1.00000	USD

Underlyings Allocation Interest Details History Concentration Netted

» Open the Margin Call trade - You can double-click the trade, or right-click the trade and choose **Show > Trade**.

Modify the Principal amount as needed, and save the trade.

The margin call trade is modified accordingly.

101003	Client A IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101004	Client B IM Swaps CME	EXECUTED	AMEND	USD	300,000.00

Direction	Underlying	Type	Description	Value	AllInValue	Currency	FX Rate	Contract
Receive	Cash	Margin	USD	400,000.00	400,000.00	USD	1.00000	USD

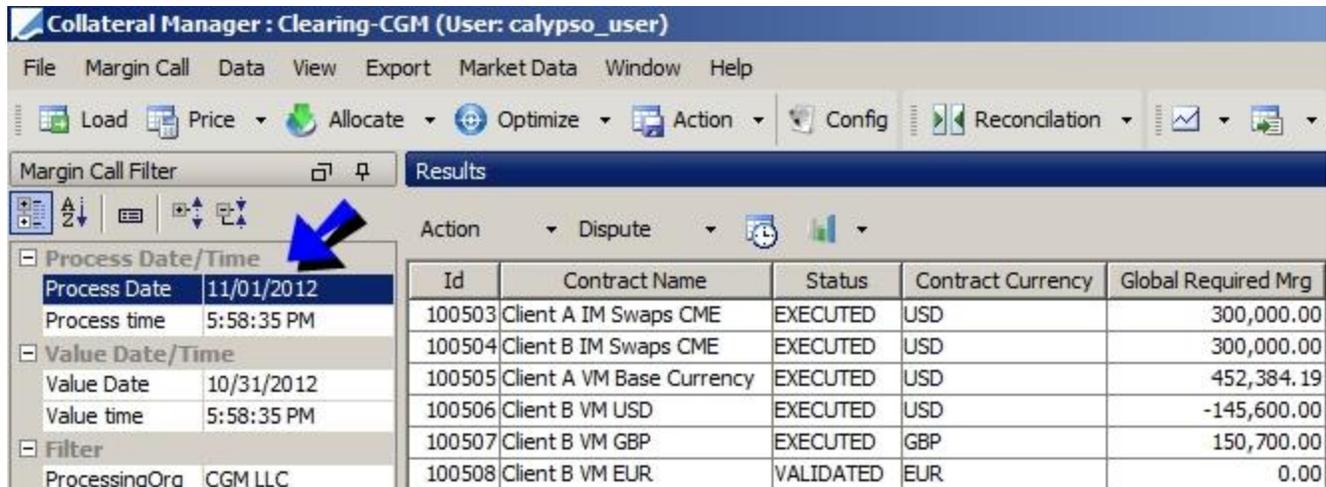
- » Right-click the contract and choose **Action > AMEND** to save the changes.
- » You can now settle the margin call transfers as described in Scenario 1.

### Scenario 3

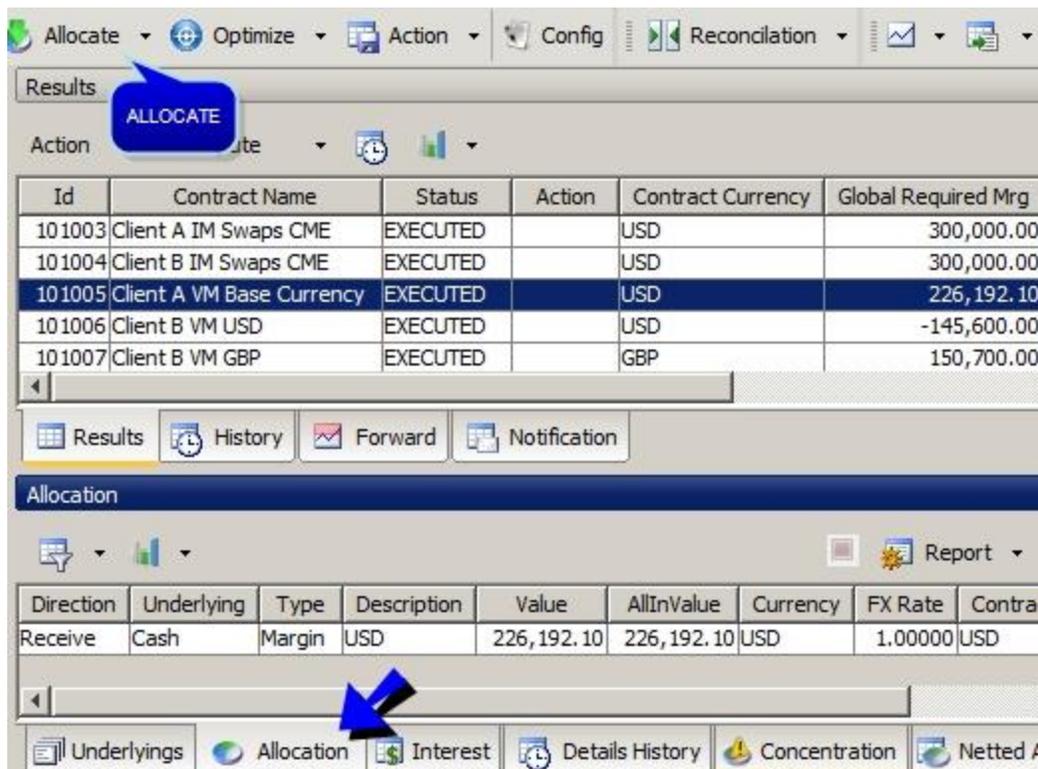
Meet the margin calls in a different currency.

From the Calypso Navigator, navigate to **Processing > Collateral Management > Collateral Manager**.

Set the process date to the client statement's date (the previous day), and load the Collateral Manager report template used to run the COLLATERAL\_MANAGER scheduled task.



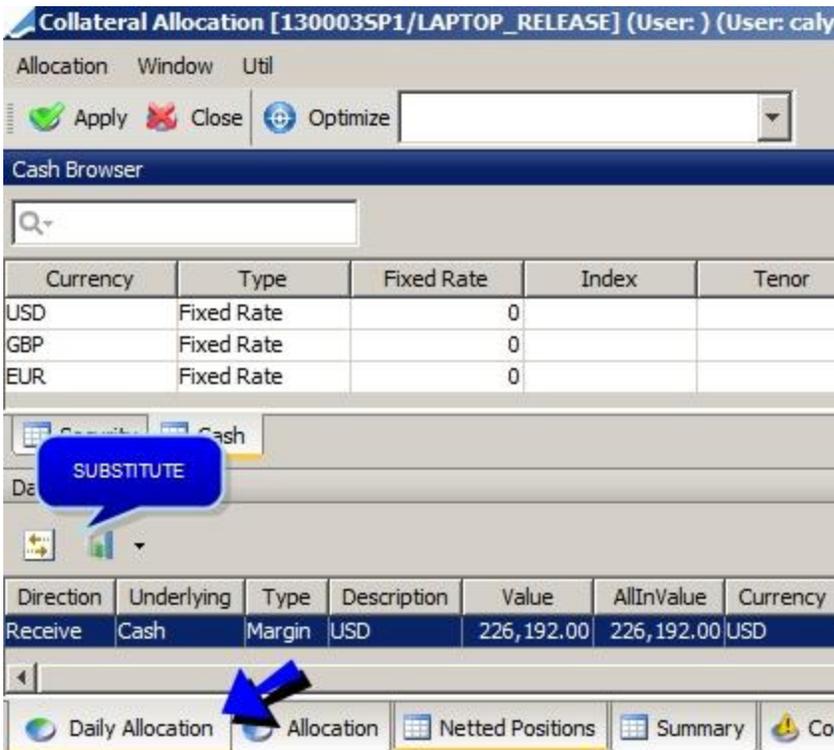
Select the contract you want to modify, it will show additional panels at the bottom of the Collateral Manager. You can select the Allocation panel to view the actual margin call trade.



» Click **Allocate** to bring up the Allocation window. It allows you to modify the margin call.

Select the Daily Allocation panel.

You can enable the Daily Allocation panel from the "Window > Show View" menu if it does not appear.



- » Select the row that you want to substitute, and click the substitute icon. It creates a reverse row in the Allocation panel.



In the Cash panel, double-click the currency that you want to use from the list of eligible currencies, and the system creates a new row in the selected currency.

Eligible currencies are defined in the margin call contract.

Click **Apply** when you are done.

The margin call trades are created accordingly: the reverse trade and the new trade.

Contract ID	Client	VM	Base Currency	Status	Action	Currency	Value
101005	Client A	VM	Base Currency	EXECUTED	AMEND	USD	226,192.10
101006	Client B	VM	USD	EXECUTED	AMEND	USD	-145,600.00
101007	Client B	VM	GBP	EXECUTED	AMEND	GBP	150,700.00

Direction	Underlying	Type	Description	Value	AllInValue	Currency	FX Rate
Receive	Cash	Margin	USD	226,192.00	226,192.00	USD	1.00000
Pay	Cash	Substitution	USD	-226,192.00	-226,192.00	USD	1.00000
Receive	Cash	Margin	EUR	172,665.73	172,665.73	EUR	1.3100

- » Right-click the contract and choose **Action > SUBSTITUTE** to save the changes.
- » You can now settle the margin call transfers as described in Scenario 1.

### Scenario 4

Meet the margin calls by posting collateral securities (this only applies to IM margin calls).

From the Calypso Navigator, navigate to **Processing > Collateral Management > Collateral Manager**.

Set the process date to the client statement's date (the previous day), and load the Collateral Manager report template used to run the COLLATERAL\_MANAGER scheduled task.

**Collateral Manager : Clearing-CGM (User: calypso\_user)**

File Margin Call Data View Export Market Data Window Help

Load Price Allocate Optimize Action Config Reconciliation

Margin Call Filter Results

Process Date/Time  
 Process Date: 11/01/2012  
 Process time: 5:58:35 PM

Value Date/Time  
 Value Date: 10/31/2012  
 Value time: 5:58:35 PM

Filter  
 ProcessingOrg: CGM LLC

Id	Contract Name	Status	Contract Currency	Global Required Mrg
100503	Client A IM Swaps CME	EXECUTED	USD	300,000.00
100504	Client B IM Swaps CME	EXECUTED	USD	300,000.00
100505	Client A VM Base Currency	EXECUTED	USD	452,384.19
100506	Client B VM USD	EXECUTED	USD	-145,600.00
100507	Client B VM GBP	EXECUTED	GBP	150,700.00
100508	Client B VM EUR	VALIDATED	EUR	0.00

Select the contract you want to modify, it will show additional panels at the bottom of the Collateral Manager. You can select the Allocation panel to view the actual margin call trade.

Allocate Optimize Action Config Reconciliation

Results

Action **ALLOCATE**

Id	Contract Name	Status	Action	Contract Currency	Global Required Mrg
101001	House Swaps CME	VALIDATED	EXECUTE	USD	0.00
101002	Client Swaps CME	VALIDATED	EXECUTE	USD	0.00
101003	Client A IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101004	Client B IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101005	Client A VM Base Currency	EXECUTED	AMEND	USD	226,192.10
101006	Client B VM USD	EXECUTED	AMEND	USD	-145,600.00
101007	Client B VM GBP	EXECUTED	AMEND	GBP	150,700.00

Results History Forward Notification

Allocation

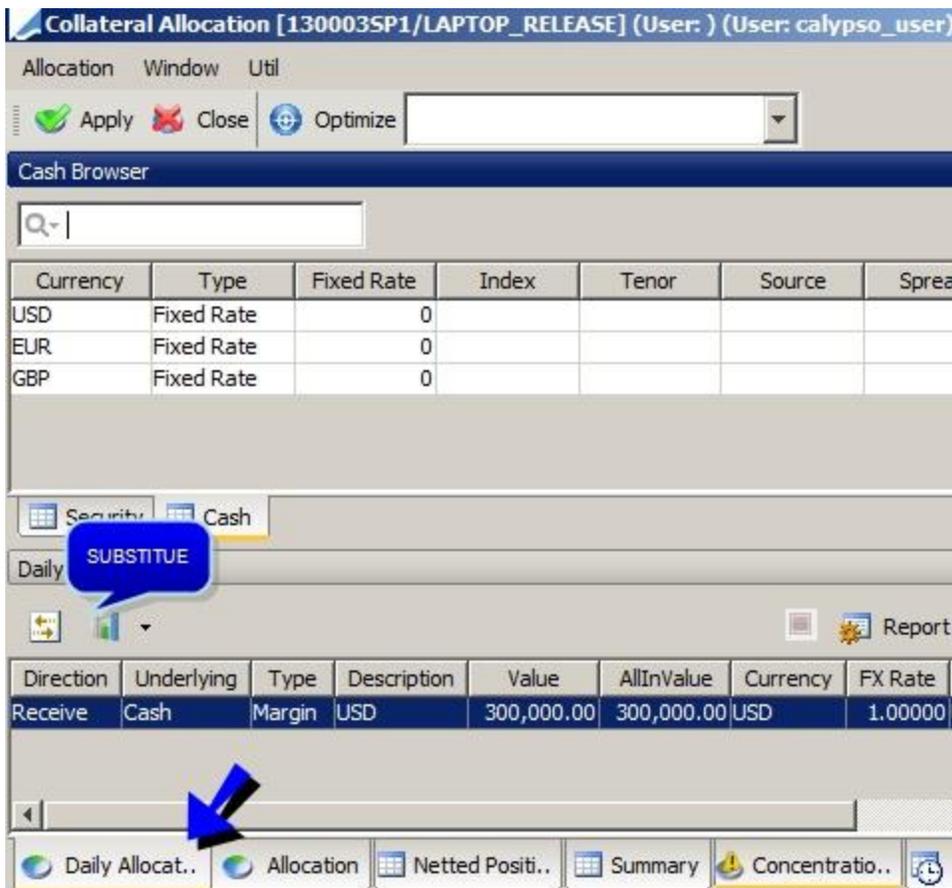
Direction	Underlying	Type	Description	Value	AllInValue	Currency	FX Rate	Contract
Receive	Cash	Margin	USD	300,000.00	300,000.00	USD	1.00000	USD

Underlyings Allocation Interest Details History Concentration Netted A

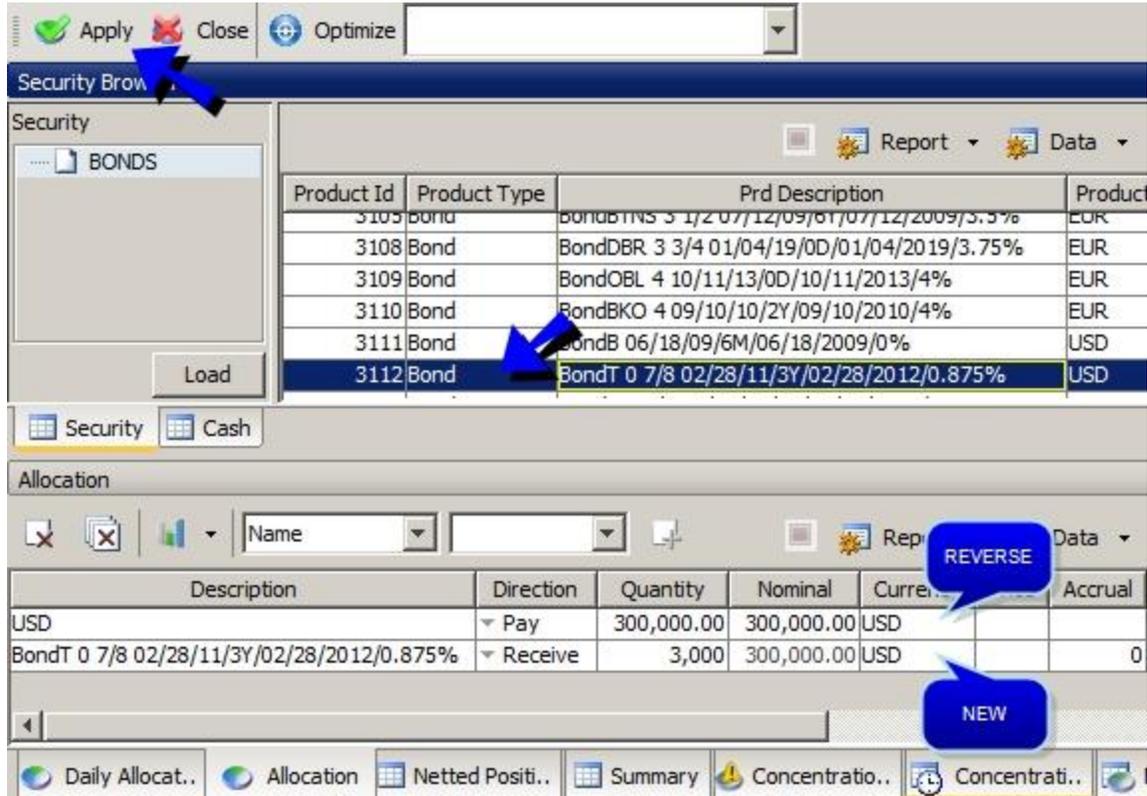
» Click **Allocate** to bring up the Allocation window. It allows you to substitute the margin call.

Select the Daily Allocation panel.

You can enable the Daily Allocation panel from the "Window > Show View" menu if it does not appear.



- » Select the row that you want to substitute, and click the substitute icon. It creates a reverse row in the Allocation panel.



In the Security panel, load the eligible securities. Then double-click the security that you want to use, and the system creates a new row.

Enter the nominal.

Repeat for other securities as needed.

Eligible securities are defined in the margin call contract.

Click **Apply** when you are done.

The margin call trades are created accordingly.

101003	Client A IM Swaps CME	EXECUTED	AMEND	USD	300,000.00	<input type="checkbox"/>
101004	Client B IM Swaps CME	EXECUTED	AMEND	USD	300,000.00	<input type="checkbox"/>
101005	Client A VM Base Currency	EXECUTED	AMEND	USD	226,192.10	<input type="checkbox"/>
101006	Client B VM USD	EXECUTED	AMEND	USD	-145,600.00	<input type="checkbox"/>
101007	Client B VM GBP	EXECUTED	AMEND	GBP	150,700.00	<input type="checkbox"/>

Direction	Underlying	Type	Description	Value	AllInValue
Receive	Cash	Margin	USD	300,000.00	300,000.00
Pay	Cash	Substitution	USD	-300,000.00	-300,000.00
Receive	Security	Margin	BondT 0 7/8 02/28/11/3Y/02/28/2012/0.875%		

- » Select the contract and choose **Action > SUBSTITUTE** to save the changes.
- » You can now settle the margin call transfers as described in Scenario 1.

### Scenario 5

Meet the margin calls with a combination of cash and collateral securities (this only applies to IM margin calls).

From the Calypso Navigator, navigate to **Processing > Collateral Management > Collateral Manager**.

Set the process date to the client statement's date (the previous day), and load the Collateral Manager report template used to run the COLLATERAL\_MANAGER scheduled task.

Process Date/Time		Results				
Process Date	11/01/2012	Id	Contract Name	Status	Contract Currency	Global Required Mrg
Process time	5:58:35 PM	100503	Client A IM Swaps CME	EXECUTED	USD	300,000.00
Value Date/Time		100504	Client B IM Swaps CME	EXECUTED	USD	300,000.00
Value Date	10/31/2012	100505	Client A VM Base Currency	EXECUTED	USD	452,384.19
Value time	5:58:35 PM	100506	Client B VM USD	EXECUTED	USD	-145,600.00
Filter		100507	Client B VM GBP	EXECUTED	GBP	150,700.00
ProcessingOrg	CGM LLC	100508	Client B VM EUR	VALIDATED	EUR	0.00

Select the contract you want to modify, it will show additional panels at the bottom of the Collateral Manager.

You can select the Allocation panel to view the actual margin call trade.

The screenshot shows the 'Allocate' button highlighted with a blue callout. Below it is a table of contract details:

Id	Contract Name	Status	Action	Contract Currency	Global Required Mrg
101001	House Swaps CME	VALIDATED	EXECUTE	USD	0.00
101002	Client Swaps CME	VALIDATED	EXECUTE	USD	0.00
101003	Client A IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101004	Client B IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101005	Client A VM Base Currency	EXECUTED	AMEND	USD	226,192.10
101006	Client B VM USD	EXECUTED	AMEND	USD	-145,600.00
101007	Client B VM GBP	EXECUTED	AMEND	GBP	150,700.00

Below this table is the 'Allocation' section, which includes a table showing the margin call details:

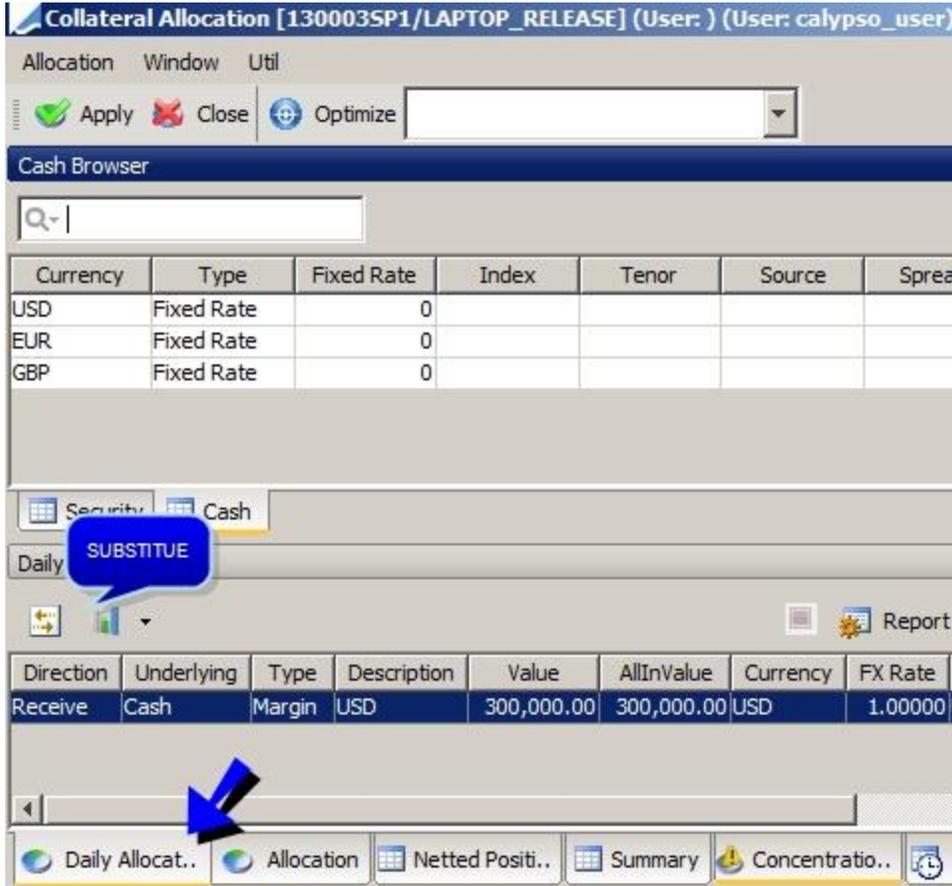
Direction	Underlying	Type	Description	Value	AllInValue	Currency	FX Rate	Contract
Receive	Cash	Margin	USD	300,000.00	300,000.00	USD	1.00000	USD

At the bottom of the screenshot, the 'Allocation' tab is selected in the navigation bar, indicated by a blue arrow.

» Click **Allocate** to bring up the Allocation window. It allows you to substitute the margin call.

Select the Daily Allocation panel.

You can enable the Daily Allocation panel from the "Window > Show View" menu if it does not appear.



- » Select the row that you want to substitute, and click the substitute icon. It creates a reverse row in the Allocation panel.

The screenshot displays the 'Security Browser' and 'Allocation' panels. The Security Browser shows a list of bonds, with 'BondT 1 3/8 03/15/12/3Y/03/15/2012/1.375%' selected. The Allocation panel shows a table with columns: Description, Direction, Quantity, Nominal, Currency, Price, and Value. A 'Pay' row for USD is highlighted, and a 'Receive' row for the selected bond is also highlighted. Blue callout boxes labeled 'REVERSE' and 'NEW' point to the 'Pay' and 'Receive' rows respectively. Arrows indicate the 'Apply' button in the Security Browser and the 'Pay' row in the Allocation panel.

Product Id	Product Type	Prd Description	Product Currency
3105	Bond	BondBMS 3 1/2 07/12/09/01/07/12/2009/3.375%	EUR
3108	Bond	BondDBR 3 3/4 01/04/19/0D/01/04/2019/3.75%	EUR
3109	Bond	BondOBL 4 10/11/13/0D/10/11/2013/4%	EUR
3110	Bond	BondBKO 4 09/10/10/2Y/09/10/2010/4%	EUR
3111	Bond	BondB 06/18/09/6M/06/18/2009/0%	USD
3112	Bond	BondT 0 7/8 02/28/11/3Y/02/28/2012/0.875%	USD
3113	Bond	BondT 1 3/8 03/15/12/3Y/03/15/2012/1.375%	USD

Description	Direction	Quantity	Nominal	Currency	Price	Value
USD	Pay	200,000.00	200,000.00	USD		200,000.00
BondT 0 7/8 02/28/11/3Y/02/28/2012/0.875%	Receive	1,500	150,000.00	USD		0
BondT 1 3/8 03/15/12/3Y/03/15/2012/1.375%	Receive	500	50,000.00	USD		0

Modify the nominal of the reverse row, so that you don't reverse the whole cash margin call but you reverse it partially.

In the Security panel, load the eligible securities. Then double-click the security that you want to use, and the system creates a new row.

Enter the nominal.

Repeat for other securities as needed.

Click **Apply** when you are done.

The margin call trades are created accordingly.

101003 Client A IM Swaps CME EXECUTED AMEND USD 300,000.00					
Allocation					
Direction	Underlying	Type	Description	Value	AllInValue
Receive	Cash	Margin	USD	300,000.00	300,000.00
Pay	Cash	Substitution	USD	-200,000.00	-200,000.00
Receive	Security	Margin	BondT 0 7/8 02/28/11/3Y/02/28/2012/0.875%		
Receive	Security	Margin	BondT 1 3/8 03/15/12/3Y/03/15/2012/1.375%		

In this example, you have USD 100,000 cash margin call, and two collateral securities.

- » Select the contract and choose **Action > SUBSTITUTE** to save the changes.
- » You can now settle the margin call transfers as described in Scenario 1.

## 2.2 Importing Trades

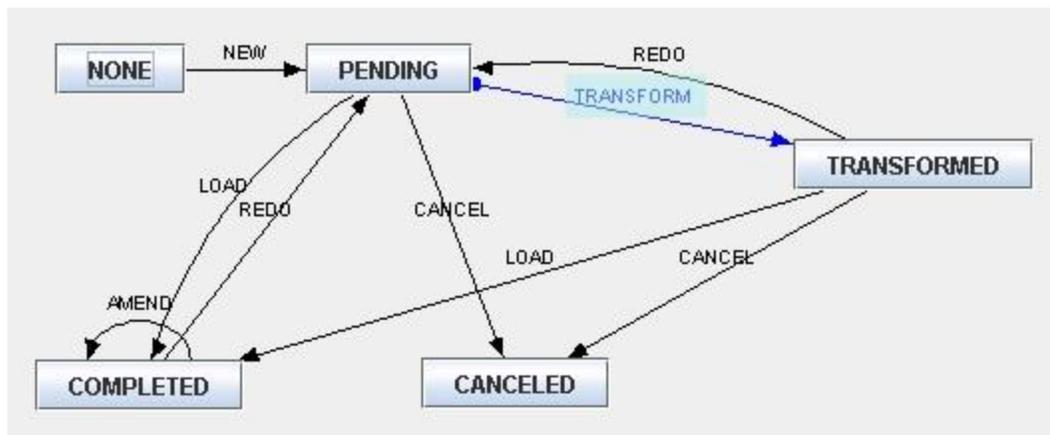
The trades are captured on the Affirmation Platform and are automatically imported into Calypso.

All the steps between the trade capture on the Affirmation Platform and the VERIFIED status in Calypso, are executed in straight-through processing. They may happen without any user intervention if all the conditions are met. The role of the user is to monitor the proper execution of the processes.

### 2.2.1 Processing Messages through the Exchange Feed

Trades are captured on the Affirmation Platform and routed to Calypso through the CCP and Exchange Feed using Trade Event messages of type BRIDGEMSG.

Based on the BRIDGEMSG workflow shown below, the messages are first created in status PENDING. Then they advance through the workflow as they meet the specified conditions, and trigger additional processes.



**[NOTE: Transitions highlighted in blue are STP transitions]**

#### PENDING Status

The BRIDGEMSG message is transformed into an Upload Document through the "TransformBridge" rule.

If the transformation is successful, the message automatically moves to status TRANSFORMED, and the ExchangeFeedBridgeEngine creates a GATEWAYMSG message that triggers the Data Uploader. See below.

**■** If the transformation is not successful, the trade remains in status PENDING and an exception is raised in the Task Station. You can monitor the messages in status PENDING.

Task Id	Trade Id	Message Type	Status	
587521	0	EX_BRIDGE	PENDING	CME.type=MissingData~subtype=~item=,
587518	0	EX_BRIDGE	PENDING	CME.type=MissingData~subtype=~item=,
587515				
587512				

Once you fix the error, you can manually apply the action LOAD that will attempt to transform the message again, and move the trade to status COMPLETED if it is successful.

### TRANSFORMED Status

Once the message is in status TRANSFORMED, and if the creation of the trades has been successful, the Exchange Feed Bridge engine will update the message with the Trade ID and the GATEWAYMSG message status through the "MergeTradeId" rule. The BRIDGEMSG message moves to status COMPLETED.

If the creation of the trades is not successful, the Exchange Feed Bridge engine cancels the message, and it moves to status CANCELED.

### COMPLETED Status

 The COMPLETED status reflects messages for which the trades have been created.

Once the messages are completed, they have reached the end of their lifecycle.

You can view COMPLETED BRIDGEMSG messages in the Message report.

From the Calypso Navigator, navigate to **Reports > Message Reports > Message Report**.

You can select today's messages of type "BRIDGEMSG" and status COMPLETED.

Sample trade messages received from the CCP.

Report (9/17/12 10:14:43 AM) / CMF MC STATEMENT (User: ) (User: calypso\_user)

Rep LOAD View Export Market Data Process Utilities Help

Criteria

Template Description

Start 09/17/2012   CreationDate  Type BRIDGEMSG  ...

End 09/17/2012   Receiver  ...

Trade Id ID  Method  ...

Transfer Id  Contact Id

Statement Id  Processing Org ALL

Message Id  Message LE  ...

Template  ... Msg Linked Id

Bundle  ... Id  ...

MESSAGE_ID	Trade Id	GATEWAY	ADDRESS_METHOD	MESSAGE_TYPE	Message Legal Er
173348	191042		All	BRIDGEMSG	CMF_1
173346	191044		All	BRIDGEMSG	CMF_1
173340	191044		All	BRIDGEMSG	CMF_1

When you double-click a message, you can view the actual message document sent by the CCP.

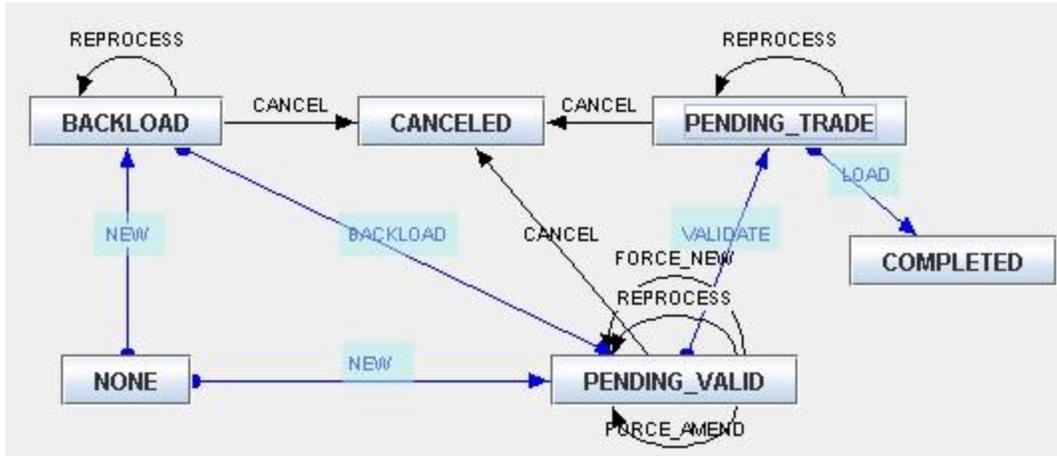
```

BRIDGE Advice Document Viewer (User: calypso_user)
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><cme:FpML
xmlns="http://www.fpml.org/FpML-5/confirmation"
xmlns:cme="http://www.cmegroup.com/otc-clearing/confirmation"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#"><cme:requestConsent
fpmlVersion="5-0"><header><messageId
messageIdScheme="cme_message_id">180560684</messageId><sentBy
messageAddressScheme="cme_clearingorg_id">CME</sentBy><sendTo
messageAddressScheme="cme_firm_id">180</sendTo><sendTo
messageAddressScheme="cme_exchange_id">CME</sendTo><creationTimest
amp>2012-09-17T08:05:57-05:00</creationTimestamp></header><isCorrection>
false</isCorrection><correlationId
correlationIdScheme="cme_trade_id">560684</correlationId><sequenceNumbe
r>1</sequenceNumber><trade><tradeHeader xsi:type="cme:CMETradeHeader"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"><partyTradeIdentifier>
<partyReference href="clearing_service"/><tradeId
tradeIdScheme="cme_trade_id">560684</tradeId><tradeId
tradeIdScheme="client_trade_id">8239101-2</tradeId><tradeId
tradeIdScheme="platform_trade_id">8239101</tradeId><tradeId
tradeIdScheme="block_trade_id">8239101</tradeId></partyTradeIdentifier><part
yTradeInformation><partyReference href="clearing_firm"/><accountReference
href="account1"/><relatedParty><partyReference
href="trade_source"/><role>InputSource</role></relatedParty><category
categoryScheme="cme_origin_code">CUSTOM</category></partyTradeInformation>
<tradeDate>2012-09-17</tradeDate><cme:originatingEvent>NEW_TRADE</cme
:originatingEvent><cme:status>ALLEGED</cme:status><cme:universalSwapIden
tifier><cme:issuer
  
```

### 2.2.2 Processing Messages through the Data Uploader

The GATEWAYMSG messages are processed by the Data Uploader to create the trades.

Based on the GATEWAYMSG workflow shown below, the messages are first created in status PENDING\_VALID. Then they advance through the workflow as they meet the specified conditions, and trigger additional processes.



**[NOTE: Transitions highlighted in blue are STP transitions]**

### PENDING\_VALID Status

The GATEWAYMSG message is validated and the trades are created through the "Validate" rule. Two trades are created in Calypso: a trade to reflect the clearing member position at the CCP, and a trade to reflect the client / house position at the clearing member. See below for details on the trade workflow.

If the trades are successfully created, the GATEWAYMSG message moves to status PENDING\_TRADE and COMPLETED.

If the trades are not created, the GATEWAYMSG message remains in status PENDING\_VALID, and an exception is raised in the Task Station. You can monitor the messages in status PENDING\_VALID.

Task Id	Trade Id	Message Type	Status	
589342	196433	EX_GATEWAYMSG_ERROR	PENDING_VALID	type=InvalidData~subtyp
589339	196432	EX_GATEWAYMSG_ERROR	PENDING_VALID	type=InvalidData~subtyp
589332				
589328				

**Tab Name:** Gateway Errors and Warnings

**Event Class:** Message

**Event Types:** EX\_GATEWAYMSG\_ERROR, EX\_GATEWAYMSG\_REJECT, EX\_GATEWAYMSG\_WARNING

**List of Defined Tabs:** Trades, All Messages, All Exceptions, MW M, MW E, Bridge Messages, Gateway Errors and Warnings, Clearing ST Exceptions

### COMPLETED Status



You can view trades in CREDIT\_CONSENTED status in the Trade Browser or in the Task Station, while they are awaiting to be cleared.

You can double-click a trade to bring it up, and choose **Trade > Trade Attributes** to check the trade keywords.

Name	Value
CCP	▼ CME
CCPAccountReference	AAAA
CCPOriginCode	▼ CLIENT
CME Status	ALLEGED
CMFAccountReference	72696
IS_CLIENT	▼ true
LIMIT_WHATIF_CHECK_PASS	Y
LIMIT_WHATIF_LIMIT_MAX	100,000,000
LIMIT_WHATIF_PORTFOLIO	CME-AAAA
LIMIT_WHATIF_RISK_USAGE	324,602.46
PlatformTradeID	8012378
Status	ALLEGED

When a trade reaches this status, a consent message is sent to the CCP.

Sample Calypso CONSENT message sent to the CCP.

MESSAGE_ID	Trade Id	GATEWAY	ADDRESS_METHOD	MESSAGE_TYPE	Message Legal Entity	TEMPLATE_NAME
131293	142340	MQ	CME	CONSENT	CME	CMEBridgeConsentGranted

The CCP replies with a message indicating if the trade is cleared or not.

Sample "CLEARED" message received from the CCP.

MESSAGE_ID	Trade Id	Msg_Attr.UploadObjectAction	Message Legal Entity	Is External	ADDRESS_METHOD	MESSAGE_TYPE
131593	142340	AMEND	CMF_1	<input checked="" type="checkbox"/>	All	BRIDGEMSG

```

BRIDGE Advice Document Viewer (User: calypso_user)
<?xml version="1.0" ?><cme:FpML
xmlns:cme="http://www.cmegroup.com/otc-clearing/confirmation"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#"
xmlns="http://www.fpml.org/FpML-5/confirmation"><clearingConfirmed
fpmlVersion="5-0"><header><messageId
messageIdScheme="cme_message_id">4Q0490437</messageId><sentB
messageAddressScheme="cme_clearingorg_id">CME</sentBy><sendTo
messageAddressScheme="cme_firm_id">4Q0</sendTo><sendTo
messageAddressScheme="cme_exchange_id">CME</sendTo><creationTi
06-26T17:40:01-05:00</creationTimestamp></header><trade><tradeHeade
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="cme:CMETradeHeader"><partyTradeIdentifier><partyReference
href="clearing_service"></partyReference><tradeId
tradeIdScheme="cme_trade_id">490437</tradeId><tradeId
tradeIdScheme="client_trade_id">7830203-2</tradeId><tradeId
tradeIdScheme="platform_trade_id">7830203</tradeId><tradeId
tradeIdScheme="block_trade_id">7830203</tradeId></partyTradeIdentifier><
mation><partyReference href="clearing_firm"></partyReference><accountRe
href="account1"></accountReference><relatedParty><partyReference
href="trade_source"></partyReference><role>InputSource</role></relatedPa
categoryScheme="cme_origin_code">CUS</category></partyTradeInforma
>2012-06-26</tradeDate><clearedDate>2012-06-27</clearedDate><cme:or
NEW_TRADE</cme:originatingEvent><cme:status>CLEARED</cme:status>

```

If the trade is cleared, the trade keywords are amended to reflect the cleared status, and the trade automatically moves to status CLEARED, and to status VERIFIED provided the settlement instructions are properly set on the trades.

If the trade is not cleared, it automatically moves to status REJECTED.

### LIMIT\_FAILED Status

You can view trades in LIMIT\_FAILED status in the Trade Browser or in the Task Station, and manually accept or reject the trades.

You can double-click a trade to bring it up, and choose **Trade > Trade Attributes** to check the trade keywords.

Trade Attributes Window	
Domain ...	
Name	
CCP	▼ CME
CCPAccountReference	AAAA
CCPOriginCode	▼ CLIENT
CME Status	ALLEGED
CMFAccountReference	72696
IS_CLIENT	▼ true
LIMIT_WHATIF_CHECK_ERROR	Y
LIMIT_WHATIF_CHECK_ERROR_MSG	No credit limit BMM found in
LIMIT_WHATIF_CHECK_PASS	N
LIMIT_WHATIF_PORTFOLIO	CME-AAAA
PlatformTradeID	7746240

To accept a trade in the Trade Browser, right-click a trade and choose **Action > ACCEPT**. The trade will move to status CONSENT\_GRANTED and CREDIT\_CONSENTED.

To reject a trade in the Trade Browser, right-click a trade and choose **Action > REJECT**. The trade will move to status CONSENT REJECTED.

### CONSENT REJECTED Status

When the trades reach the status CONSENT REJECTED, a reject message is sent to the CCP.

You can view trades in CONSENT REJECTED status in the Trade Browser or in the Task Station, and manually reject the trades. They will move to status REJECTED.

### REJECTED Status

You can view trades in status REJECTED in the Trade Browser or in the Task Station.

Trades maybe rejected because they failed the limits check, or because they were refused by the CCP.

Once the trades are rejected, they have reached the end of their lifecycle.

### CLEARED Status

If the settlement instructions are not set on the trades, the trades remain in status CLEARED, and an exception is raised in the Task Station. You can monitor the trades in status CLEARED.

**VERIFIED Status**

 You can view trades in status VERIFIED in the Trade Browser using the "New Trades" trade filter for example.

Trade Browser / Trade Browser (User: calypso_user)					
Report Data View Export Market Data Process Utilities Help					
Criteria					
Trade Id	Mirror Trade Id	Book	CounterParty.Short Name	Product Description	Principal Amount
142344	142340	CPTY_AAAA	CPTY_A	Swap/12/28/2021/P:JPY 1.23700 /R:JPY/LIBOR/6M	35,000,000
142340	142344	PO4SWAP_CLIENT	CME	Swap/12/28/2021/P:JPY/LIBOR/6M /R:JPY 1.23700	35,000,000
142336	142335	CPTY_HOUSE	CPTY_HOUSE	Swap/12/28/2021/P:JPY/LIBOR/6M /R:JPY 1.23700	35,000,000
142335	142336	PO4SWAP_HOUSE	CME	Swap/12/28/2021/P:JPY 1.23700 /R:JPY/LIBOR/6M	35,000,000

In this example, the first 2 trades are the mirror trades created for a client trade, and the last 2 trades are the mirror trades created for a house trade.

Once the trades are verified, they trigger various processes in the system: Account positions, fees computation, etc. See details below.

## 2.3 Generating Intraday Margin Calls

This currently only applies to LCH.

You can generate intraday margin calls as margin calls are made by LCH during the day.

The margin call trades are generated by the scheduled task CLEARING\_INTRADAY\_MARGIN which is automatically executed throughout the day by the Scheduler engine.

The margin call trades are associated with the IM contracts (client or house) of the clearing member facing the CCP, and can be viewed in the Collateral Manager as "previous margin".

Sample LCH report:

Cobdate	Scmmnemonic	SCMName	Account	Currenc y	Valuedate	Ppspay	Ppscall	Timesent
20/11/2012 00:00:00	CC1	CALYPSO MEGA BANK CCFCM	C	USD	20/11/2012 00:00:00	#EMPTY	943,239.80	6:33
20/11/2012 00:00:00	CC1	CALYPSO MEGA BANK CCFCM	C	USD	20/11/2012 00:00:00	#EMPTY	25,706,046.64	16:51

Margin call trade generated by the scheduled task:

**Margin Call CashTransfer(-25,706,046.64 USD) -PO is Calypso Clearing US FCM (218025) - Ve**

Trade Back Office MarginCall Analytics Pricing Env Market Data Utilities Help Tem

Trade Details Fees

To LCH CounterParty Book CLIENT Status VERIFIED

From CALYPSO\_US ProcessingOrg Trade Date 11/20/2012 8:14:00 AM

Pay Cash Transfer Type ITD\_COLLATERAL Contract Id

Principal 25,706,046.64 Ccy USD

The trade keyword "ITDTimestamp" shows the time of the margin call.

Margin call entry in the Collateral Manager:



Margin Call Entry	
Trade Margin	-9,407,654.68
Net Exposure	-9,407,654.68
Threshold Am...	-0.00
Margin Required	-9,407,654.68
<b>Total Prev Mrg</b>	<b>-25,706,046.64</b>
Constituted Mrg	16,298,391.96
Constituted M...	16,298,391.96
Minimum Tran...	0.00
Global Requir...	16,298,391.96
Cash Margin	0.00
Security Margin	0.00
Security S...	
Interest	0.00
Interest Balance	0.00

In this example, it would result in a return of collateral at EOD.

## 2.4 Computing Account Positions

Trades in status VERIFIED update the account positions using the Transfer engine, the Inventory engine, and the Margin Call engine:

- CASH\_SETTLEMENT clearing transfers update:
  - The Client - Cash Account @ Clearing Member positions
  - The Internal Counterparty - Cash Account @ Clearing Member positions
  - The Margin\_Call positions
  - The Clearing Member - House Nostro Account @ Agent positions
  - The Clearing Member - Agent Nostro Account @ Agent positions

You can view account positions using the Inventory Position report.

From the Calypso Navigator, navigate to **Reports > Nostro/Custodian Positions > Inventory Position**.

Sample inventory positions:

AGGREGATION	Agent	Position Type	Book	May 22, 2013	May 23, 2013	May 24, 2013
BOCashPosition						
AUD				23,709.42	23,709.42	23,709.42
CALYPSO_US_TRADING@FCM_CME_IRD				805.53	805.53	805.53
CALYPSO_US_TRADING_AUD_CASH@FCM				-22,330.26	-22,330.26	-22,330.26
CUST_A@FCM_CME_IRD				-721.27	-721.27	-721.27
CUST_A_AUD_CASH@FCM				45,955.42	45,955.42	45,955.42
CHF				20,000.00	20,000.00	20,000.00
EUR				-2,021,758.60	-2,021,758.60	-2,021,758.60
GBP				3,712,303.75	3,712,303.75	3,712,303.75
JPY				-1,255,392	-1,255,392	-1,255,392
USD				-6,587,128.69	-6,587,128.69	-6,587,128.69

## 2.5 Computing Fees

Fees are computed on the trades based on the fee configuration:

- Daily fees - Clearing Member COMMISSION\_FEE and Clearing Member EXECUTION\_FEE  
Daily fees are automatically computed on the trades when the trades move to status VERIFIED through the AutomaticFees rule.
- Periodic fees - CCP COMMISSION\_FEE, CCP MAINTENANCE\_FEE, Clearing Member MAINTENANCE\_FEE  
Periodic fees are automatically computed on billing trades.
- Initial margin fees - IM\_BASED\_FEE, automatically computed on billing trades.

You can monitor fees in the Consolidated Fee Report.

From the Calypso Navigator, navigate to [Reports > Fees & Settlements > Consolidated Fee Report](#).

## 2.6 Importing the CCP Files

The CCP files are imported into Calypso using scheduled tasks. The scheduled tasks are automatically executed by the Scheduler engine.

The scheduled tasks perform the following:

- CDML files processing - You first need to store the files into the system using the scheduled task CLEARING\_TRANSLATE\_TO\_CDML. Then you can process the files using the scheduled task CLEARING\_PROCESS\_FROM\_CDML.

The scheduled task CLEARING\_PROCESS\_FROM\_CDML consumes the imported tradeValuationReport and initialMarginRreport CDML reports.

- A set of scheduled tasks allow importing market data:
  - CLEARING\_IMPORT\_MARKET\_DATA
  - CLEARING\_IMPORT\_SCENARIO\_SHIFTS

If any error occurs during the scheduled tasks processing, an exception is raised in the Task Station.

The screenshot shows the Task Station interface. At the top, there are several tabs: Bridge Messages [1436], Gateway Errors and Warnings [120], Clearing ST Exceptions [6], Trades [287], All Messages [4197], All Exceptions [5], and MW Messages [4220]. A blue arrow points to the 'All Exceptions [5]' tab. Below the tabs, a table shows task details for the period 'From 09/24/2012 To 09/25/2012'. The table has columns for Task Id, Date & Time, and a description. Two tasks are listed: 473095 (Report: Cash Settlement Report) and 473094 (Missing data for report). Below the table, a configuration panel for 'Clearing ST Exceptions' is open. It shows 'Event Class' as 'Exception' and 'Event Types' as a list of clearing-related events. A 'List of Defined Tabs' panel is also visible, showing a list of tabs including Trades, All Messages, All Exceptions, MW Messages, MW E, Bridg, Gateway Errors and Warnings, and Clearing ST Exceptions. A blue callout box labeled 'PANEL CONFIGURATION' points to the 'Clearing ST Exceptions' tab in the list.

Task Id	Date & Time	
473095	9/24/12 9:39:13.803 AM PDT	Report: Cash Settlement Report ( File Name = REP00016c%
473094	9/24/12 9:39:13.803 AM PDT	Missing data for report CashSettlementReport on valuation d

If the scheduled tasks are successful, you can view the trades in the Trade Browser, and double-click a trade to view its details.

Sample Clearing Transfer trade of type CASH\_SETTLEMENT.

ClearingTransfer(CASH\_SETTLEMENT/-192.43 USD) -PO is Calypso Clearing US FCM (307612) - Version : 2 Mod User :(lvi...

Trade Back Office ClearingTransfer Analytics Pricing Env Market Data Utilities Help

Trade Details Fees

CCP LCH CounterParty Book A LCH IRD Status VERIFIED ID 307612

PO CALYPSO\_US ProcessingOrg Mirror id 306248

Client CUSTOMER\_A CounterParty Trade Date 04/11/2013 8:00:00 PM Settle Date 04/12/2013

Pay Principal 192.43 Ccy USD Transfer Type CASH\_SETTLEMENT Account CUST\_A@FCM\_LCH\_IRD

Type	Date	Start Date	End Date	Currency	Amount	Legal Entity	Pay/Rec	Known Date	Method	Input
CS_PAI	04/12/2013	04/12/2013	04/12/2013	USD	1.66	CUSTOMER A	REC	04/11/2013		0
CS_FRA_PAYMENT	04/12/2013	04/12/2013	04/12/2013	USD	0	CUSTOMER A	REC	04/11/2013		0
CS_NPV_ADJUSTED	04/12/2013	04/12/2013	04/12/2013	USD	397,905.11	CUSTOMER A	PAY	04/11/2013		0
CS_NPV_ADJUSTED	04/15/2013	04/15/2013	04/15/2013	USD	397,905.11	CUSTOMER A	REC	04/12/2013		0
CS_CONSIDERATN	04/12/2013	04/12/2013	04/12/2013	USD	0	CUSTOMER A	REC	04/11/2013		0
CS_INTERESTS	04/12/2013	04/12/2013	04/12/2013	USD	0	CUSTOMER A	REC	04/11/2013		0
CS_VARIATION	04/12/2013	04/12/2013	04/12/2013	USD	194.09	CUSTOMER A	PAY	04/11/2013		0

Sample Collateral Exposure trade.

CollateralExposureInitial Margin/USD/01/01/2012/OPEN -PO is Calypso Global Markets (39736)

Trade Back Office CollateralExposure Analytics Pricing Env Market Data View Utilities Help

Trade Details Fees

Cpty CLIENT A Client CLIENT A

Book CLIENTA@CGM Status VERIFIED ID 39736

General

Instrument	Direction	Start Date	End Date	Open/Term
Initial Margin	Sell	01/01/2012		OPEN

Sample PL Marks for CollateralExposure trades are displayed using [Position & Risk > Official P&L Marks > Official P&L Mark Report](#) from the Calypso Navigator.

Criteria			
Name	Value	Name	Value
Book	ALL	Pricing Environment	FROMDB
Include Trades	<input checked="" type="checkbox"/>	From Date	10/31/2012
Include Positions	<input checked="" type="checkbox"/>	To Date	10/31/2012
Trade ID		Adjustments Only	<input type="checkbox"/>
External Reference		Adjustment Type	

Position/Trade	Position or Trade Id	Pricing Env	Val Date	Book	Currency	Measure Name	Measure Value
Trade	39737	FROMDB	Oct 31, 2012	CLIENTB@CGM	USD	INITIAL_MARGIN	400,000.00
Trade	39737	FROMDB	Oct 31, 2012	CLIENTB@CGM	USD	MARGIN_CALL	300,000.00
Trade	39736	FROMDB	Oct 31, 2012	CLIENTA@CGM	USD	INITIAL_MARGIN	400,000.00
Trade	39736	FROMDB	Oct 31, 2012	CLIENTA@CGM	USD	MARGIN_CALL	300,000.00

### 2.6.1 Importing Market Data

Market data are used to compute margin call requirements, and to replicate margins.

The following scheduled tasks are automatically executed by the Scheduler engine to import market data:

- CLEARING\_IMPORT\_MARKET\_DATA:
  - Variation margin curves
  - Initial margin curves
  - Rate Index quotes and FX quotes
- CLEARING\_IMPORT\_SCENARIO\_SHIFTS:
  - Curve shifting scenarios for ERS Risk calculations

▶ Setup examples are described in details in the Calypso Clearing Margin Estimation Guide.

### 2.6.2 Computing Margin Calls

By default, the margin calls are computed in Cash on the initial margins and variation margins using the scheduled task COLLATERAL\_MANAGEMENT.

This scheduled task is automatically executed by the Scheduler engine.

Task Attributes	
Template	Clearing OTC
Collateral Context	default
Price method	
Optimization	

**[NOTE: The template is a Collateral Manager template]**

For IM contracts, the scheduled task loads the corresponding Collateral Exposure trades.

For VM contracts, the scheduled task loads the cash accounts associated with the margin call contracts. The exposure is the inventory THEORETICAL Margin\_Call position that has been updated by the CASH\_SETTLEMENT Clearing Transfer trades.

You can use the Collateral Manager to view the exposure on the various contracts. See examples below.

From the Calypso Navigator, navigate to **Processing > Collateral Management > Collateral Manager**.

### Sample IM Contract

The screenshot displays the Collateral Manager interface. At the top, there is a 'Results' section with a table of contracts:

Id	Contract Name	Status	Action	Contract Currency	Global Required Mrg
101001	House Swaps CME	VALIDATED	EXECUTE	USD	0.00
101002	Client Swaps CME	VALIDATED	EXECUTE	USD	0.00
101003	Client A IM Swaps CME	EXECUTED	AMEND	USD	300,000.00

Below this is the 'Underlyings' section, which contains a table with the following data:

Trade Id	Product Type	Net Balance	Description
39736	CollateralExposure	300,000.00	CollateralExposureInitial Margin/USD/01/01/2012/OPEN

A detailed view of the trade (ID 39736) is shown in a pop-up window. It includes the following information:

- Trade Details:** Cpty: CLIENT A, Client: CLIENT A, Book: CLIENTA@CGM, Status: VERIFIED, ID: 39736.
- General:** Instrument: Initial Margin, Direction: Sell, Start Date: 01/01/2012, End Date: (empty), Open/Term: OPEN.
- MarketData / Results:**

	INITIAL_MARGIN	MARGIN_CALL
Pay/Rec	400,000.00	300,000.00

Blue arrows in the image indicate the flow of information: from the contract list to the underlying table, and from the underlying table to the detailed trade view.

### Sample VM Contract - Single Currency Scenario

All the positions are converted to the base currency.

Results

Id	Contract Name	Status	Action	Contract Currency	Global Required Mrg
101003	Client A IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101004	Client B IM Swaps CME	EXECUTED	AMEND	USD	300,000.00
101005	Client A VM Base Currency	EXECUTED	AMEND	USD	226,192.10

Margin Call Cash Positions

ProcessingOrg	Book	Currency	Agent	Account	Position Type	Oct 31, 2012
CGM LLC	CGM-CLIENT	GBP	CLIENT A	N/A	THEORETICAL	0.00
CGM LLC	CLIENTA@CGM	USD	CLIENT A	N/A	THEORETICAL	-146,000.00
CGM LLC	CLIENTA@CGM	GBP	CLIENT A	N/A	THEORETICAL	-49,500.00

FX QUOTE

Quote Name	Quote Type	Bid	Ask	Open	Close
FX.GBP.USD	Price	1.620000	1.620000	1.620000	1.620000

Criteria

Template Description

Start 10/31/2012 End 10/31/2012

Position Date: Settle Aggregation: Book/Agent/Account

Position Class: Margin\_Call Counterparty: CLIENT A

Position Type: Theoretical Contract Id

Position Value: Quantity Custom Filter

Position Direction: All Offset Pos Cash/Sec Both

Closing Bal.

Cash

INVENTORY POSITION

ProcessingOrg	Book	Currency	Agent	Account	Oct 31, 2012
CGM LLC	CLIENTA@CGM	USD	CLIENT A	N/A	-146,000.00
CGM LLC	CLIENTA@CGM	GBP	CLIENT A	N/A	-49,500.00

### Sample VM Contract - Multi Currency Scenario

There is one VM contract for each currency, and a margin call for each currency.

USD

ProcessingOrg	Book	Currency	Agent	Account	Position Type	Oct 31, 2012
CGM LLC	CLIENTB@CGM	USD	CLIENT B	N/A	THEORETICAL	145,600.00

GBP

ProcessingOrg	Book	Currency	Agent	Account	Position Type	Oct 31, 2012
CGM LLC	CLIENTB@CGM	GBP	CLIENT B	N/A	THEORETICAL	-150,700.00
CGM LLC	CGM-CLIENT	GBP	CLIENT B	N/A	THEORETICAL	0.00

Based on the generated cash margin calls, IM requirements and VM requirements will be posted to the client statement, and the clients can choose how to meet those requirements.

► See [Process Margin Calls](#) for details.

### 2.6.3 Generating the Client Statements

The scheduled task CLEARING\_STATEMENT generates the client statements.

This scheduled task is automatically executed by the Scheduler engine.

<b>Task Description</b>	
Task Type:	CLEARING_STATEMENT
External Reference:	0.0001 DAILY CUS01
Comments:	0.0001 DAILY CUS01
Description:	0.0001 DAILY CUS01
<b>Execution Parameters</b>	
Attempts:	1
Retry After:	0 minutes
JVM Settings:	-XX:MaxPermSize=192M -Djava.util.Arrays.useLegacyMergeSort=true
Log Settings:	
<b>Task Notification Options</b>	
<input type="checkbox"/> Send Emails	<input type="checkbox"/> Publish Business Events
To User:	<input type="text"/>
<b>+ Common Attributes</b>	
<b>- Task Attributes</b>	
CCPs	CME,LCH, ICE CLEAR CREDIT
Static Data Filter	
Client	CUS01
Layout Style	Default
Mode	Daily
New Trades for IRS	0001 - CALYPUS New Trades IRD
New Trades for FXNDF	0001 - CALYPUS New Trades NDF
New Trades for CDX	

From the Calypso Navigator, navigate to [Reports > Message Reports > Message Report](#) to view the client statements.

MESSAGE_TYPE	Msg Status	Message Legal Entity
CLEARING_STATEMENT	TO_BE_SENT	CUSTOMER_B
CLEARING_STATEMENT	TO_BE_SENT	CUSTOMER_A

You can double-click a CLEARING\_STATEMENT message to view the actual statement.

## 2.6.4 "Default" Client Statement



### Daily Statement on 2015-10-07 for CUS01

CUS01  
99 Park Avenue  
New York, NY, 10016

#### Clearing Cash Flows Summary

	AUD	CAD	CHF	EUR	GBP	JPY
Beginning Cash Balance	431,678.66	-7,925.06	43,030.11	1,044,235.64	-17,502,783.96	119,184,641
Commissions/Fees	0.00	0.00	0.00	0.00	0.00	0
PAI	0.00	0.00	0.00	0.14	0.00	0
Coupons	0.00	0.00	0.00	0.00	0.00	0
FRA Settlements	0.00	0.00	0.00	0.00	0.00	0
Upfront Fees	0.00	0.00	0.00	0.00	0.00	0
Credit Premium	0.00	0.00	0.00	0.00	0.00	0
Credit Event	0.00	0.00	0.00	0.00	0.00	0
Credit Coupon	0.00	0.00	0.00	0.00	0.00	0
Credit Event Rebate	0.00	0.00	0.00	0.00	0.00	0
Cash Movements	0.00	0.00	0.00	0.00	0.00	0
Ending Cash Balance	431,678.66	-7,925.06	43,030.11	1,044,235.78	-17,502,783.96	119,184,641

[Partial view of a "Default" client statement](#)

The fields of the client statement are described in details below.

All the fields are populated for the client statement's date unless otherwise specified.

#### Clearing Cash Flows Summary

The clearing cashflows are displayed in the Client Statement based on the Fee transfer dates using the logic described below.

#### Logic of Non-NPV Flows (fees other than CS\_NPV\_ADJUSTED and CS\_NPV\_REV)

The following non-NPV Clearing Cashflows are included in the Client Statement: any fee where, Known Date ≤ Statement Date ≤ Available Date < Settle Date.

From this set of fees, we determine whether they are pending or not using the Available Date. When the Available Date of the Fee is equal to the Statement Date, they are not pending and are included in the Financial Summary section of the statement. In all other cases, the amounts are considered pending and re included in the pending section of the statement.

### Logic of NPV Flows (CS\_NPV\_ADJUSTED and CS\_NPV\_REV fees)

The logic is slightly different because these amounts are a snapshot of the position valuation at one point in time. Therefore we only want to include this amount in the statement on one and only one date.

The criteria for including NPV flows in the statement is to include only those fees whose Known Date is equal to the Statement Date.

From this set of fees, if the Available Date of the Fee is equal to the Statement Date, the fee is included in the non-pending section of the statement. If the Available Date is not equal to the Statement Date, the fee is included in the pending section of the statement.

Client Statement Field	Calypso Source
Beginning Cash Balance	<p>= Starting Balance from Account Activity report - NPV - Cash Initial Margin. Starting Balance from Account Activity report for Client Cash Accounts based on ACTUAL Client positions. The system uses the Account Activity report template provided when running the scheduled task.</p> <p><b>ⓘ [NOTE: ACTUAL positions are based on settled transfers from CASH_SETTLEMENT clearing transfer trades]</b></p> <p>NPV is NPV from previous day (CS_NPV_ADJUSTED transfers for which Available Date = Statement Date - 1 business day, based on the Clearing Business Calendar). Initial Margin is the "Value" column of the Margin Call Position report.</p>
Commissions/Fees	<p>Non pending fees. COMMISSION from CASH_SETTLEMENT clearing transfer trades. TERM_FEES from CASH_SETTLEMENT clearing transfer trades. FEE from CASH_SETTLEMENT clearing transfer trades. IM_BASED_FEE from billing trades.</p>
PAI	<p>Non pending fees. CS_PAI from CASH_SETTLEMENT clearing transfer trades.</p>
Coupons	<p>Non pending fees. CS_COUPON from CASH_SETTLEMENT clearing transfer trades. CS_CASH_DELIVERY from CASH_SETTLEMENT clearing transfer trades. CASH_DELIVERY from CASH_SETTLEMENT clearing transfer trades.</p>

Client Statement Field	Calypso Source
	CS_INTERESTS from CASH_SETTLEMENT clearing transfer trades.
FRA Settlements	Non pending fees. CS_FRA_PAYMENT from CASH_SETTLEMENT clearing transfer trades.
Upfront Fees	Non pending fees. CS_FEES from CASH_SETTLEMENT clearing transfer trades. CS_CONSIDERATN from CASH_SETTLEMENT clearing transfer trades.
Cash Movements	Settled COLLATERAL, SUBSTITUTION, and MARGIN_CALL cash movements from Account Activity report for Client Cash Accounts based on ACTUAL Client positions. Available Date = Statement Date.
Ending Cash Balance	= Beginning Cash Balance + Commissions/Fees + PAI + Coupons + FRA Settlements + Upfront Fees + Cash Movements
<CCP> <Product Type> NPV	Non pending fees. CS_NPV_ADJUSTED from CASH_SETTLEMENT clearing transfer trades.
Total NPV	Total of all <CCP> <Product Type> NPV rows.
Total Equity	= Ending Cash Balance + Total NPV
Pending Commissions/Fees	Pending fees. COMMISSION from CASH_SETTLEMENT clearing transfer trades. TERM_FEES from CASH_SETTLEMENT clearing transfer trades. FEE from CASH_SETTLEMENT clearing transfer trades. IM_BASED_FEE from billing trades.
Pending PAI	Pending fees. CS_PAI from CASH_SETTLEMENT clearing transfer trades.
Pending Coupons	Pending fees. CS_COUPON from CASH_SETTLEMENT clearing transfer trades. CS_CASH_DELIVERY from CASH_SETTLEMENT clearing transfer trades. CASH_DELIVERY from CASH_SETTLEMENT clearing transfer trades. CS_INTERESTS from CASH_SETTLEMENT clearing transfer trades.
Pending FRA Settlements	Pending fees. CS_FRA_PAYMENT from CASH_SETTLEMENT clearing transfer trades.
Pending Upfront Fees	Pending fees. CS_FEES from CASH_SETTLEMENT clearing transfer trades.

Client Statement Field	Calypso Source
	CS_CONSIDERATN from CASH_SETTLEMENT clearing transfer trades.
Pending Cash Movements	The Pending Cash Movements row is sourced from the transfers of type COLLATERAL, SUBSTITUTION and MARGIN_CALL based on the following criteria: Xfer Trade Date <= Statement Date, Xfer Trade Date < Xfer Settle Date, and Xfer Settle Date > Statement Date.
Pending NPV	Pending fees. CS_NPV_ADJUSTED from CASH_SETTLEMENT clearing transfer trades.
Total Pending Cash	= Sum (Pending: Commissions/Fees, PAI, Coupons, FRA Settlements, Upfront Fees, NPV)
Total Equity plus Pending Cash	= Total Equity + Total Pending Cash
FX Rates	FX rate.

### Separate Settlements

Only appears when you have chosen to breakdown variation margins by components.

Same as "Financial Summary - Clearing Cash Flows" for the cashflows associated with the variation margin contract.

### Initial Margin Summary

There is one section per currency.

Client Statement Field	Calypso Source
Margin Requirement	Initial margin amount calculated by the CCP. Amount from the CCP files. Net Balance from margin call contract.
Cash Collateral	Current market value of cash deposited as collateral for IM contracts from Margin Call Position report "All in Value" for IM cash.
Non Cash Collateral	Current market value of securities deposited as collateral from Margin Call Position report "All in Value" for securities.
Total Collateral	= Cash Collateral + Non Cash Collateral
Excess/Deficit	= Margin Requirement + Total Collateral
Pending Cash Collateral	Unsettled CASH margin call trade with Settlement Date > Statement Date + 1 business day.
Pending Non-Cash Collateral	Unsettled SECURITY margin call trade with Settlement Date > Statement Date + 1 business day.

Client Statement Field	Calypso Source
Total Pending Collateral	= Pending Cash Collateral + Pending Non-Cash Collateral
Total Collateral Plus Pending Collateral	= Total Collateral + Total Pending Collateral
Excess/Deficit Including Pending Collateral	= Excess/Deficit + Total Pending Collateral

### Summary of Payments

Client Statement Field	Calypso Source
Clearing Cash Flows	= Total Equity plus Pending Cash
Initial Margin	= Sum (Excess/Deficit Including Pending Collateral)
Net Excess/Deficit	= Clearing Cash Flows + Initial Margin
FX Rates	FX rates.

### Trading Activity

There is one section per product type.

The system uses the Trade Browser report templates "New Trades for IRS", "New Trades for FXNDF", "New Trades for CDX" provided when running the scheduled task CLEARING\_STATEMENT.

It shows trades cleared on the client statement's date.

### Open Trades

There is one section per product type.

The system uses the Trade Browser report templates "Open Trades for IRS", "Open Trades for FXNDF", "Open Trades for CDX" provided when running the scheduled task CLEARING\_STATEMENT.

It shows trades cleared before the client statement's date.

### Terminated Trades

There is one section per product type.

The system uses the Trade Browser report template "Terminated Trades for IRS", "Terminated Trades for FXNDF", "Terminated Trades for CDX" provided when running the scheduled task CLEARING\_STATEMENT.

It shows trades terminated on the client statement's date.

### ***Matured Trades***

There is one section per product type.

The system uses the Trade Browser report template "MaturedTrades for IRS", "Matured Trades for FXNDF", "Matured Trades for CDX" provided when running the scheduled task CLEARING\_STATEMENT.

It shows trades matured on the client statement's date.

### ***Account Activity***

The system uses the Account Activity report template "Account Activity Template" provided when running the scheduled task CLEARING\_STATEMENT.

It shows the Client ACTUAL cash positions.

It shows the following:

- Clearing fees (e.g. PAI, Coupons, Upfront fees, etc.), provided they are settled (as the template uses the ACTUAL cash positions)
- VM margin call trades (Cash Movements).
- FCM's fees
- Other amounts (e.g. interests, adjustments, rebates, etc.)

### ***Pending Account Activity***

The system uses the Account Activity report template "Account Activity Template" provided when running the scheduled task CLEARING\_STATEMENT.

It shows however the Client THEORETICAL cash positions on position date = Trade Date.

It shows the cashflow types: INTEREST, PAYDOWN, COLLATERAL, SUBSTITUTION, MARGIN CALL for Margin Call Type "VM".

The Pending Account Activity can be reconciled with the pending sections of the Separate Settlements and Clearing Cash Flow Summary sections.

### ***Margin Call Activity***

The system uses the Collateral Manager "Allocation" report template "Collateral Allocation Template" provided when running the scheduled task CLEARING\_STATEMENT.

It shows the margin calls generated by the scheduled task COLLATERAL\_MANAGEMENT.

MarginCallAllocationEntry Report (11/8/12 1:43:34 PM) (User: calypso_user)						
MarginCallConfig.Name	Direction	Underlying	Type	Description	Value	AllInValue
Client A IM Swaps CME	Receive	Cash	Margin	USD	300,000.00	300,000.00
Client A VM Base Currency	Receive	Cash	Margin	USD	226,192.00	226,192.00
Client B IM Swaps CME	Receive	Cash	Margin	USD	300,000.00	300,000.00
Client B VM GBP	Receive	Cash	Margin	GBP	150,700.00	150,700.00
Client B VM USD	Pay	Cash	Margin	USD	-145,600.00	-145,600.00

### Margins on Deposit

The system uses the Collateral Manager "Margin Call Position" report template "Collateral Position Template" provided when running the scheduled task CLEARING\_STATEMENT.

It shows the Margin\_Call ACTUAL positions.

MarginCallPositionEntry Report (11/8/12 2:18:22 PM) / SWAP-MCPOSITION (User: calypso_user)							
MarginCallConfig.Name	Type	Currency	Haircut	All-In Value	FX Rate	Contract Value	
<b>MarginCallConfig.Name: Client A VM Base Currency</b>							
Client A VM Base Currency	Cash	USD	0	-146,000.00	1.00000	-146,000.00	
Client A VM Base Currency	Cash	GBP	0	-49,500.00	1.6200	-80,192.10	
						-226,192.10	
<b>MarginCallConfig.Name: Client B VM GBP</b>							
Client B VM GBP	Cash	GBP	0	-150,700.00	1.00000	-150,700.00	
						-150,700.00	
<b>MarginCallConfig.Name: Client B VM USD</b>							
Client B VM USD	Cash	USD	0	145,600.00	1.00000	145,600.00	
						145,600.00	

► For a description of the templates used by the scheduled task CLEARING\_STATEMENT, please refer to the *Calypso Clearing Member Setup Guide*.

## 2.6.5 "Condensed" Client Statement



### Daily Statement on 2015-10-07 for CUS01

CUS01  
99 Park Avenue  
New York, NY, 10016

#### Clearing Cash Flows Summary

	AUD	CAD	CHF	EUR	GBP	JPY
FX Rates	0.72463788	1.300000	0.970000	1.13000000	1.54000000	119.930000
Intraday Funding Amount	0.00	0.00	0.00	0.00	0.00	0
<b>Beginning Cash Balance</b>	<b>431,678.66</b>	<b>-7,925.06</b>	<b>43,030.11</b>	<b>1,044,235.64</b>	<b>-17,502,783.96</b>	<b>119,184,641</b>
CALYPUS Commissions	0.00	0.00	0.00	0.00	-7,500,000.00	0
CCP Fees	0.00	0.00	0.00	0.00	0.00	0
PAI	0.00	0.00	0.00	0.14	0.00	0
Coupons	0.00	0.00	0.00	0.00	0.00	0
FRA Settlements	0.00	0.00	0.00	0.00	0.00	0
FX Settlements	0.00	0.00	0.00	0.00	0.00	0
Upfront Fees	0.00	0.00	0.00	0.00	0.00	0
Interest	0.00	0.00	0.00	0.00	0.00	0
Cash Movements	0.00	0.00	0.00	0.00	0.00	0
<b>Ending Cash Balance</b>	<b>431,678.66</b>	<b>-7,925.06</b>	<b>43,030.11</b>	<b>1,044,235.78</b>	<b>-25,002,783.96</b>	<b>119,184,641</b>
CME - IRD NPV	0.00	0.00	0.00	0.00	0.00	0
LCH - IRD NPV	0.00	0.00	0.00	37,108.58	159,125.30	0
<b>Net VM Excess/Deficit</b>	<b>431,678.66</b>	<b>-7,925.06</b>	<b>43,030.11</b>	<b>1,081,344.36</b>	<b>-24,843,658.66</b>	<b>119,184,641</b>
Pending Settlements	0.00	0.00	0.00	0.00	-542,465.75	-894,435
<b>Net VM Excess/Deficit (Incl. Pending)</b>	<b>431,678.66</b>	<b>-7,925.06</b>	<b>43,030.11</b>	<b>1,081,344.36</b>	<b>-25,386,124.41</b>	<b>118,290,206</b>

Partial view of a "Condensed" client statement

The fields of the client statement are described below.

All the fields are populated for the client statement's date unless otherwise specified.

### Clearing Cash Flows Summary

Client Statement Field	Calypso Source
FX Rates	FX rate.
Intraday Funding Amount	ITD margin calls.
Beginning Cash Balance	<p>= Starting Balance from Account Activity report - NPV - Cash Initial Margin - Beginning Cash Balance from separate settlements</p> <p>Starting Balance from Account Activity report for Client Cash Accounts based on ACTUAL Client positions.</p> <p>The system uses the Account Activity report template provided when running the scheduled task.</p> <p><b>ⓘ [NOTE: ACTUAL positions are based on settled transfers from CASH_SETTLEMENT clearing transfer trades]</b></p> <p>NPV is NPV from previous day (CS_NPV_ADJUSTED transfers for which Available Date = Statement Date - 1 business day, based on the Clearing Business Calendar).</p> <p>Initial Margin is the "Value" column of the Margin Call Position report.</p>
<clearing member> Commissions	<p>Non pending fees.</p> <p>Fees from billing trades and simple transfer trades:</p> <p>&lt;clearing member&gt;_&lt;CCP&gt;_TRANS_FEE</p> <p>&lt;clearing member&gt;_&lt;CCP&gt;_MAINT_FEE</p> <p>&lt;clearing member&gt;_&lt;CCP&gt;_CUSTODY_FEE</p> <p>&lt;clearing member&gt;_&lt;CCP&gt;_IM_FEE</p>
<CCP> Fees	<p>Non pending fees.</p> <p>IM_BASED_FEE from billing trades and simple transfer trades.</p>
PAI	<p>Non pending fees.</p> <p>CS_PAI from CASH_SETTLEMENT clearing transfer trades.</p>
Coupons	<p>Non pending fees.</p> <p>CS_COUPON from CASH_SETTLEMENT clearing transfer trades.</p> <p>CS_CASH_DELIVERY from CASH_SETTLEMENT clearing transfer trades.</p> <p>CASH_DELIVERY from CASH_SETTLEMENT clearing transfer trades.</p> <p>CS_INTERESTS from CASH_SETTLEMENT clearing transfer trades.</p>
FRA Settlements	Non pending fees.

Client Statement Field	Calypso Source
	CS_FRA_PAYMENT from CASH_SETTLEMENT clearing transfer trades.
FX Settlements	PRINCIPAL from CASH_SETTLEMENT clearing transfer trades.
Upfront Fees	Non pending fees. UPFRONT_FEE from CASH_SETTLEMENT clearing transfer trades. CS_FEES from CASH_SETTLEMENT clearing transfer trades. CS_CONSIDERATN from CASH_SETTLEMENT clearing transfer trades.
Interest	INTEREST from interest bearing trades, billing trades, and from Account Activity report for Client Cash Accounts based on ACTUAL Client positions.
Cash Movements	Settled PAYDOWN, COLLATERAL, SUBSTITUTION, and MARGIN_CALL cash movements from Account Activity report for Client Cash Accounts based on ACTUAL Client positions. Available Date = Statement Date.
Ending Cash Balance	= Beginning Cash Balance + Commissions + Fees + PAI + Coupons + FRA Settlements + FX Settlements + Upfront Fees + Interest + Cash Movements
<CCP> <Product Type> NPV	Non pending fees. CS_NPV_ADJUSTED from CASH_SETTLEMENT clearing transfer trades.
Net VM Excess/Deficit	= Ending Cash Balance + Total of all <CCP> <Product Type> NPV rows.
Pending Settlements	Pending: <clearing member> Commissions <CCP> Fees PAI Coupons FRA Settlements FX Settlements Upfront Fees Cash Movements NPV
Net VM Excess/Deficit (Incl. Pending)	= Net VM Excess/Deficit + All pending settlements
<CCP> <product> Margin Requirement	Initial margin amount calculated by the CCP. Amount from the CCP files. = Net Balance (no buffer) from margin call contract The domain "Collateral.Multiplier" must contain the value "Buffer" so that the system can report margin requirements based on collateral multipliers.

Client Statement Field	Calypso Source
<clearing member> IM (%)	= Net Balance (with buffer) - Net Balance (no buffer)
<clearing member> Buffer	= Buffer
Total IM Requirement	= Margin Requirement + IM (%) + Buffer
IM Cash Balance	Cash collateral position.
IM Non Cash Balance	Non cash collateral position.
Total Collateral	= IM Cash Balance + IM Non Cash Balance
Net IM Excess/Deficit	= Total Collateral - Total IM Requirement
IM Cash (Pending)	= Cash Theoretical Position Valuation – Cash Actual Position Valuation
IM Non-Cash (Pending)	= (Non-Cash Theoretical Position Valuation) – (Non-Cash Actual Position Valuation)
Total IM Collateral (Pending)	= IM Cash (Pending) + IM Non-Cash (Pending)
Net IM Excess/Deficit (Incl. Pending)	= Net IM Excess/Deficit + Total IM Collateral (Pending)
Net Excess/Deficit	= Net IM Excess/Deficit (Incl. Pending) + Net VM Excess/Deficit (Incl. Pending)
Separate Settlement <VM flow>	Separate VM flow.
Net Excess/Deficit Separate Settlement	Total of all Separate Settlements

### Trading Activity

There is one section per product type.

The system uses the Trade Browser report templates "New Trades for IRS", "New Trades for FXNDF", "New Trades for CDX" provided when running the scheduled task.

It shows trades cleared on the client statement's date.

### Open Trades

There is one section per product type.

The system uses the Trade Browser report templates "Open Trades for IRS", "Open Trades for FXNDF", "Open Trades for CDX" provided when running the scheduled task.

It shows trades cleared before the client statement's date.

### Terminated Trades

There is one section per product type.

The system uses the Trade Browser report template "Terminated Trades for IRS", "Terminated Trades for FXNDF", "Terminated Trades for CDX" provided when running the scheduled task.

It shows trades terminated on the client statement's date.

### Matured Trades

There is one section per product type.

The system uses the Trade Browser report template "MaturedTrades for IRS", "Matured Trades for FXNDF", "Matured Trades for CDX" provided when running the scheduled task.

It shows trades matured on the client statement's date.

### Account Activity

The system uses the Account Activity report template "Account Activity Template" provided when running the scheduled task.

It shows the Client ACTUAL cash positions.

### Margin Call Activity

The system uses the Collateral Manager "Allocation" report template "Collateral Allocation Template" provided when running the scheduled task.

It shows the margin calls generated by the scheduled task COLLATERAL\_MANAGEMENT.

MarginCallConfig.Name	Direction	Underlying	Type	Description	Value	AllInValue
Client A IM Swaps CME	Receive	Cash	Margin	USD	300,000.00	300,000.00
Client A VM Base Currency	Receive	Cash	Margin	USD	226,192.00	226,192.00
Client B IM Swaps CME	Receive	Cash	Margin	USD	300,000.00	300,000.00
Client B VM GBP	Receive	Cash	Margin	GBP	150,700.00	150,700.00
Client B VM USD	Pay	Cash	Margin	USD	-145,600.00	-145,600.00

### Margins on Deposit

The system uses the Collateral Manager "Margin Call Position" report template "Collateral Position Template" provided when running the scheduled task.

It shows the Margin\_Call ACTUAL positions.

MarginCallPositionEntry Report (11/8/12 2:18:22 PM) / SWAP-MCPOSITION (User: calypso_user)						
Report Data View Export Market Data Utilities Help						
Criteria						
MarginCallConfig.Name	Type	Currency	Haircut	All-In Value	FX Rate	Contract Value
<b>MarginCallConfig.Name: Client A VM Base Currency</b>						
Client A VM Base Currency	Cash	USD	0	-146,000.00	1.00000	-146,000.00
Client A VM Base Currency	Cash	GBP	0	-49,500.00	1.6200	-80,192.10
						-226,192.10
<b>MarginCallConfig.Name: Client B VM GBP</b>						
Client B VM GBP	Cash	GBP	0	-150,700.00	1.00000	-150,700.00
						-150,700.00
<b>MarginCallConfig.Name: Client B VM USD</b>						
Client B VM USD	Cash	USD	0	145,600.00	1.00000	145,600.00
						145,600.00

### 2.6.6 Computing EOD Limits

The EOD limits are computed using the ERS\_ANALYSIS scheduled task. It is automatically executed by the Scheduler engine.

You can view the availability in ERS Limits.

Sample Availability

Name Details	Measure	Bucket	Limit	Used	Currency	Available	Usage
InitialMarginLimit/LCH-GIGACALP_FUND3	HistVaR (LCH)	Aggr	500,000,000	146,546,604	USD	353,453,396	29.3%
InitialMarginLimit/LCH-GIGACALP_FUND3	HistVaR (LCH)	Rates	500,000,000	145,795,592	USD	354,204,408	29.2%
InitialMarginLimit/CME-CCC	HistVaR (CME)	Aggr	150,000,000	19,962,246	USD	130,037,754	13.3%
InitialMarginLimit/CME-CCC	HistVaR (CME)	Rates	150,000,000	19,887,824	USD	130,112,176	13.3%
InitialMarginLimit/CME-AAAA	HistVaR (CME)	Aggr	150,000,000	12,350,139	USD	137,649,861	8.2%
InitialMarginLimit/CME-AAAA	HistVaR (CME)	Rates	150,000,000	12,149,330	USD	137,850,670	8.1%
InitialMarginLimit/CME-BBBB	HistVaR (CME)	Rates	150,000,000	9,312,845	USD	140,687,155	6.2%
InitialMarginLimit/CME-BBBB	HistVaR (CME)	Aggr	150,000,000	9,104,925	USD	140,895,075	6.1%

The EOD availability will be used the day after for pre-deal limit checks on the trades.

## 2.7 Running Regulatory Reporting

### 2.7.1 Parent / Child Relationships

When a parent/child relationship is defined between accounts, it must also be defined between the legal entities. The reports Liquidity Deficit and Aged Margin will aggregate information under the parent.

Example:

The screenshot shows a configuration window for a legal entity. The fields are as follows:

- Short Name: CYP\_HF1\_1
- Full Name: CYP\_HF1\_1
- Parent: CYP\_HF1
- Country: UNITED STATES
- Status: Enabled
- Role(s): CounterParty, ExtCounterParty, Statement Recipient
- Inactive As From: (empty)
- User: max
- Entered Date: 10/19/2013

CYP\_HF1\_1 is linked to the parent CYP\_HF1.

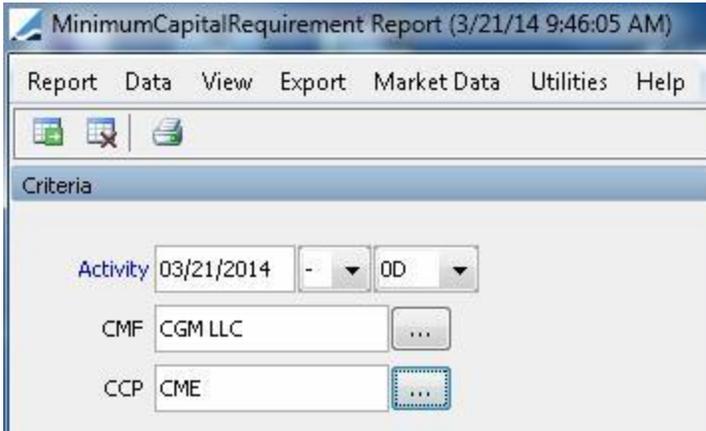
Both reports will show aggregated information under CYP\_HF1, representing data for CYP\_HF1 and CYP\_HF1\_1.

### 2.7.2 CFTC Minimum Net Capital Requirement

This report is obtained using the Minimum Capital Requirement window (menu action `reporting.ReportWindow$MinimumCapitalRequirement`).

Define the report template. Typical setup of the report template should be:

- Activity: 0d to run the report for today's activity (to run the report for the previous day, use -1d instead).
- CMF: Select the clearing member.
- CCP: Select the CCP.

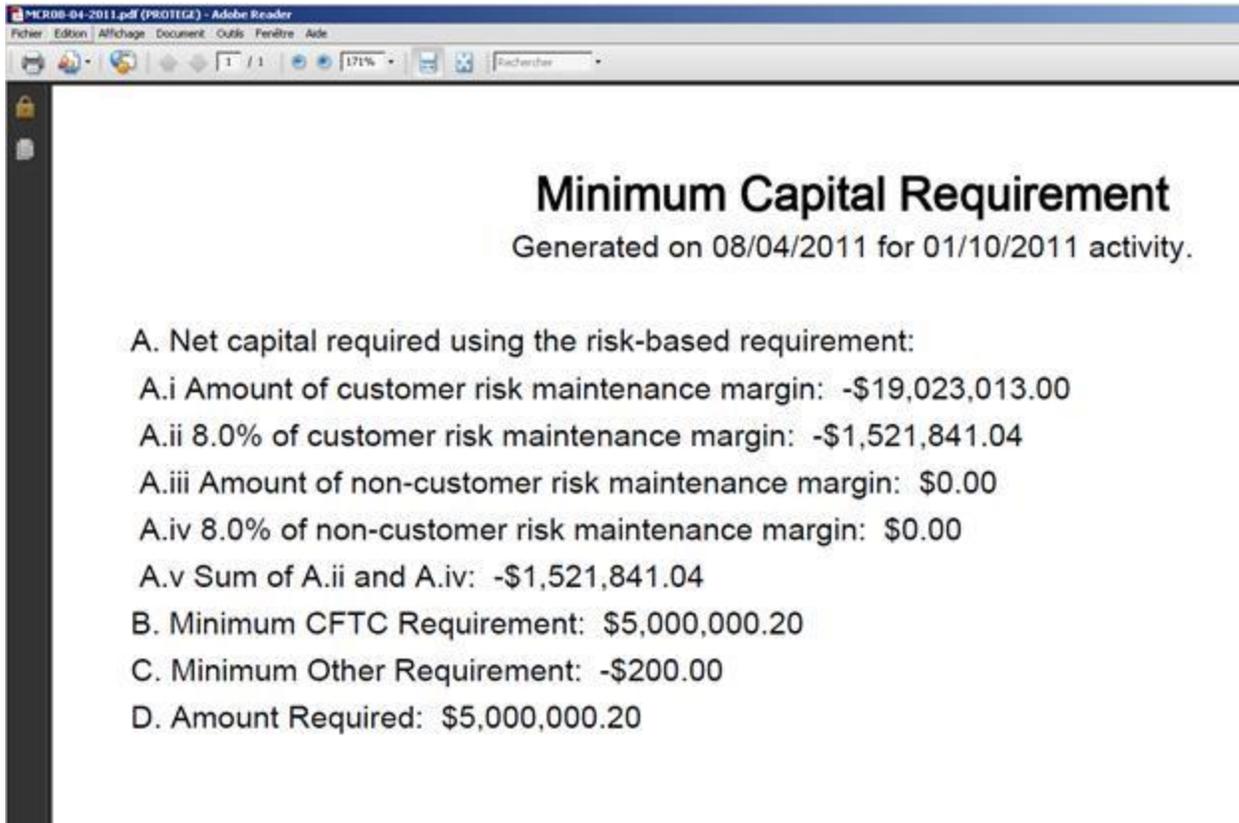


You can use the scheduled task EOD\_CMF\_REPORT to generate a PDF or HTML document at the required format.

REPORT TYPE = MinimumCapitalRequirement

Common Attributes	
Task Attributes	
REPORT TYPE	MinimumCapitalRequirement
REPORT FILE NAME	Test Min Cap
REPORT FORMAT	html
REPORT TEMPLATE NAME	CFTC Minimum Net Capital Requirement
REPORT OUTPUT TEMPLATE	
SEND REPORT BY EMAIL TO	
TIMESTAMP FILENAME	
TIMESTAMP FORMAT	
GENERATE PDF HEADER?	
UNDO	
GENERATE SUPPORTING REPORTS?	

### Sample Report



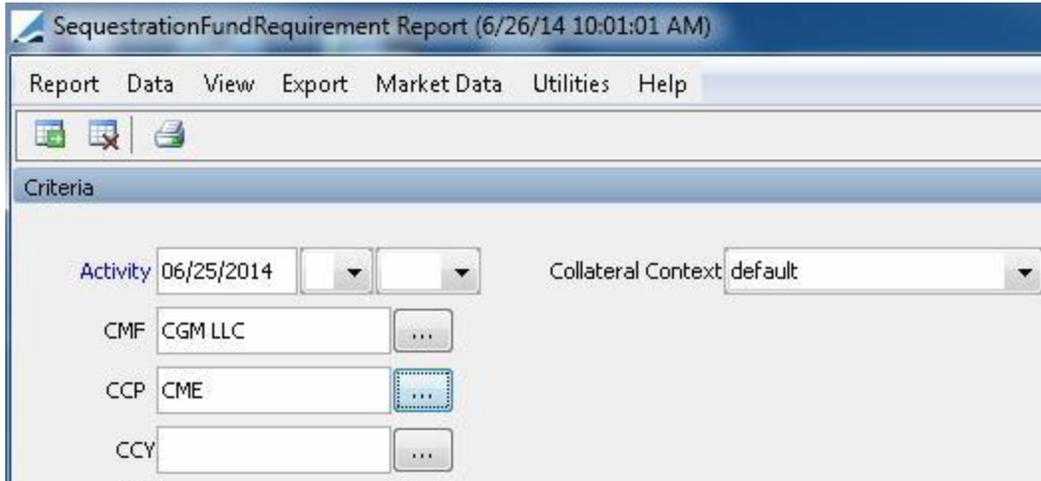
NOTE: Data can also be exported from the report window or the REPORT scheduled task in the usual Calypso formats (XLS, CSV, etc.). In this case the export only contains raw data, without the above formatting.

### 2.7.3 Sequestration Fund Requirement

This report is obtained using the Sequestration Fund Requirement window (menu action `reporting.ReportWindow$SequestrationFundRequirement`).

Define the report template. Typical setup of the report template should be:

- Activity: 0d to run the report for today's activity (to run the report for the previous day, use -1d instead).
- CMF: Select the clearing member.
- CCP: Select the CCP.
- CCY: Select a currency to run the report for a given currency, or none for all currencies.
- Collateral Context: Select "default".



You can use the scheduled task EOD\_CMF\_REPORT to generate a PDF or HTML document at the required format.

REPORT TYPE = SequestrationFundRequirement

Common Attributes	
Task Attributes	
REPORT TYPE	SequestrationFundRequirement
REPORT FILE NAME	Test Seq
REPORT FORMAT	html
REPORT TEMPLATE NAME	Seq Fund Req
REPORT OUTPUT TEMPLATE	
SEND REPORT BY EMAIL TO	
TIMESTAMP FILENAME	
TIMESTAMP FORMAT	
GENERATE PDF HEADER?	
UNDO	
GENERATE SUPPORTING REPORTS?	

You can set "GENERATE SUPPORTING REPORTS? = TRUE" to generate individual reports for each eligible currency, in addition to the multi-currency report. Otherwise, only the multi-currency report is generated.

Eligible currencies are currencies with currency attribute "ClearingEligible" = True.

When multiple currencies are selected, the values are reported in native currency and in base currency.

### Sample Report

## Statement of Sequestration Requirements And Funds in Cleared OTC Derivatives Sequestered Accounts

Generated on 06/26/2012 for 06/25/2012 activity.

<u>Cleared OTC Derivatives Customer Requirements</u>			
1	Net ledger balance		
	A. Cash	\$12,900,920.10	8500
	B. Securities (at market)	\$7,201,827.50	8510
		\$724,273.30	8520
2	Net unrealized profit (loss) in open cleared OTC derivatives		
3	Cleared OTC derivatives options		
	A. Market value of open cleared OTC derivatives option contracts purchased	\$0.00	8530
	B. Market value of open cleared OTC derivatives option contracts granted (sold)	\$0.00	8540
4	Net equity (deficit)	\$20,827,020.90	8550
5	Accounts liquidating to a deficit and accounts with debit balances - gross amount	\$2,516.80	8560
	Less: amount offset by customer owned securities	\$7,201,827.50	8570
		\$0.00	8580
6	Amount required to be sequestered for cleared OTC derivatives (add lines 4 and 5)	\$20,827,020.90	8590
<u>Funds in Cleared OTC Derivatives Customer Sequestered Accounts</u>			
7	Deposited in cleared OTC derivatives customer sequestered account at banks		
	A. Cash	(\$96,568.61)	8600
	B. Security representing investment of customers' fund (at market)	\$0.00	8610
	C. Security held for particular customers or option customers in lieu of cash (at market)	\$7,201,827.50	8620
8	Margins on deposit with derivatives clearing organizations in cleared OTC derivatives customer sequestered accounts		
	A. Cash	\$0.00	8630
	B. Security representing investment of customers' fund (at market)	\$10,000,000.00	8640
	C. Security held for particular customers or option customers in lieu of cash (at market)	\$0.00	8650
9	Net settlement from (to) derivatives clearing organizations	\$425,333.11	8660
10	Cleared OTC derivatives options		
	A. Value of open cleared OTC derivatives long option contracts	\$0.00	8670
	B. Value of open cleared OTC derivatives short option contracts	\$0.00	8680
11	Net equities with other FCMs		
	A. Net liquidating equity	\$0.00	8690
	B. Security representing investment of customers' fund (at market)	\$0.00	8700
	C. Security held for particular customers or option customers in lieu of cash (at market)	\$0.00	8710
12	Cleared OTC derivatives customer funds on hand	\$0.00	8715
13	Total amount in sequestration (add lines 7 through 12)	\$17,530,592.00	8720
14	Excess (deficiency) funds in sequestration (subtract line 6 from line 13)	(\$3,296,428.90)	8730

NOTE: Data can also be exported from the report window or the REPORT scheduled task in the usual Calypso formats (XLS, CSV, etc.). In this case the export only contains raw data, without the above formatting.

The report details are described below.

Column	Formula
1-A Cash Net Ledger Balance	= Sum of closing balances from client cash account activity at Trade Date D-1 minus Sum of CS_NPV_ADJUSTED fees from the client CASH_SETTLEMENT Clearing Transfer trades at Trade Date D-1, for which the fee known date is equal to the trade's settlement date
1-B Securities Net Ledger Balance	= Sum of market values (converted to USD) from ACTUAL client security margin call positions
2 Net Unrealized Profit	= Sum of fees defined in domain "NPVFlows" from the client CASH_SETTLEMENT Clearing Transfer trades at Trade Date D-1, for which the fee known date is equal to the trade's settlement date  The domain "NPVFlows" contains CS_NPV_ADJUSTED and NPV_ADJUSTED by default.
3-A Market Value of Open Contracts Purchased	Defaults to 0.
3-B Market Value of Open Contracts Sold	Defaults to 0.
4 Net Equity	= Line 1-A + Line 1-B + Line 2 + Line 3-A + Line 3-B
5-A Accounts Gross Amount	= Sum of closing balances in deficit from client cash account activity at Trade Date D-1 <i>minus</i> Sum of CS_NPV_ADJUSTED fees from the client CASH_SETTLEMENT Clearing Transfer trades at Trade Date D-1, for which the fee known date is equal to the trade's settlement date  Displayed as positive amount.
5-B Accounts Amount Offset by Customer Securities	If Line 5-A (absolute value) < Line 1-B = Line 5-A Otherwise = Line 1-B
5-C Accounts Balance	= Line 5-A (absolute value) - Line 5-B
6 Sequestered Amount	= Line 4 + Line 5-C
7-A Cash Deposited	= Sum of closing balances from sequestered accounts activity (converted to USD)

Column	Formula
	Accounts with account attribute SequesteredAccount = Bank.
7-B Securities of Customers Funds Deposited	<p>From the Inventory Position Report as of previous day's close of business (T-1), take all accounts that have the "SequesteredAccount" attribute set to "BANK" as well as the attribute "Collateral Investment" set to True, and calculate the values of any securities that fall into the aforementioned account criteria converted to USD based on FX Rate from quote set. The values will be determined by using the balance type defined in domain "SFR7BMovementType": CleanVal(MTM) OR DirtyVal(MTM).</p> <p>▶ Please refer to the Calypso Clearing Member Setup Guide for setup details - "Collateral Investment Program".</p>
7-C Securities of Customers Held	<p>From the Inventory Position Report, take security collateral positions (other than funds) for books with BookType in domain "SFR7CBookType", using the balance type defined in domain "SFR7CMovementType": CleanVal(MTM) OR DirtyVal(MTM).</p> <p>▶ Please refer to the Calypso Clearing Member Setup Guide for balance type setup details - "Collateral Investment Program".</p>
8-A Margin Cash Deposited	= Sum of ACTUAL client cash margin call positions between the clearing member and the CCP (converted to USD), including IEF5 security collaterals (funds with product code "SFR-8A = True").
8-B Margin Securities of Customers Funds	<p>= Sum of ACTUAL client security margin call positions between the clearing member and the CCP</p> <p>Displayed as a positive amount.</p> <p>Any securities with product code "Collateral Investment = True" and "SFR-8B = True" as of previous day's close of business (T-1) converted to USD based on FX Rate from quote set.</p> <p>▶ Please refer to the Calypso Clearing Member Setup Guide for setup details - "Collateral Investment Program".</p>
8-C Margin Securities in Lieu of Cash	<p>= Sum of ACTUAL client security margin call positions between the clearing member and the CCP</p> <p>Displayed as a positive amount.</p> <p>Any securities with product code "Collateral Investment = False or not set".</p>
9 Net Settlement	= Sum of principal amounts (converted to USD) from client cash settlement trades between the clearing member and the CCP
10-A Value of Open Long Contracts	Defaults to 0.
10-B Value of Open Short Contracts	Defaults to 0.
11-A Net	= Sum of closing balances from sequestered accounts activity

Column	Formula
Liquidating Equity with Other FCMs	Accounts with account attribute SequesteredAccount = CMF.
11-B Net Securities of Customers Funds	Defaults to 0.
11-C Net Securities in Lieu of Cash	Defaults to 0.
12 Cleared OTC Derivatives Customer Funds	Defaults to 0.
13 Total Amount in Sequestration	= Line 7-A + Line 7-B + Line 7-C + Line 8-A + Line 8-B + Line 8-C + Line 9 + Line 10-A + Line 10-B + Line 11-A + Line 11-B + Line 11-C + Line 12
14 Excess Funds in Sequestration	= Line 13 - Line 6

### 2.7.4 Collateral Valuation Report

This report allows satisfying the LSOC regulation. It computes the valuation of the collaterals.

This report is obtained using the Collateral Valuation Report worksheet (menu action `clearing.cvr.worksheet.Worksheet`), or using the scheduled task `CLEARING_EXPORT_CVR_WORKSHEET`.

#### ***Sample Collateral Valuation Report Worksheet***

**LSOC CVR**

**Collateral Valuation Report Worksheet**  
Create a new worksheet with New or browse previously generated CVR report with Load Saved.

CALYPUS / CME / IRD New Load Saved

Legal Entity	Account	Total Haircut CV Posted at CMF	IM As Per CCP	Haircut CV	Haircut Excess	IM Deficit	Reported CV
ETDTEST1	XXXX	0.00	0.00	0.00	0.00	0.00	0.00
CUS02	BBBB	30,176.68	0.00	0.00	30,176.68	0.00	30,176.68
CUS01	AAAA	0.00	0.00	0.00	0.00	0.00	0.00

Unallocated Excess Value:  Haircut Firm Buffer Value: 119,576.68  
Total CV Posted at CCP: 149,753.36 Total Reported CV: 149,753.36

Generate CVR

Collateral Context:  2014-Jun-26 10:11:05 PDT Report Calculated

- » You can click **New** to create a new report. You will be prompted to select a processing organization, a CCP and a clearing service.  
Clearing services are defined in domain "mccAdditionalField.PRODUCT\_TYPE".
- » You can select a collateral context at the bottom of the screen. It is "default" by default.
- » Then click **Calculate** to compute the report.  
Once the report is displayed, you can click **Generate CVR** to export the report to a file.
- » You can also click **Load Saved** to load an existing report. You will be prompted to select a processing organization, a CCP, a clearing service, a date, and click **Load**.  
The existing reports for that date will be displayed.  
Double-click a report to display it.

**Sample Scheduled Task CLEARING\_EXPORT\_CVR\_WORKSHEET**

Task Type	CLEARING_EXPORT_CVR_WORKSHEET
External Reference	0.60 CALYPUS CME-IRD
Comments	Generation of CVR for CME IRD
Description	Generation of CVR for CME IRD
Attempts	1
Retry After, In Minutes	0
JVM Settings	
Allow Task To	<input type="checkbox"/> Skip Execute <input type="checkbox"/> Send Emails <input type="checkbox"/> Publish Business
+ Common Attributes	
- Task Attributes	
CCP	CME
Product	IRD
Export folder	/home/clearing27/Calypso/clearing/CME/CVR
File name	LSOC.CVR.\${CCP}.\${firmId}.\${serviceCode}.xml
Collateral Context	default

- » Select a CCP.
- » Select a product (clearing service).  
Clearing services are defined in domain "mccAdditionalField.PRODUCT\_TYPE".
- » Enter the folder where the file containing the report will be saved.  
You can then load the file in the Collateral Valuation Report worksheet as needed.  
The "File name" is pre-populated. It allows dynamic placeholders, in the form `_${placeholder}_`, so users can customize the final file name.
- » Select a collateral context, "default" by default.

The default file name is:

LSOC.CVR.\${CCP}.\${firmId}.\${serviceCode}.\${datetime}.xml

For instance, for a CME IRD worksheet, for the 4Q0 firm, the filename would be:

LSOC.CVR.CME.4Q0.01.20130822130000.xml.

Possible placeholders are:

- CCP: CCP name
- firmId: member firm Id  
If the legal entity attribute "`<CCP>CVRSenderCode`" is populated, it is used as firm Id to identify the CVR sender, otherwise the legal entity "`<CCP><Clearing Service>FirmId`" or "`<CCP>FirmId`" is used. These attributes are set on the Clearing Member legal entity.
- date (in yyyyMMdd format): worksheet generation date
- datetime (in yyyyMMddHHmmss format): worksheet generation datetime

- serviceCode: a representation of the clearing service being reported.

#### Clearing Service Codes:

Used in the `${serviceCode}` name placeholder. It is defined per CCP and product type. The out-of-the-box codes are:

- CME-IRD : 01
- CME-NDF : 02
- LCH-IRD : 03

These codes can be overridden in the configuration file "`<calypso home>/client/resources/config/clearingServiceCodes.properties`". A sample file is included in the Clearing distribution.

The Collateral Valuation report can be sent directly through MQ Series if configured accordingly.

▶ Please refer to the *Calypso Clearing Member Setup Guide* for details.

### 2.7.5 LSOC CVR Static Data

The LSOC CVR Static Data report provides detailed information about clients margin accounts.

You need to configure the following attributes on the client legal entities: CFTCID (Required - CFTC Reportable Number), LEID (Optional - US LEI of the client), OfficeCode (Optional) and CustAccountType (Optional - H for hedger, M for member, O for omnibus, or S for speculator).

The report is run using the scheduled task CLEARING\_EXPORT\_CVR\_LE\_DATA.

Task Type	CLEARING_EXPORT_CVR_LE_DATA
External Reference	CME IRD LSOC CVR Static Data
Comments	
Description	
Attempts	1
Retry After, In Minutes	0
JVM Settings	-Xms512m -Xmx1024m -XX:MaxPermSize=256m
Allow Task To	<input type="checkbox"/> Skip Execute <input type="checkbox"/> Send Emails <input type="checkbox"/> Publish Business
+ Common Attributes	
- Task Attributes	
CCP	CME
Product	IRD
Mode	Client
LE_Contact	Default
Export folder	/home/clearingV14/Calypso/clearing/CME/CVR

- » Select the CCP.
- » Select the product: IRD or NDF.
- » The mode can only be Client.
- » Select the legal entity contact from which the information will be retrieved.
- » Select the export folder.

The scheduled task generates FIXML files:

- For IRS, the file name is in the form "CME.MarginAccounts.01.Firm<CMEFirmID>.xml".
- For FX NDF, the file name is in the form "CME.MarginAccounts.02.Firm<CMEFirmID>.xml".

It also generates a message of type CVR\_LE\_DATA.

### 2.7.6 Aged Margin Call

The Aged Margin Call report shows accounts with unpaid margin calls.

The report is run using the scheduled task CLEARING\_CFTC\_REPORTING.

Make sure that you have define the CFTC\_REPORTING message workflow as described in the Calypso Clearing Member Installation and Setup Guide.

The Processing Org, the Pricing Environment, and the Timezone are mandatory.

Task Description	
Task Type:	CLEARING_CFTC_REPORTING
External Reference:	Aged Margin Call debug
Comments:	Aged Margin Call
Description:	Aged Margin Call
Execution Parameters	
Attempts:	1
Retry After:	0 minutes
JVM Settings:	-Xms512m -Xmx1024m -XX:MaxPermSize=256m
Log Settings:	
Task Notification Options	
<input type="checkbox"/> Send Emails	<input type="checkbox"/> Publish Business Events
To User:	
+ Common Attributes	
- Task Attributes	
REPORT TYPE	Aged Margin Call
CCPOriginCode	
REPORT FOLDER	/home/clearing/AMC
REPORT FORMAT	html
CUTOFF TIME T	20:00
CUTOFF TIME T+1	5:00

- » Select the report type "Aged Margin Call".
- » Select the CCPOriginCode: All, Client, or House.
- » Select the location of the file.
- » Select the report format.
- » Select today's cutoff time
- » Select tomorrow's cutoff time

Determination of the Valuation date is based on the following logic:

- If the Valuation Date of the scheduled task is in  $\leq$  CUTOFF TIME and  $<$  12:00:00AM, then T = Valuation Date + 1 Business day. We use USD calendar to determine the business days.
- If the valuation date is in the range between  $\geq$  12:00:00AM and  $<$  CUTOFF TIME T+1, the T = Valuation Date.

It generates a file that contains the report, and saves the report as a message of type CFTC\_REPORTING with "Msg\_Attr.CFTCReport" = Aged Margin Call.

### Sample Report

Valuation Date: 06/30/14 23:25:00 Monday

Legal Name	Short Name	Closing Balance	Open Trade Equity	Total Equity	Collateral	Net Liquidating Equity	Initial Margin	Amount Under Maintenance	Call	Age
CYP_HF2	CYP_HF2	20,000	(1,000)	19,000	0	19,000	60,000	(41,000)	5,000	1
									13,000	3
									12,000	4
									11,000	5
CYP_HF2_1	CYP_HF2_1	38,000	6,000	44,000	5,000	49,000	60,000	(11,000)	2,000	1
									4,000	3
									5,000	5
CYP_HF2_2	CYP_HF2_2	38,000	17,000	55,000	0	55,000	60,000	(5,000)	0	
									3,000	3
									5,000	5
CYP_HF2_3	CYP_HF2_3	38,000	6,000	44,000	9,000	53,000	60,000	(7,000)	7,000	1
CYP_HF2_LE	CYP_HF2_LE	30,000	30,000	60,000	0	60,000	60,000	0	0	

- Legal Name:** "Full Name" of the parent account Legal Entity definition.  
 If an account belongs to a legal entity with a parent, the report shows the margin call at the parent level. Make sure that your legal entity hierarchies are adequately defined.
- Closing Balance:** Aggregated cash accounts of the parent and all its child accounts. All currencies are converted into dollar using the quote set associated to the Pricing Environment from the scheduled task CLEARING\_CFTC\_REPORTING.

AMC [Closing Balance] = Activity Report [Closing Balance] – NPV – IM Cash Collateral

**Activity Report [Closing Balance]** - The Closing Balance is computed from an Account Activity template crated on the fly and based on the following criteria:

- Position Date: Available
- Position Class: Client
- Position type: Actual
- Start/End Date: T-1.
- The Account ID field includes all the account Ids determined in the set of Parent Legal Entity accounts (children + parent accounts).

**NPV** - From each closing balance of the Parent's accounts we back out the transfers sourced from the Account Activity report output, which are contained in the list of domain MTMFlows and convert the results into USD.

**IM Cash Collateral** - Source the data from the report MarginCallPositionValuation:

- Position Type: ACTUAL
- Underlying Type: Cash
- Date: T-1

If the Contract Currency is USD, back-out the sum of all the amounts in the column Contract Value.

Else, convert the sum of all the amounts from column Contract Value and back-out the result from the Closing Balance.

- **Open Trade Equity:** Aggregated NPV of the parent and child positions. All currencies converted into USD using the quote set associated to the Pricing Environment from the scheduled task CLEARING\_CFTC\_REPORTING. We use the account activity report to source this amount:
  - Position Date: Available
  - Position Class: Client
  - Position type: Actual
  - Start/End Date: T-1.
  - The Account ID field includes all the account Ids determined in the set of Parent Legal Entity accounts (children + parent accounts).

- **Total Equity:** Closing Balance + Total Equity

- **Collateral:** Settled collateral, cash and non-cash, from the parent and child accounts. All amounts converted into USD. We source this amount from the MarginCallPositionValuation report based on a template created on the fly with the following criteria:

- Position Type: ACTUAL
- Underlying Type: Cash and Security
- Date: T-1

If the Contract Currency is USD we report the sum of all the amounts in the column Contract Value.

Else, we convert into USD and report the sum of all the amounts from column Contract Value.

- **Net Liquidating Equity:** Total Equity + Collateral
- **Initial Margin:** Net Balance of the parent and its children margin call contracts.
- **Amount under Maintenance (AUM):**

AUM = Net Liquidating deficit – Initial Margin IF (Net Liquidating deficit – Initial Margin) < 0, Else “0”

- **Call:** This can be a new call or an outstanding call (age >1).

New Call: It is created when the Net Liquidating Deficit plus the sum of outstanding calls doesn't cover the initial margin.

IF (Net Liquidating Equity + Outstanding Calls) – Initial Margin < 0, then New Call = (Net Liquidating Equity + Outstanding Calls) – Initial Margin, Else 0.

When a call is aged for more than one day, it is considered as outstanding.

When the client sends collateral to the Clearing Broker, the system uses it to cover the oldest Calls based on a FIFO method. When the amount fully cover a call, such a call is DELETED and it doesn't appear on the report anymore, when the remaining of the allocated collateral partially covers the call, this one is said REDUCED but it continues to be aged.

- **Age:** Increases of one business day as long as the call is not DELETED. The USD calendar is used for aging the calls.

- C/H: Value of the account attribute CCPOriginCode of the parent account in the following way:
  - If the value is CLIENT, populate with “C”
  - If the value is House, populate with “H”

### 2.7.7 Liquidating Deficit

The Liquidity Deficit report shows accounts whose Net Liquidating Equity is negative.

The report is run using the scheduled task CLEARING\_CFTC\_REPORTING.

Make sure that you have define the CFTC\_REPORTING message workflow as described in the Calypso Clearing Member Installation and Setup Guide.

The Processing Org, the Pricing Environment, and the Timezone are mandatory.

<b>Task Description</b>	
Task Type:	CLEARING_CFTC_REPORTING
External Reference:	Liquidation Deficit
Comments:	
Description:	
<b>Execution Parameters</b>	
Attempts:	1
Retry After:	0 minutes
JVM Settings:	-Xms512m -Xmx1024m -XX:MaxPermSize=256m
Log Settings:	
<b>Task Notification Options</b>	
<input type="checkbox"/> Send Emails	<input type="checkbox"/> Publish Business Events
To User:	
<b>Common Attributes</b>	
<b>Task Attributes</b>	
REPORT TYPE	Liquidating Deficit
CCPOriginCode	
REPORT FOLDER	/home/clearing310/Calypso/LD
REPORT FORMAT	html
CUTOFF TIME T	20:00
CUTOFF TIME T+1	5:00

- » Select the report type "Liquidating Deficit".
- » Select the CCPOriginCode: All, Client, or House.
- » Select the location of the file.
- » Select the report format.
- » Select today's cutoff time

- » Select tomorrow's cutoff time

Determination of the Valuation date is based on the following logic:

- If the Valuation Date of the scheduled task is in  $\leq$  CUTOFF TIME and  $< 12:00:00AM$ , then  $T =$  Valuation Date + 1 Business day. We use USD calendar to determine the business days.
- If the valuation date is in the range between  $\geq 12:00:00AM$  and  $< CUTOFF TIME T+1$ , the  $T =$  Valuation Date.

It generates a file that contains the report, and saves the report as a message of type CFTC\_REPORTING with "Msg\_Attr.CFTCReport" = Liquidating Deficit.

### Sample Report

Valuation Date: 07/01/14 23:25:00 Tuesday

Legal Name	Short Name	Closing Balance	Open Trade Equity	Total Equity	Collateral	Net Liquidating Equity
CYP_HF2_LE	CYP_HF2_LE	30,000	(64,000)	(34,000)	0	(34,000)

- **Legal Name:** "Full Name" of the parent account Legal Entity definition.  
If an account belongs to a legal entity with a parent, the report shows the margin call at the parent level. Make sure that your legal entity hierarchies are adequately defined.
- **Closing Balance:** Aggregated cash accounts of the parent and all its child accounts. All currencies are converted into dollar using the quote set associated to the Pricing Environment from the scheduled task CLEARING\_CFTC\_REPORTING.
- **Open Trade Equity:** Aggregated NPV of the parent and child positions. All currencies converted into USD using the quote set associated to the Pricing Environment from the scheduled task CLEARING\_CFTC\_REPORTING.
- **Total Equity:** Closing Balance + Total Equity
- **Collateral:** Settled collateral, cash and non-cash, from the parent and child accounts. All amounts converted into USD.
- **Net Liquidating Equity:** Total Equity + Collateral