



Nasdaq Calypso

Bloomberg TS Integration Guide

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Approved

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Document History

Revision	Published	Summary of Changes
1.0	November 2012	First edition.
2.0	November 2012	Second edition – Add remarks under RateDefinition in Calypso Mapping.
3.0	November 2012	Third edition – Add message element mapping of Bloomberg AIM/Bloomberg TOMS to Calypso Upload Document.
4.0	November 2012	Fourth edition – Change in product lookup for Equity and Equity Index Future.
5.0	November 2012	Fifth edition – Update Java Libraries Dependency for IBM MQ. Add lookup method for default counterparty and default book. Add screenshot for setting up attributes of equity, future, equity index and future option. Mark "user extended" for some categories in Calypso Mapping. Add details to instructions in the Recovery section.
6.0	December 2012	Sixth edition – Include Bloomberg TS Phase 2 changes.
7.0	January 2013	Seventh edition – Add screenshots in Product Setup.
8.0	January 2013	Eighth edition – Add FX Option Premium Data Mapping.
9.0	January 2013	Ninth edition – Add Trade Handling.
10.0	February 2013	Tenth edition – Add details to Book Hierarchy Product Node in Calypso Mapping.
11.0	May 2015	Eleventh edition – Remove field mapping.
12.0	May 2016	Twelfth edition – Updates for version 4.1.0.
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14.0	February 2017	Fourteenth edition – Updates for version 5.0.0.

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17.0	September 2018	Seventeenth edition – Updates for version 5.3.4.
18.0	November 2018	Eighteenth edition – Updates for version 5.4.0.
19.0	December 2019	Nineteenth edition – Updates for version 5.6.0.
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21.0	April 2019	Edition 21 – Updates for versions 5.4.6 and 5.5.2.
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23.0	November 2021	Edition 23 – Updates for version 5.11.0.
24.0	May 2022	Edition 24 – Update for version 5.11.0
25.0	April 2024	Added support for Bonds, Repo, and Futures in v20.
26.0	May 2024	Added support for Issuance in v20.
27.0	June 2024	Added support for Unitized Fund in v20 & CounterParty LE attribute Config
28.0	July 2024	Added ACK/NACK process
29.0	August 2024	Added support for OTC Equity Index Option and CDS Index Trade
30.0	September 2024	Added additional note in Client Account configuration Added support for Swaptions in Bloomberg AIM and FX Spot in Bloomberg TOMS
31.0	October 2024	Added support for FX Option (Vanilla) for v20
32.0	December 2024	Added support for FX Swap

This document describes the configuration required to integrate Bloomberg TS with Calypso.

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


 **IMPORTANT NOTE: For Cloud deployments please contact your application management team as the deployment procedure for Cap Cloud is different.**

Table of Contents

Introduction.....	7
1.1 Software Requirements	7
1.1.1 Engine Dependencies.....	7
Calypso Configuration Instructions	9
2.1 Prerequisites.....	9
2.2 Calypso Application Configuration	9
2.2.1 Migration Scripts and Schema Data.....	9
2.2.2 Upload Import Message Engine Setup.....	9
2.2.3 Update Manager Engine Setup	11
2.2.4 Calypso Workflow.....	11
2.2.5 Counterparty, Trader and Sales Person.....	12
2.2.6 Book.....	13
2.2.7 Bloomberg Data License Integration.....	15
2.2.8 Task Station	16
2.3 CounterParty LE attribute Config	16
2.3.1 Client account Configuration	16
2.3.2 Counterparty account Configuration	18
2.4 Product Setup.....	20
2.4.1 Bond Future	20
2.4.2 Equity	20
2.4.3 Equity Index Future.....	21
2.4.4 FX Forward.....	22
2.4.5 FX Future.....	23
2.4.6 FX Spot.....	24
2.4.7 FX NDF	24
2.4.8 Interest Rate Future.....	25
2.4.9 Option on Equity Index Future.....	26
2.4.10 Vanilla FX Option.....	27
2.4.11 Vanilla Interest Rate Swap.....	28
2.4.12 Asset Backed Securities.....	28
2.4.13 Basis Swap.....	29
2.4.14 Callable Bond.....	29
2.4.15 CD	30
2.4.16 CP.....	31
2.4.17 Fixed Term Loan and Deposit	32
2.4.18 FX Swap	34
2.4.19 Index Exchange Traded Fund	34
2.4.20 Listed Option on Bond Future	35
2.4.21 Mortgage Backed Securities	36
2.4.22 Repo and Reverse Repo	37
2.4.23 Security Lending.....	39

2.4.24	Shin-Gensaki.....	41
2.4.25	Single Barrier FX Option	42
2.4.26	Standard Bonds	43
2.4.27	Vanilla Cross Currency Swap	43
2.4.28	When Issued Bond.....	44

Data Mapping.....46

3.1	External Reference and Internal Reference	46
3.2	Trade Date.....	46
3.3	MiFID Trade Keywords.....	46
3.4	Configurable Mapping.....	46

Trade Handling.....48

4.1	Supported Products and Actions	48
4.2	New Trade in Bloomberg	50
4.3	Correct Trade in Bloomberg	50
4.4	Cancel Trade in Bloomberg	51
4.5	Terminate Trade in Bloomberg (for Repo only)	51
4.6	Rollover Trade in Bloomberg (for Repo only).....	51
4.7	Lifecycle Actions	51
4.8	Pre-Existing Trades.....	52

ACK/NACK process53

Introduction

The Bloomberg TS module specializes in integrating the Calypso Systems with the Bloomberg AIM or Bloomberg TOMS on Gateway NET (GNET) product.

This document explains the components involved and its dependencies with Calypso and other modules. It also describes the functions provided by the module as well as the setup procedures for the module to be functioning.

Gateway Net (GNET)

Schema version 30.14 is supported currently. Clients are suggested to get in touch with their Bloomberg Representatives for compatibility details.

1.1 Software Requirements

Please refer to the Data Uploader Integration Guide and the Bloomberg Data License Integration Guide.


IBM MQ – either server or client s/w installations are required. Please refer to IBM documentation.

Java Libraries Dependency

- com.ibm.mq.commonservices_7.0.1.3.jar
- com.ibm.mq.headers.jar
- com.ibm.mq.jar
- com.ibm.mq.jmqi.jar
- com.ibm.mq.jms.Nojndi.jar
- com.ibm.mq.pcf.jar
- com.ibm.mqjms.jar
- com.ibm.mq.* from your IBM MQ installation
- dhibcore.jar
- bloomberg.jar (for integration with Bloomberg Data License)


1.1.1 Engine Dependencies

- UploadImportMessageEngine, subscribing to PSEventUpload, with argument "-config BloombergAIM" (for integrating with Bloomberg AIM) or "-config BloombergTOMS" (for integrating with Bloomberg TOMS)
- BloombergEngine (for integration with Bloomberg Data License)
- TaskEngine (for integration with Bloomberg Data License)
- UpdateManagerEngine

 **Calypso supports v12 and v20 tradefeed format. V12 is the Calypso certified format while v20 is the standard Tradefeed format by Bloomberg. Bloomberg recommends to move from v12 to v20 format.**

For now, calypso supports v20 for the following products:

- Bonds
- Repo
- FutureBond
- FutureEquity
- FutureEquityIndex
- FutureMM
- FutureFX
- FutureCommodity
- FutureOptionBond
- FutureOptionEquity
- FutureOptionEquityIndex
- FutureOptionMM
- FutureOptionFX
- FutureOptionCommodity
- Issuance
- Unitized Fund

 **Calypso supports Issuance product only in v20**

Calypso Configuration Instructions

2.1 Prerequisites

Install Data Uploader - For instructions on installing Data Uploader, please refer to the Calypso Data Uploader Integration Guide.

2.2 Calypso Application Configuration

2.2.1 Migration Scripts and Schema Data

Schema Data are automatically loaded in Execute SQL and migration scripts are automatically applied.

2.2.2 Upload Import Message Engine Setup

Step 1 – Prepare the engine configuration file. You may start with the samples provided, which are named `calypso_bloombergaim_config.properties.sample` (for integrating with Bloomberg AIM) and `calypso_bloombergtoms_config.properties.sample` (for integrating with Bloomberg TOMS), and specify the messaging platform information in the file.


Please set `uploadMode` as "local" and `persistMessages` as "All" in the engine configuration file.

Rename the file as `calypso_bloombergaim_config.properties` or `calypso_bloombergtoms_config.properties`.

Step 2 – Configure the Upload Import Message Engine as shown in the figure.

The value of "config" should match (case insensitive) the middle part of the engine configuration file name. For example, if the file name is `calypso_bloombergaim_config.properties`, fill "BloombergAIM" here.


The engine should subscribe to `PSEventUpload`.

Engine Name: 
Engine ID:

Upload Import Message Engine - Bloomberg
421016

Engine Class:

com.calypso.tk.engine.UploadImportMessageEngine

Display Name: 
Application Type:

Upload Import Message Engine - Bloomberg
EngineServer

Description:

Upload Import Message Engine - Bloomberg AIM

Persisted Event Configuration:

PSEventAccountBilling
PSEventUpload

Event Filters:

AllTransfersKnownEventFilter

Engine Manager Configuration:
Start on Startup:

engineserver
☐

Configuration attributes

STARTUP	
TIMEOUT_RESTART	
USE_BOOK_PRICING_ENV	
VALUATION_TIMES	
VALUATION_TIMEZONES	
VERSION_CHECK	
XFER_CHECK_FIRST	
XFER_NEVER_BV	
XFER_NEXT_EVENT	
XFER_PAST_GENERATION	
XFER_POS_AGGREGATION_NAME	
XFER_USE_AUTOMATIC_ACCOUNT	
XFER_USE_MONEYDIFF	
XFER_USE_POS_AGGREGATION_ONLY	
XFER_USE_REVERSE	
config	BloombergAIM
tcid	

Cancel
Save

Connection to client's IBM MQ server via proxy, in calypso_bloombergtoms_config.properties file, we need to update the hostname, port accordingly, since it will not be updated via Tab file.



```
jms.queue.userid=calypsodev
jms.queue.queueManager=PMQNJ_DMZ2
jms.queue.hostname=10.60.50.10
jms.queue.port=8296
jms.queue.channel=P.TS.TSF.2106.12
input.queue.name=P.TS.TSF.FROM.BLP.2106.12
dynamicQueues/P.TS.TSF.FROM.BLP.2106.12.queue.setContext=true
messagingPlatform=IBMMQ
#ccdtURL=file:///C:/calypso/calypso-17.23.9.1/client/resources/P.TS.TSF.2106.12.TAB
restart.attempts=3
#IBM SSL Support
sslVersion=TLSv1.2
sslKeystore=cert.jks
sslKeystorePassword=$ENV('calypso_bloomberg_toms_keystore_password')
sslTrustStore=cert.jks
sslTrustStorePassword=$ENV('calypso_bloomberg_toms_truststore_password')
sslCipherSuite=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
uploadSource=Bloomberg
uploadFormat=TradeFeed
```

```
uploadMode=Local
persistMessages=All
```

Step 3 - Copy the configuration files to: <calypso home>/tools/calypso-templates/resources, then deploy the configuration files to your application servers.

2.2.3 Update Manager Engine Setup

Configure the Update Manager Engine as shown in the figure.

Engine Name: 	Engine ID:
<input type="text" value="UpdateManagerEngine"/>	<input type="text" value="421012"/>
Engine Class:	
<input type="text" value="com.calypso.tk.engine.UpdateManagerEngine"/>	
Display Name: 	Application Type:
<input type="text" value="Update Manager Engine"/>	<input type="text" value="EngineServer"/>
Description:	
<input type="text" value="Update Manager Engine"/>	
Persisted Event Configuration:	
<input type="text" value="PSEventAccountBilling"/> <div> <input type="text" value="PSEventMessage"/> <input type="text" value="PSEventRepublish"/> <input type="text" value="PSEventTrade"/> <input type="text" value="PSEventUploadReprocess"/> </div>	
Event Filters:	
<input type="text" value="AllTransfersKnownEventFilter"/> <div> <input type="text" value="UpdateManagerEngineEventFilter"/> </div>	
Engine Manager Configuration:	Start on Startup:
<input type="text" value="engineserver"/>	<input checked="" type="checkbox"/>

2.2.4 Calypso Workflow

► Please refer to the Data Uploader Integration Guide.

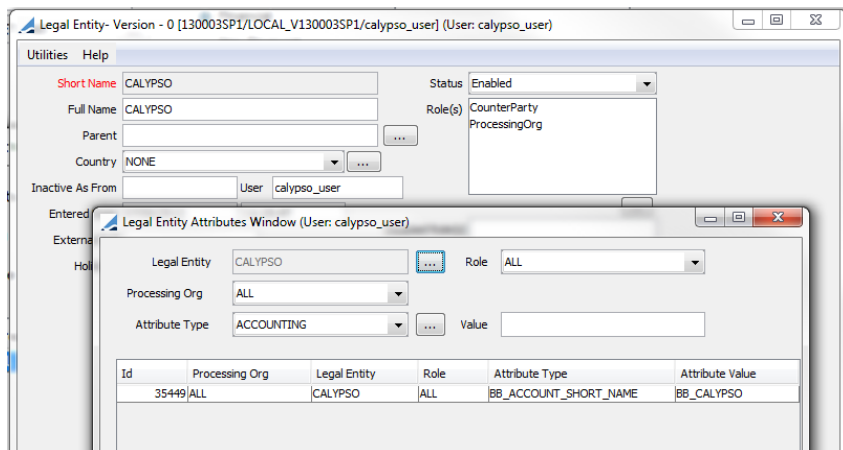
For bond trade allocation, Calypso suggests that the following actions be added to the existing bond trade workflow.

Original Status	Action	Rules	Resulting Status
VERIFIED	ALLOCATE	CheckFullAllocation CheckValidAllocation	ALLOCATED
VERIFIED	ALLOCATE	CheckPartialAllocation	PARTIAL_ALLOC

Original Status	Action	Rules	Resulting Status
		CheckValidAllocation	
ALLOCATED	ALLOCATE	CheckPartialAllocation CheckValidAllocation	PARTIAL_ALLOC
ALLOCATED	ALLOCATE	NOT(CheckValidAllocation)	VERIFIED
PARTIAL_ALLOC	ALLOCATE	CheckFullAllocation CheckValidAllocation	ALLOCATED
PARTIAL_ALLOC	ALLOCATE	CheckPartialAllocation CheckValidAllocation	PARTIAL_ALLOC
PARTIAL_ALLOC	ALLOCATE	NOT(CheckValidAllocation)	VERIFIED

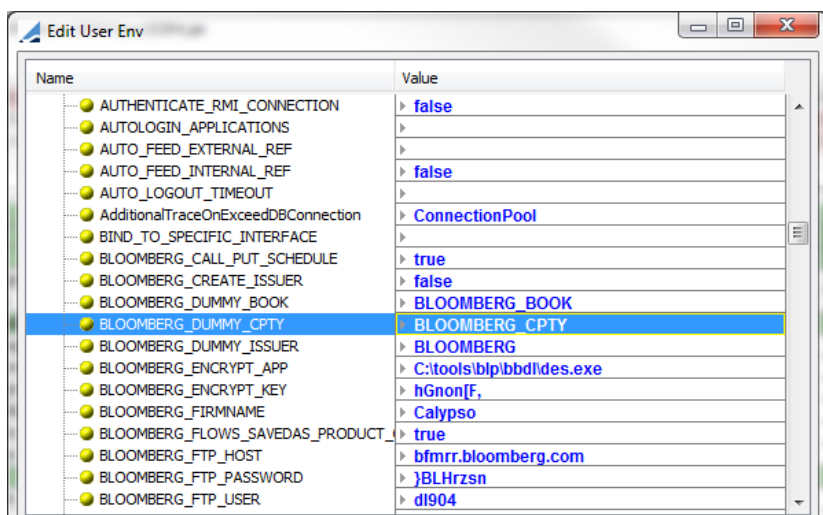
2.2.5 Counterparty, Trader and Sales Person

The Bloomberg AIM/TOMS field AccountCounterPartyShortName is used for looking up the counterparty in Calypso. The module first attempts to retrieve the counterparty via LE attribute mapping. For Bloomberg AIM and Bloomberg TOMS setup, the LE attribute name is BB_ACCOUNT_SHORT_NAME.

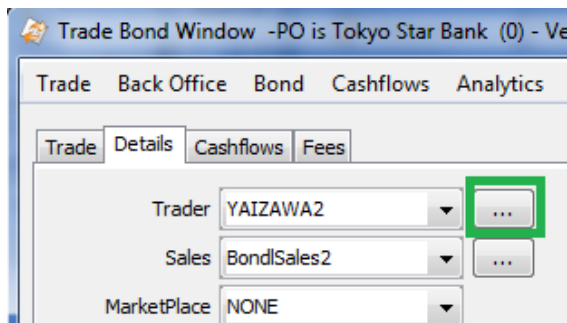


If no LE attribute mapping is found, then it searches for a counterparty with a matching name.

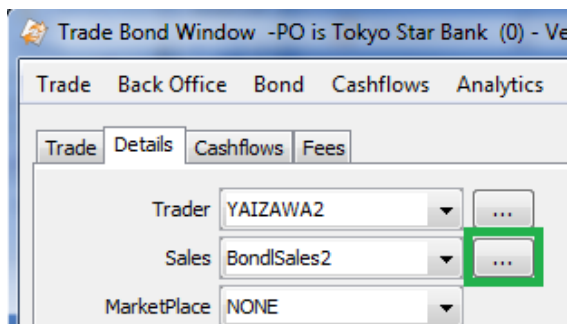
If neither is found, then the default counterparty, which is stored as environment variable BLOOMBERG_DUMMY_CPTY, will be taken.



The Bloomberg field TraderLogin will be mapped to the name of Trader in Calypso. Users need to create an appropriately named Trader values in Calypso (can be added by clicking on the eclipse located to the right of the Trader field below); otherwise the Trader default value of NONE will be used.



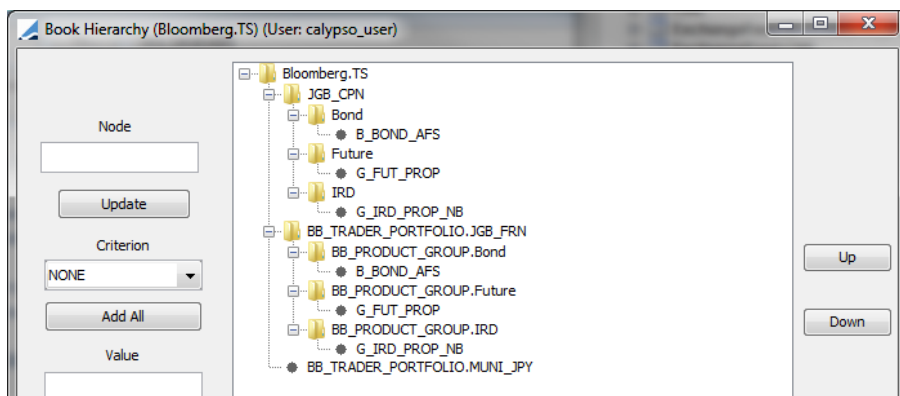
The Bloomberg field SalesLogin will be mapped to the name of Sales in Calypso. Similar to Trader described in the section above, users need to create an appropriately named Salesperson values in Calypso; otherwise the Salesperson default value of NONE will be used.



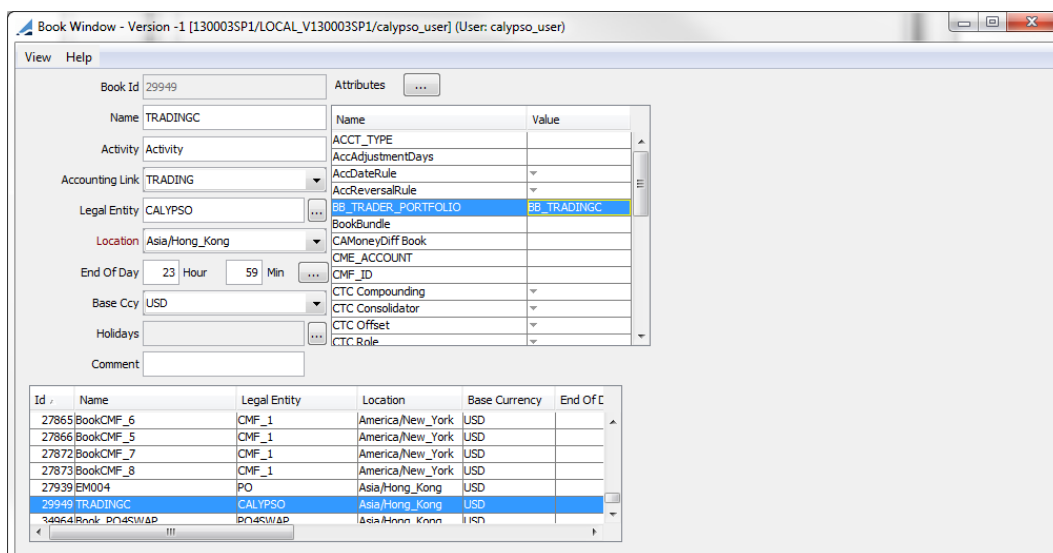
2.2.6 Book

For Bloomberg AIM or Bloomberg TOMS set up, the system will first look up the trading book from the Book Hierarchy. It searches a root node named Bloomberg.TS and then looks for a node with the name of Bloomberg

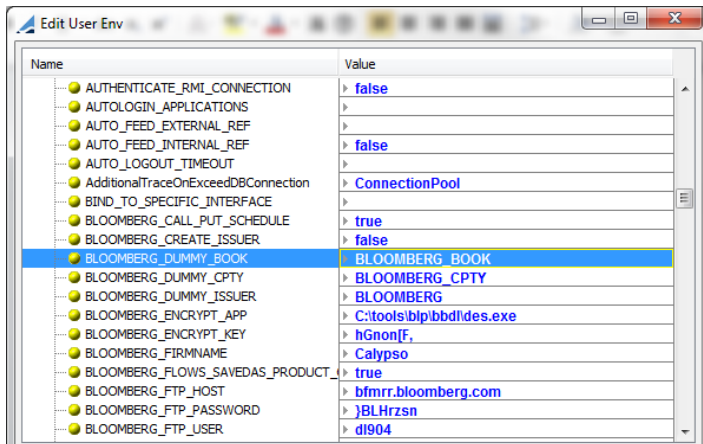
AIM or Bloomberg TOMS trade book. Finally it searches the product type of the trade. The leave node value stores the actual trade book name in Calypso.



If Book Hierarchy is not set up, the interface module would try to get the trading book by LE attribute BB_TRADER_PORTFOLIO.



If no book is found by the attribute BB_TRADER_PORTFOLIO, the default book which is stored as environment variable BLOOMBERG_DUMMY_BOOK will be used.



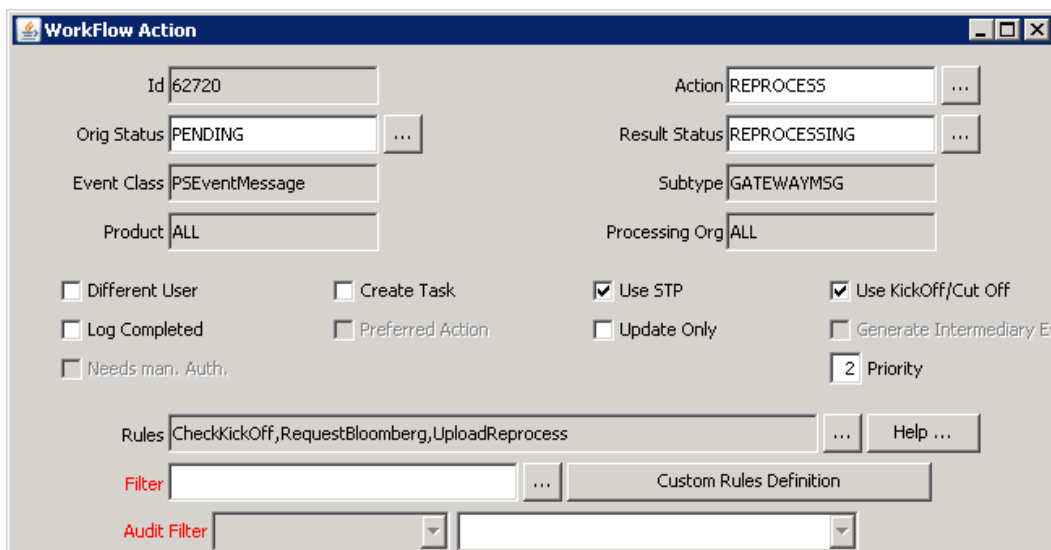
2.2.7 Bloomberg Data License Integration

For Bond trades, the module supports getting Bond product data from Bloomberg Data License if the corresponding product information is not present in Calypso System.

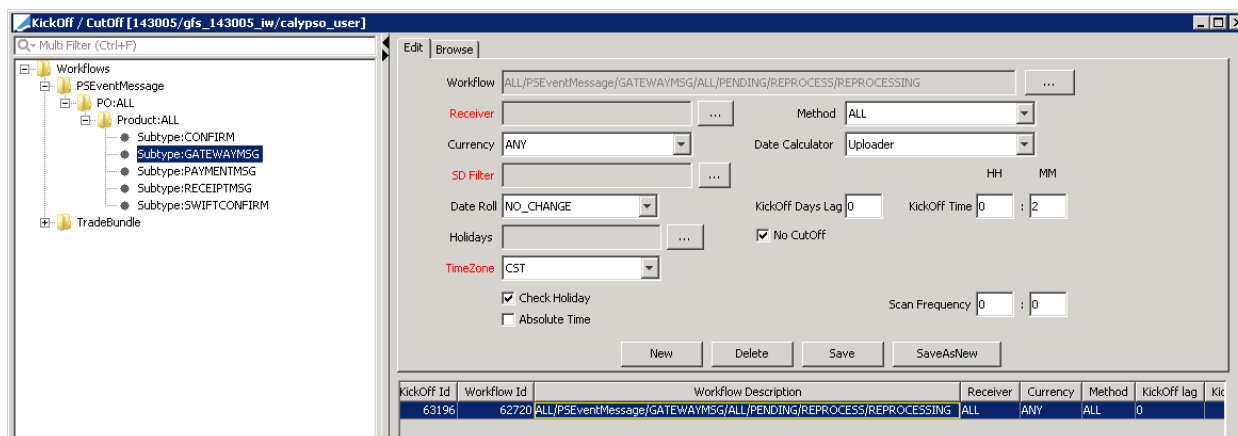
[NOTE: The Bloomberg Connect module for Calypso has to be separately licensed and set up first.]

Start the Bloomberg Engine and the Task Engine.

Then, configure the GATEWAYMESSAGE workflow, adding the rule for REPROCESS action. Please refer the below screen shot for the same:



Configure the kick off trigger as well (Configuration > Workflow > Kick-Off/Cut-Off...).



KickOff Id	Workflow Id	Workflow Description	Receiver	Currency	Method	KickOff lag	Kick
63196	62720	ALL/PSEventMessage/GATEWAYMSG/ALL/PENDING/REPROCESS/REPROCESSING	ALL	ANY	ALL	0	

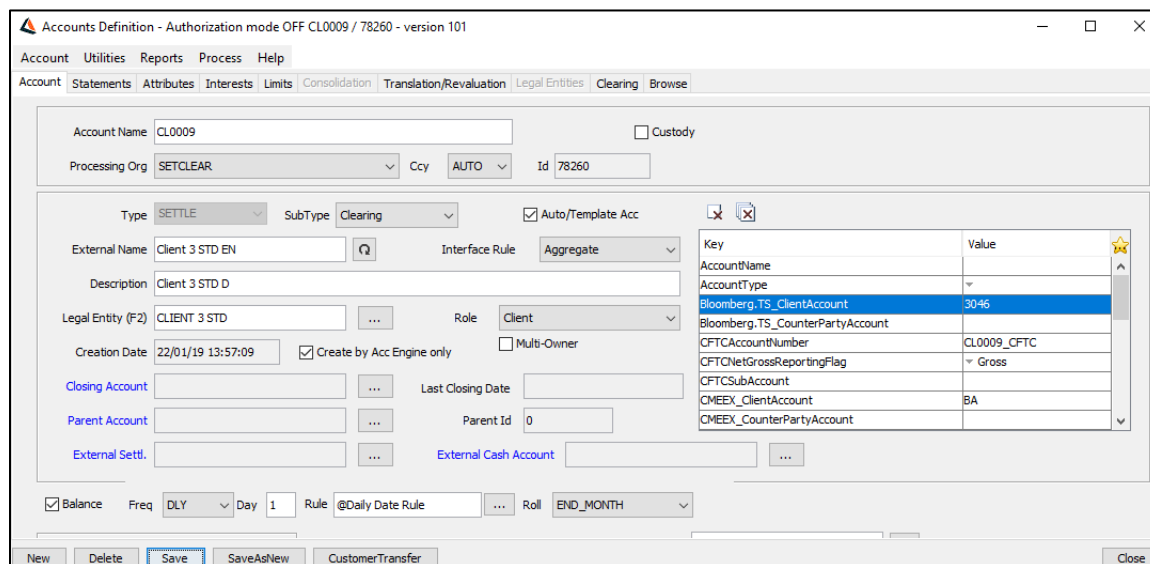
2.2.8 Task Station

► Please refer to the Data Uploader Integration Guide.

2.3 CounterParty LE attribute Config

Currently the Counterparty LE Attribute determines which Counterparty account needs to be considered to book the trades.

2.3.1 Client account Configuration



Key	Value
AccountName	
AccountType	
Bloomberg_TS_ClientAccount	3046
Bloomberg_TS_CounterPartyAccount	
CFTCAccountNumber	CL0009_CFTC
CFTCNetGrossReportingFlag	Gross
CFTCSubAccount	
CMEEX_ClientAccount	BA
CMEEX_CounterPartyAccount	

From the Bloomberg file Account number details is referred from TraderAccountNumber to link in the ClientAccount Definition. Accounts without Accountproperty in the above format will be ignored and trade will flow to Error account.

Add Account Property with prefix same name as Interface name followed by _ClientAccount.

For example:

Interface name – “Bloomberg.TS” followed by underscore – “_” and then postfix as “ClientAccount” (Bloomberg.TS_ClientAccount)

Client Error Account Logic:

Name:	Bloomberg.TS/Translator
Interface Value:	ClientAccountPOAttribute
Calypso Value:	ErrorAccount

Legal Entity Attributes Window - Version - 0

Search:

Legal Entity: SETCLEAR Role: ALL Processing Org: ALL

Attribute Group: Attribute Type: ErrorAccount Value: ERROR_ACCT

Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attribute Value
226257	ALL	SETCLEAR	ALL		ErrorAccount	ERROR_ACCT

☐ Authorization

Check Calypso Mapping Interface Translator for Client error Account from Which PO attribute to pick, if it is not mapped then fall back to check the ClientErrorAccount PO attribute.

Legal Entity Attributes Window - Version - 3

Search:

Legal Entity: SETCLEAR Role: ALL Processing Org: ALL

Attribute Group: Attribute Type: ClientErrorAccount Value: ERROR_ACCT

Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attribute Value
70257	ALL	SETCLEAR	ALL		ClientErrorAccount	ERROR_ACCT

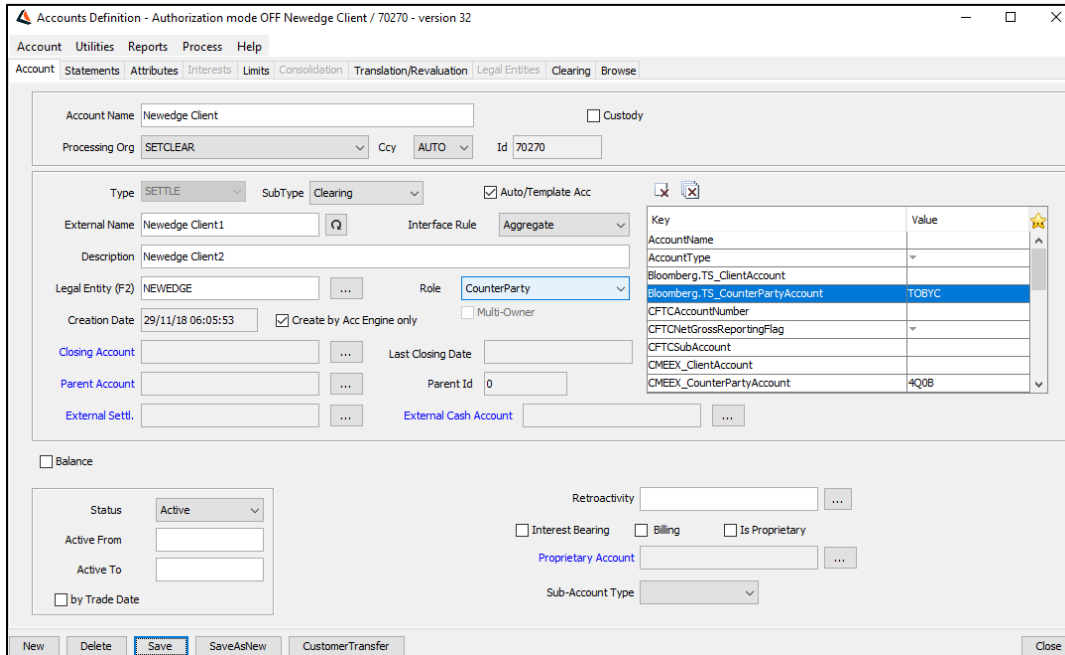
☐ Authorization

If PO ErrorAccount is not found, then fail to create the trade. The attribute value should be ClientAccount definition name.

Note: For V12, the client Account field will not be present in BBG xml file so , the trade will be booked into ClientErrorAccount.

2.3.2 Counterparty account Configuration

Account Configuration:



Accounts Definition - Authorization mode OFF Newedge Client / 70270 - version 32

Account Utilities Reports Process Help

Account Statements Attributes Interests Limits Consolidation Translation/Revaluation Legal Entities Clearing Browse

Account Name: Newedge Client ☐ Custody

Processing Org: SETCLEAR Ccy: AUTO Id: 70270

Type: SETTLE SubType: Clearing ☒ Auto/Template Acc

External Name: Newedge Client1 Interface Rule: Aggregate

Description: Newedge Client2

Legal Entity (F2): NEWEDGE Role: CounterParty

Creation Date: 29/11/18 06:05:53 ☒ Create by Acc Engine only ☐ Multi-Owner

Closing Account: Last Closing Date: Parent Account: Parent Id: 0

External Settl.: External Cash Account:

☐ Balance

Status: Active Active From: Active To: ☐ by Trade Date

Retroactivity: ☐ Interest Bearing ☐ Billing ☐ Is Proprietary

Proprietary Account: Sub-Account Type:

Key Value

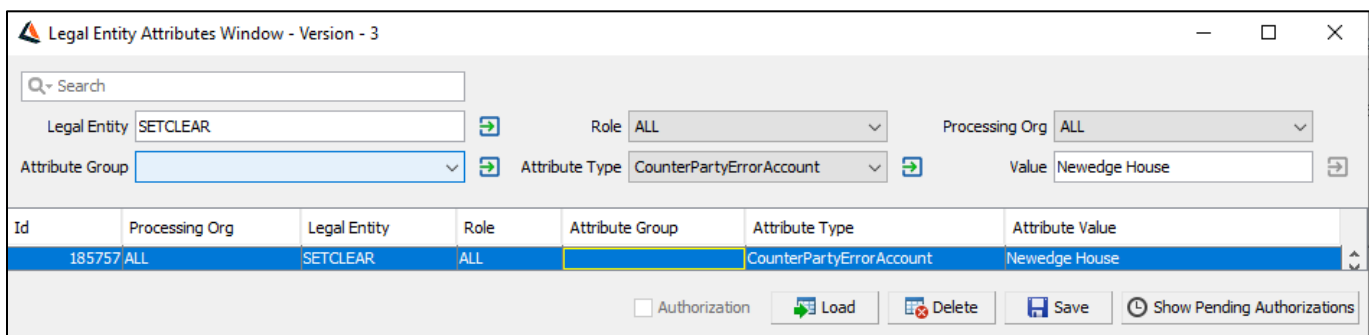
Key	Value
AccountName	
AccountType	
Bloomberg.TS_ClientAccount	
Bloomberg.TS_CounterPartyAccount	TOBYC
CFTCAccountNumber	
CFTCNetGrossReportingFlag	
CFTCSubAccount	
CHEEX_ClientAccount	
CHEEX_CounterPartyAccount	4Q08

New Delete Save SaveAsNew CustomerTransfer Close

From the Bloomberg file CounterPartyAccount number details is referred from CustomerAccountCounterParty to link in the CounterPartyAccount Definition. FCM trade interface primary look is to capture Counterparty account.

Accounts without Accountproperty in the above format will be fallback to PO attribute CounterPartyErrorAccount, if not found the current behavior (check legal entity mappings) and if not, trade will fail to load.

Add Account Property with prefix same name as Interface name followed by _CounterPartyAccount.



Legal Entity Attributes Window - Version - 3

Search

Legal Entity: SETCLEAR Role: ALL Processing Org: ALL

Attribute Group: Attribute Type: CounterPartyErrorAccount Value: Newedge House

Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attribute Value
185757 ALL	SETCLEAR	ALL			CounterPartyErrorAccount	Newedge House

☐ Authorization Load Delete Save Show Pending Authorizations

CounterPartyErrorAccount Mapping details in PO attribute, the attribute value should be Counterparty Account Definition name.

For Example:

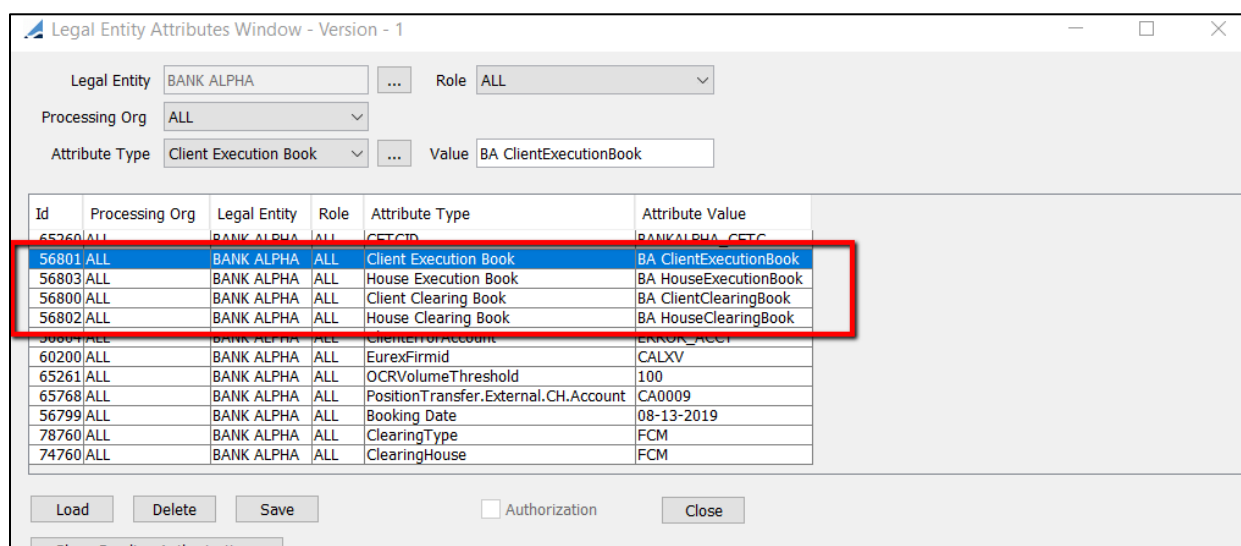
Interface name – “Bloomberg.TS” followed by underscore – “_” and then postfix as “CounterPartyAccount” (Bloomberg.TS_ CounterPartyAccount)

If the counterparty Mapping is not found then Check the PO attribute CounterPartyErrorAccount, if the PO attribute is not found then check the Legal entity attribute if this is not found fail the trade to load.

Book Mapping

If order is punched from Pricing sheet, then the book will be used from the order else it will pick the book from clearing client account property setup under Accountproperty name "Clearing Book". If an Account has a valid Book in the 'Clearing Book' value, then trades should be captured into that book.

If no value is present in the 'Clearing Book' attribute of the account, the book will be chosen from PO LE attributes by looking at the Subtype and Origin Code of the Client Account and following the logic below:



Id	Processing Org	Legal Entity	Role	Attribute Type	Attribute Value
65260	ALL	BANK ALPHA	ALL	CSTCID	BANKALPHA_CSTC
56801	ALL	BANK ALPHA	ALL	Client Execution Book	BA ClientExecutionBook
56803	ALL	BANK ALPHA	ALL	House Execution Book	BA HouseExecutionBook
56800	ALL	BANK ALPHA	ALL	Client Clearing Book	BA ClientClearingBook
56802	ALL	BANK ALPHA	ALL	House Clearing Book	BA HouseClearingBook
56804	ALL	BANK ALPHA	ALL	Client of Account	BAKOR_ACCOUNT
60200	ALL	BANK ALPHA	ALL	EurexFirmid	CALXV
65261	ALL	BANK ALPHA	ALL	OCRVolumeThreshold	100
65768	ALL	BANK ALPHA	ALL	PositionTransfer.External.CH.Account	CA0009
56799	ALL	BANK ALPHA	ALL	Booking Date	08-13-2019
78760	ALL	BANK ALPHA	ALL	ClearingType	FCM
74760	ALL	BANK ALPHA	ALL	ClearingHouse	FCM

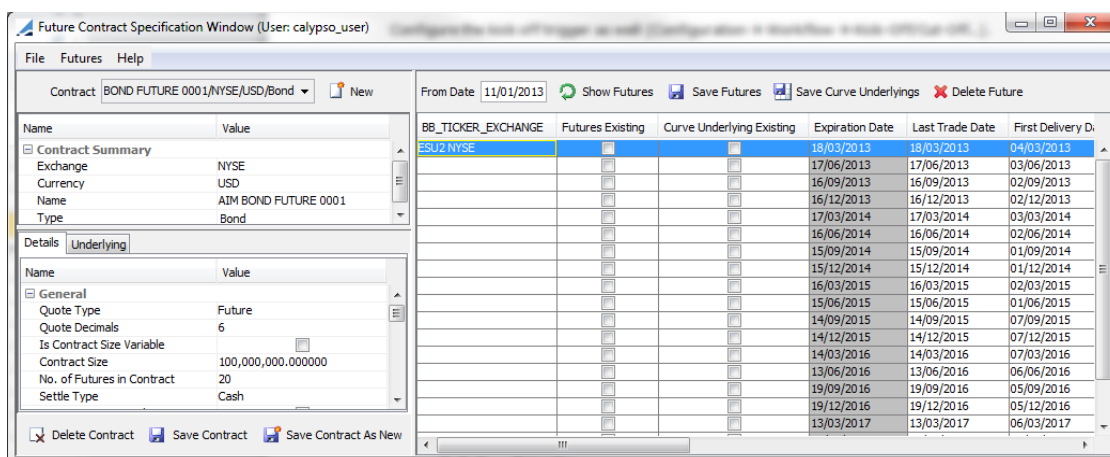
- Client Execution Book – Client account definition subtype (Execution), Account property "AccountType" (Client)
- House Execution Book – Client account definition subtype (Execution), Account property "AccountType" (House)
- Client Clearing Book – Client account definition subtype (Clearing), clearing tab Origin code (Client)
- House Clearing Book – Client account definition subtype (Clearing), clearing tab Origin code (House)

Note: in case the amend/cancel incoming message may not have client or counterparty account details then trade will be amended using the ExternalReference and ignore the check of client, book and CounterPartyAccount.

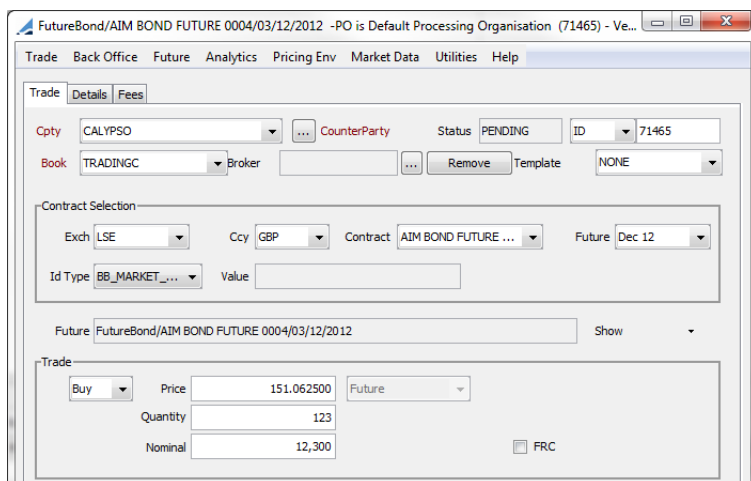
2.4 Product Setup

2.4.1 Bond Future

At the future level, map Calypso Product Code “BB_TICKER_EXCHANGE” to Bloomberg value “<Ticker> <Exchange>” (note the space between <Ticker> and <Exchange>).

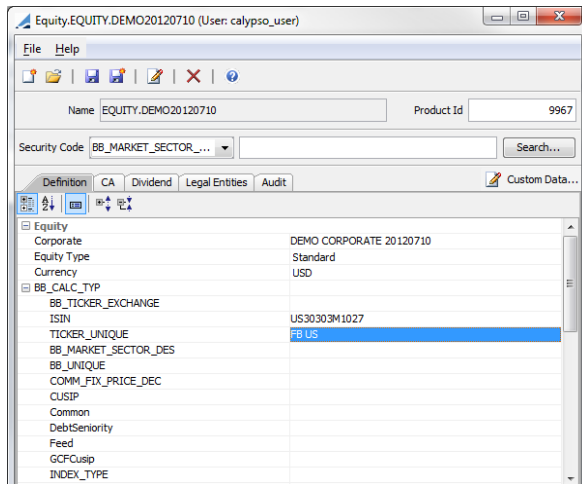


The Bond Future trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond Future trades.



2.4.2 Equity

At the equity level, map Calypso Product Code “TICKER_UNIQUE” to Bloomberg value “<Ticker> <Exchange>” (note the space between <Ticker> and <Exchange>, for example, FB US).



Equity.DEMO20120710 (User: calypso_user)

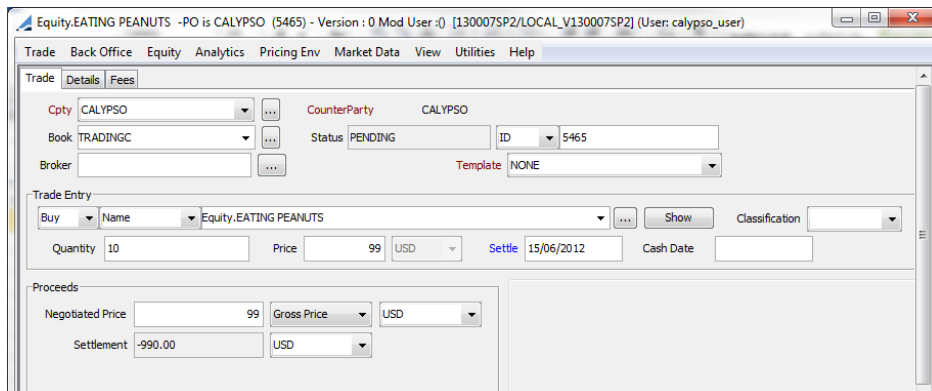
Name: EQUITY.DEMO20120710 Product Id: 9967

Security Code: BB_MARKET_SECTOR_... Search...

Definition: CA Dividend Legal Entities Audit Custom Data...

Equity	
Corporate	DEMO CORPORATE 20120710
Equity Type	Standard
Currency	USD
BB_CALC_TYP	
BB_TICKER_EXCHANGE	
ISIN	US30303M1027
TICKER_UNIQUE	FB US
BB_MARKET_SECTOR_DES	
BB_UNIQUE	
COMM_FIX_PRICE_DEC	
CUSIP	
Common	
DebtSeniority	
Feed	
GCFCusip	
INDEX_TYPE	

The Equity trades of Bloomberg AIM/TOMS are integrated into Calypso as Equity trades.



Equity.EATING PEANUTS -PO is CALYPSO (5465) - Version : 0 Mod User :0 [130007SP2/LOCAL_V130007SP2] (User: calypso_user)

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

Trade Details Fees

Cpty: CALYPSO CounterParty: CALYPSO

Book: TRADINGC Status: PENDING ID: 5465

Broker: Template: NONE

Trade Entry

Buy Name: Equity.EATING PEANUTS Show Classification:

Quantity: 10 Price: 99 USD Settle: 15/06/2012 Cash Date:

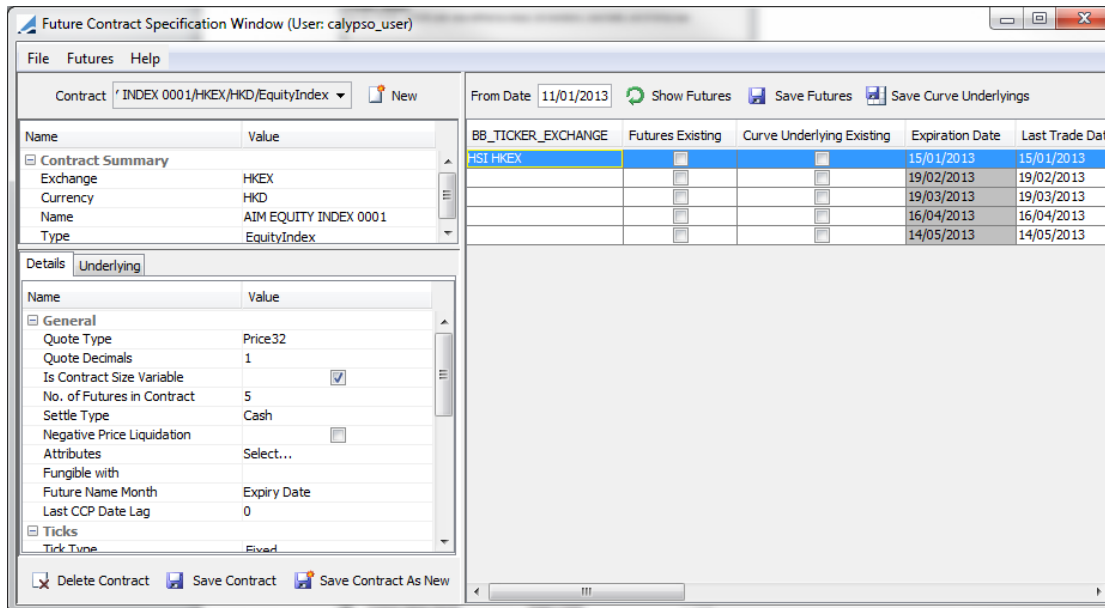
Proceeds

Negotiated Price: 99 Gross Price: USD

Settlement: -990.00 USD

2.4.3 Equity Index Future

At the future level, map Calypso Product Code "BB_TICKER_EXCHANGE" to Bloomberg value "<Ticker> <Exchange>" (note the space between <Ticker> and <Exchange>).



Future Contract Specification Window (User: calypso_user)

File Futures Help

Contract: INDEX 0001/HKEX/HKD/EquityIndex New

From Date: 11/01/2013 Show Futures Save Futures Save Curve Underlyings

BB_TICKER_EXCHANGE	Futures Existing	Curve Underlying Existing	Expiration Date	Last Trade Date
HSI HKEX	<input type="checkbox"/>	<input type="checkbox"/>	15/01/2013	15/01/2013
	<input type="checkbox"/>	<input type="checkbox"/>	19/02/2013	19/02/2013
	<input type="checkbox"/>	<input type="checkbox"/>	19/03/2013	19/03/2013
	<input type="checkbox"/>	<input type="checkbox"/>	16/04/2013	16/04/2013
	<input type="checkbox"/>	<input type="checkbox"/>	14/05/2013	14/05/2013

Details Underlying

Name Value

Contract Summary

Exchange HKEX

Currency HKD

Name AIM EQUITY INDEX 0001

Type EquityIndex

General

Quote Type Price32

Quote Decimals 1

Is Contract Size Variable ☒

No. of Futures in Contract 5

Settle Type Cash

Negative Price Liquidation ☐

Attributes Select...

Fungible with

Future Name Month Expiry Date

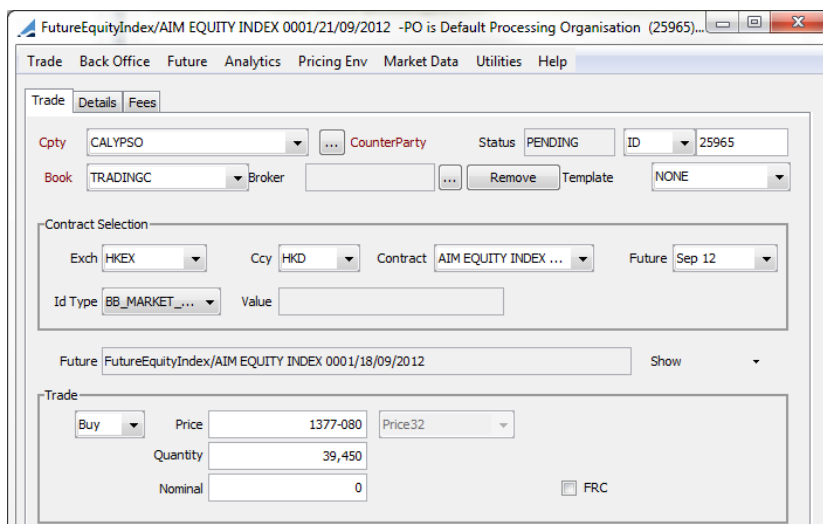
Last CCP Date Lag 0

Ticks

Tick Type Fixed

Delete Contract Save Contract Save Contract As New

The Equity Index Future trades of Bloomberg AIM/TOMS are integrated into Calypso as Equity Index Future trades.



FutureEquityIndex/AIM EQUITY INDEX 0001/21/09/2012 -PO is Default Processing Organisation (25965)...

Trade Back Office Future Analytics Pricing Env Market Data Utilities Help

Trade Details Fees

Cpty CALYPSO CounterParty Status PENDING ID 25965

Book TRADINGC Broker Remove Template NONE

Contract Selection

Exch HKEX Ccy HKD Contract AIM EQUITY INDEX ... Future Sep 12

Id Type BB_MARKET_... Value

Future FutureEquityIndex/AIM EQUITY INDEX 0001/18/09/2012 Show

Trade

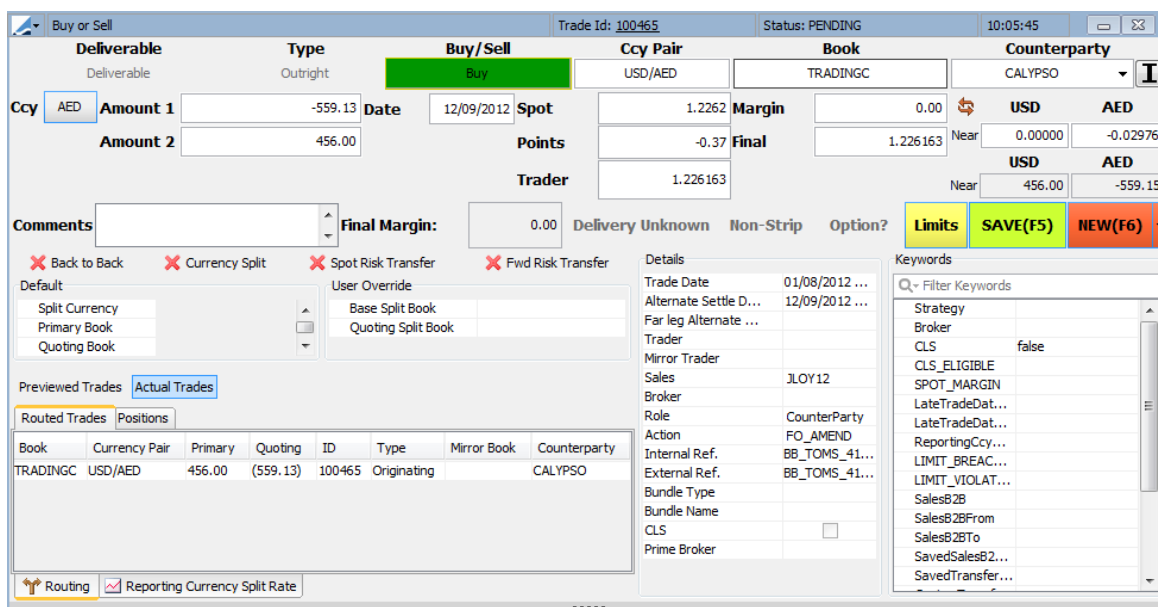
Buy Price 1377-080 Price32

Quantity 39,450

Nominal 0 FRC

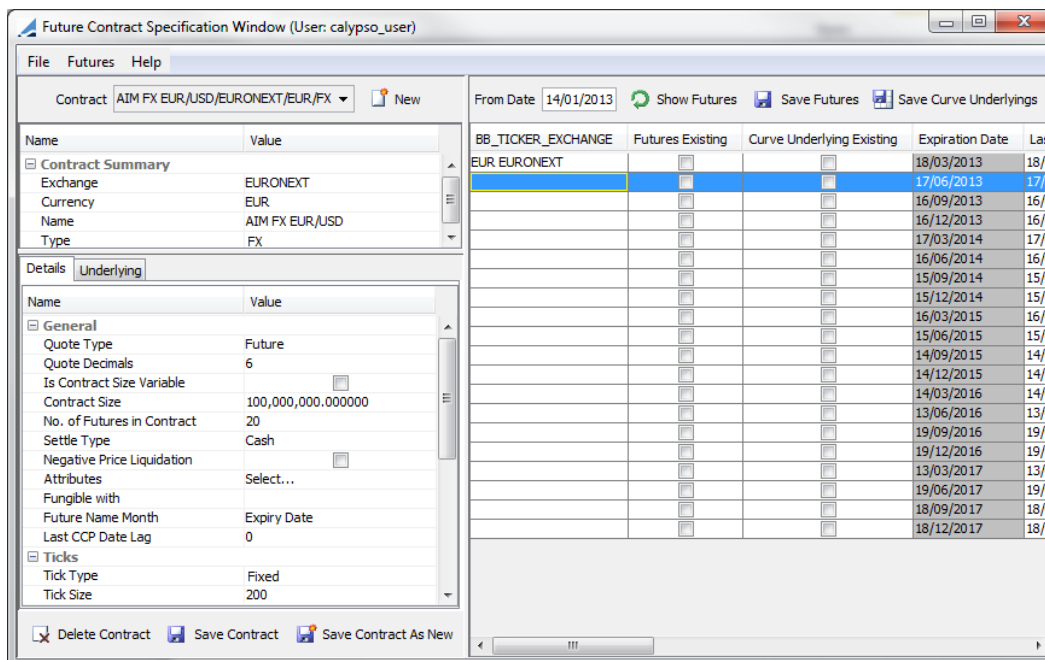
2.4.4 FX Forward

The FX Forward trades of Bloomberg AIM/TOMS are integrated into Calypso as FX Forward trades.

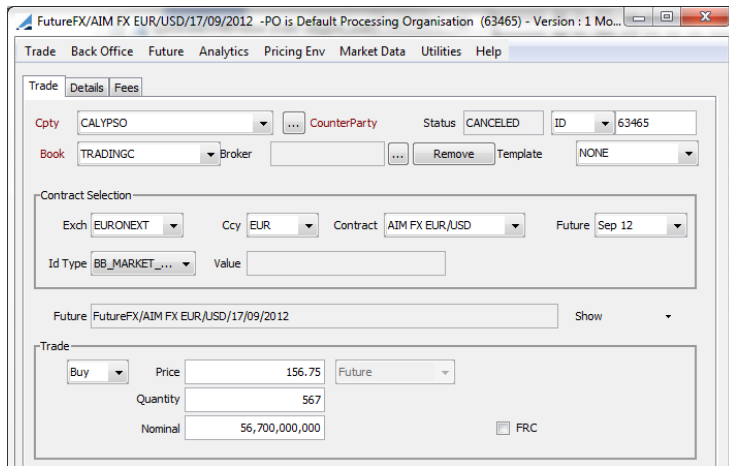


2.4.5 FX Future

At the future level, map Calypso Product Code "BB_TICKER_EXCHANGE" to Bloomberg value "<Ticker> <Exchange>" (note the space between <Ticker> and <Exchange>).

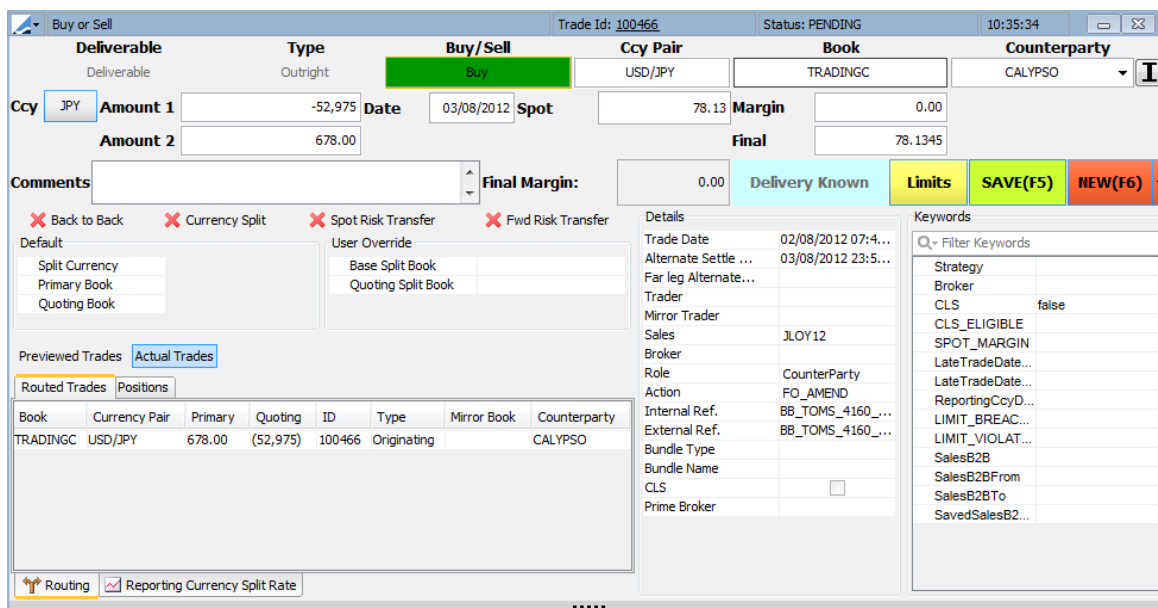


The FX Future trades of Bloomberg AIM/TOMS are integrated into Calypso as FX Future trades.



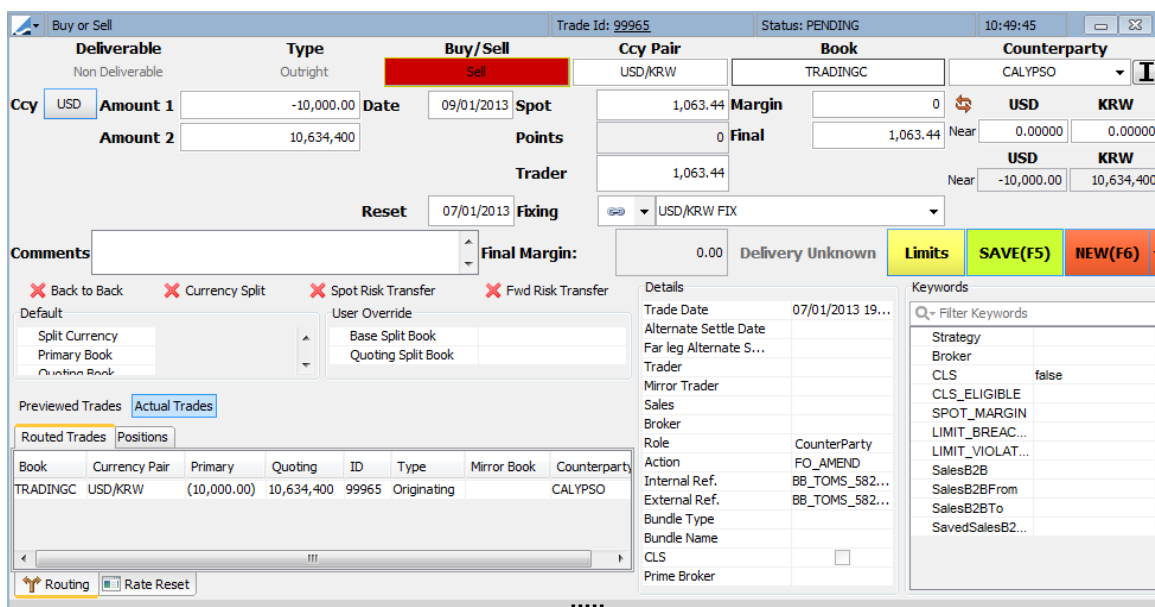
2.4.6 FX Spot

The FX Spot trades of Bloomberg AIM/TOMS are integrated into Calypso as FX Spot trades.



2.4.7 FX NDF

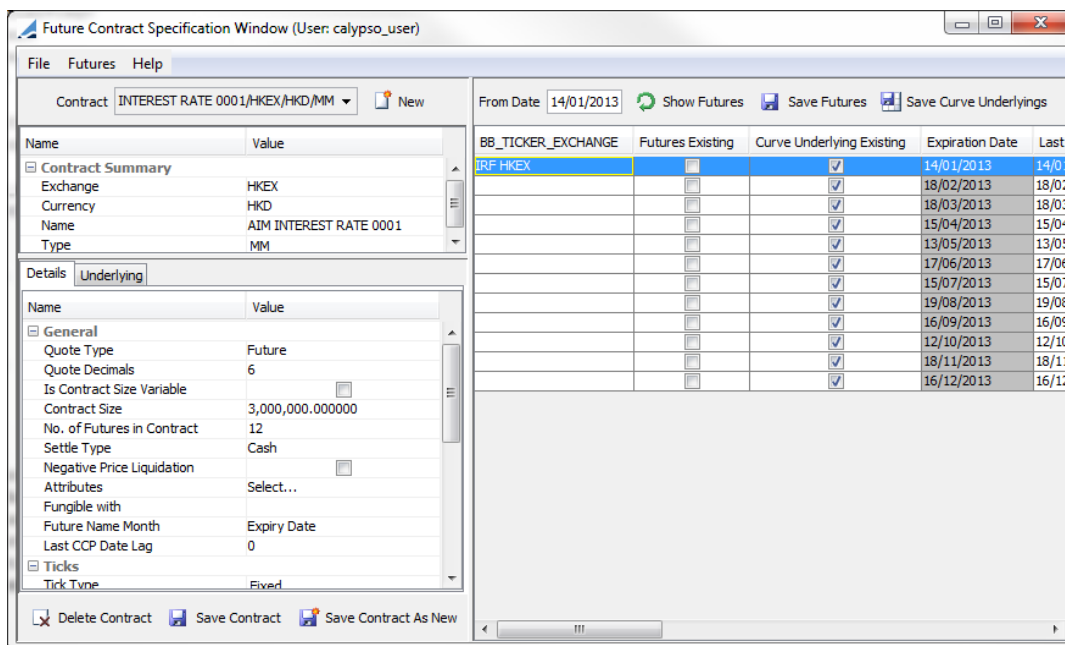
The FX NDF trades of Bloomberg AIM/TOMS are integrated into Calypso as FX NDF trades.



Buy or Sell window showing trade details for USD/KRW. The window includes fields for Deliverable, Type, Buy/Sell, Ccy Pair, Book, Counterparty, Amount 1, Amount 2, Date, Spot, Margin, Points, Final, Trader, Fixing, and Comments. It also features a Previews section with Actual Trades and a Keywords section with a search filter.

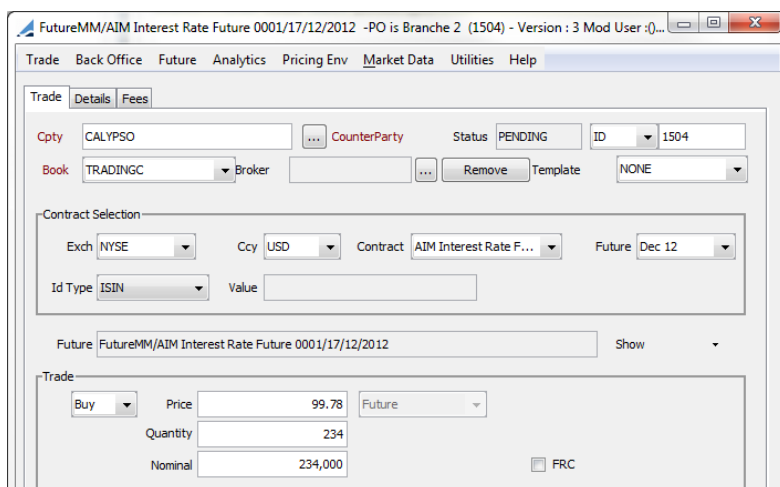
2.4.8 Interest Rate Future

At the future level, map Calypso Product Code "BB_TICKER_EXCHANGE" to Bloomberg value "<Ticker> <Exchange>" (note the space between <Ticker> and <Exchange>).



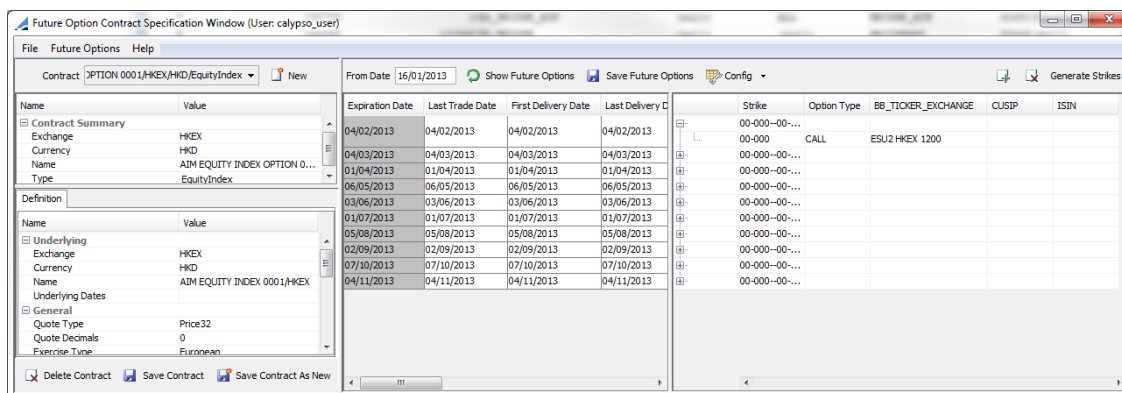
Future Contract Specification Window (User: calypso_user) showing contract details for INTEREST RATE 0001/HKEX/HKD/MM. The window includes a Contract Summary section with fields for Name, Value, Exchange, Currency, Name, and Type. It also features a Details section with fields for Quote Type, Quote Decimals, Is Contract Size Variable, Contract Size, No. of Futures in Contract, Settle Type, Negative Price Liquidation, Attributes, Fungible with, Future Name Month, Last CCP Date Lag, and Ticks. The main table lists contract details including BB_TICKER_EXCHANGE, Futures Existing, Curve Underlying Existing, Expiration Date, and Last.

The Interest Rate Future trades of Bloomberg AIM/TOMS are integrated into Calypso as Interest Rate Future trades.



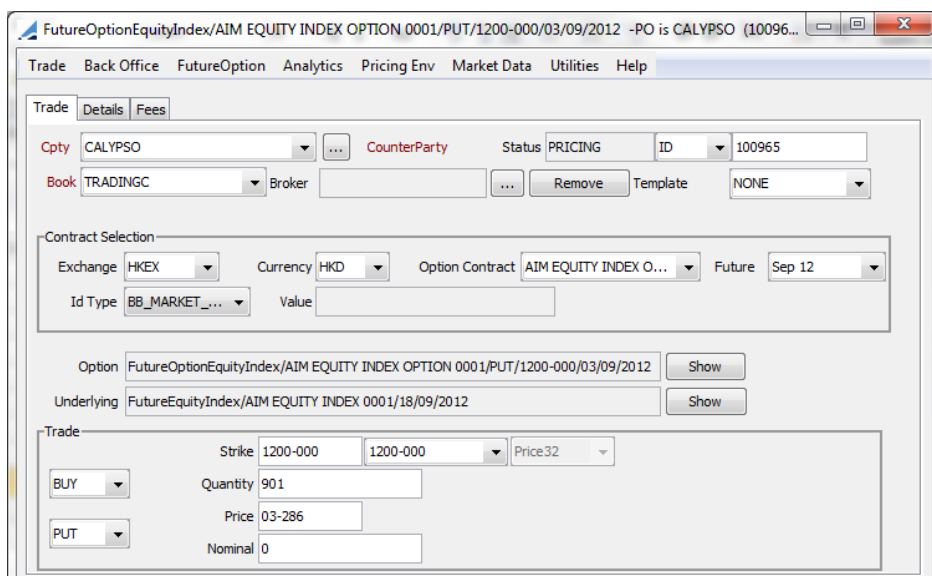
2.4.9 Option on Equity Index Future

At the future option level, map Calypso Product Code “BB_TICKER_EXCHANGE” to Bloomberg value “<Ticker> <Exchange> <Strike>” (There is a space between <Ticker>, <Exchange> and <Strike>). Please note that the number format of <Strike> should be the same between Bloomberg and Calypso.



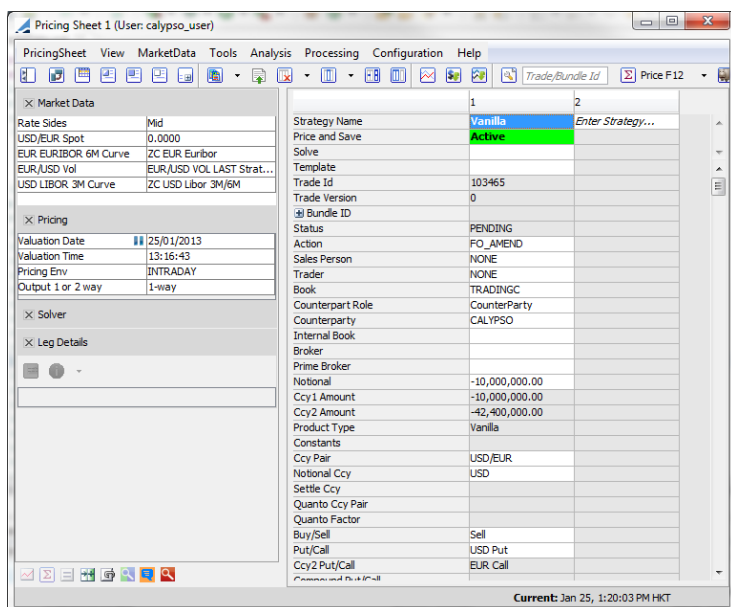
Expiration Date	Last Trade Date	First Delivery Date	Last Delivery Date	Strike	Option Type	BB_TICKER_EXCHANGE	CUSIP	ISIN
04/02/2013	04/02/2013	04/02/2013	04/02/2013	00-000-00-000				
04/03/2013	04/03/2013	04/03/2013	04/03/2013	00-000-00-000	CALL	ESU2 HKEK 1200		
01/04/2013	01/04/2013	01/04/2013	01/04/2013	00-000-00-000				
06/05/2013	06/05/2013	06/05/2013	06/05/2013	00-000-00-000				
03/06/2013	03/06/2013	03/06/2013	03/06/2013	00-000-00-000				
01/07/2013	01/07/2013	01/07/2013	01/07/2013	00-000-00-000				
05/08/2013	05/08/2013	05/08/2013	05/08/2013	00-000-00-000				
02/09/2013	02/09/2013	02/09/2013	02/09/2013	00-000-00-000				
07/10/2013	07/10/2013	07/10/2013	07/10/2013	00-000-00-000				
04/11/2013	04/11/2013	04/11/2013	04/11/2013	00-000-00-000				

The Option on Equity Index Future trades of Bloomberg AIM/TOMS are integrated into Calypso as Option on Equity Index Future trades.



2.4.10 Vanilla FX Option

The Vanilla FX Option trades of Bloomberg AIM/TOMS are integrated into Calypso as Vanilla FX Option trades.



ExpiryTimeZone Mapping - If not set, America/NewYork is used by default.

Example:

Name = Bloomberg.TS/Config

Interface Value = ExpiryTimeZone

Calypso Value = Asia/Tokyo

2.4.11 Vanilla Interest Rate Swap

The Vanilla Interest Rate Swap trades of Bloomberg AIM/TOMS are integrated into Calypso as Interest Rate Swap trades.

Swap/06/08/2017/P-USD/LIBOR/3M /RUSD 0.925000 - PO is CALYPSO (101465) - Version: 5.0 Mod User - 0 [130007SP2/LOCAL_V130007...]

Trade Back Office Swap Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details Cashflows Resets Fees (?) CSA

CounterParty ▾ CALYPSO ⓘ CALYPSO ID ▾ 101465
Book ▾ TRADING ⓘ Status PRICING Template NONE ▾ ⓘ

Subtype Standard ▾ Broker

+ Not Cancelable
+ Not Credit Contingent
+ No Principal Adjustments

Fix ▾ Rec ▾ USD ▾ 15,000,000.00
Bullet
Actual ☐
Start 06/08/2012 End 06/08/2017
0.925000 % ⓘ
Comp ☐ NONE

Pmt MTH ▾ END_PER ▾ NONE ▾
MOD_FOLLOW ▾ NONE ▾ Lag 0
ACT/360 ▾ NYC ⓘ NEAREST
NONE ADJUSTED

☐ Intermediate Ccy ▾ ▾
☐ Settlement Ccy ▾ ▾

Float ▾ Pay ▾ USD ▾ 15,000,000.00
Bullet
Actual ☐
Start 06/08/2012 End 06/08/2017
1.000000 = USD ▾ LIBOR ▾ 3M ▾ 0bp BBA
Cmp ⓘ
BEG_PER Lag -2 Bus, (LON) MOD_FOLLOW NONE

Avg ☐
1st Rate ▾ 1st Rate 0.441850
Pmt QTR ▾ END_PER ▾ NONE ▾
MOD_FOLLOW ▾ NONE ▾ Lag 0
ACT/360 ▾ NYC/LON ⓘ NEAREST
NONE ADJUSTED

☐ Intermediate Ccy ▾ ▾
☐ Settlement Ccy ▾ ▾

Val Date 16/01/2013 11:34:23 Pricing Env INTRADAY

Price Close

2.4.12 Asset Backed Securities

The system will look up the Securities by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message.

Product Chooser Window

Type/Ccy

Code

Bond chooser

Bond chooser

Type

<ALL>

Currencies

<ALL>

Maturity From

Maturity To

Country

Issuer

Id	Description	Type	CUSIP	ISIN	BB_UNIQUE	TI
5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		
52468	BondANZ 3.2 12/15/11/31/15/12/2011/3.2%	Bond	05252BA85	US05252BA853	COEH6526816	ANZ
54467	BondMTFG 0 09/18/14/21/18/09/2014/0.96425%	Bond	06538E427	US06538E4276	COEJ3629247	MTF
66967	BondT 1 1/4 09/30/15/51/30/09/2015/1.25%	Bond	912882N29	US912882N291	GV912828N29	T
52967	BondANZ 5.1 0.1/13/20/101/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI1023007	ANZ
69469	BondBATSUN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	BAT
62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JGB
50967	BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	22205201	GB0009125370A		
51967	BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AK1	JP3866800000	COOD5312515	T
52469	BondANZ 3.7 0.1/13/15/51/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI1023049	ANZ
53467	BondANZ 3.2 12/15/11/31/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	ANZ
62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP110301952	COEH8259069	JGB
3129	BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025125	US3620251254		
5345	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
5346	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
51467	BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BC03JQPB8	US0220953235	MG1100JVPQ	RM
53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
3130	FRNJPM 0 12/02/11/0D/02/12/2011	BondFRN	481247AC8	US481247AC84		
54468	FRNMTFG 0 09/18/14/21/18/09/2014	BondFRN	06538E428			

Product Id:

Clear

Add

Templates

Save...

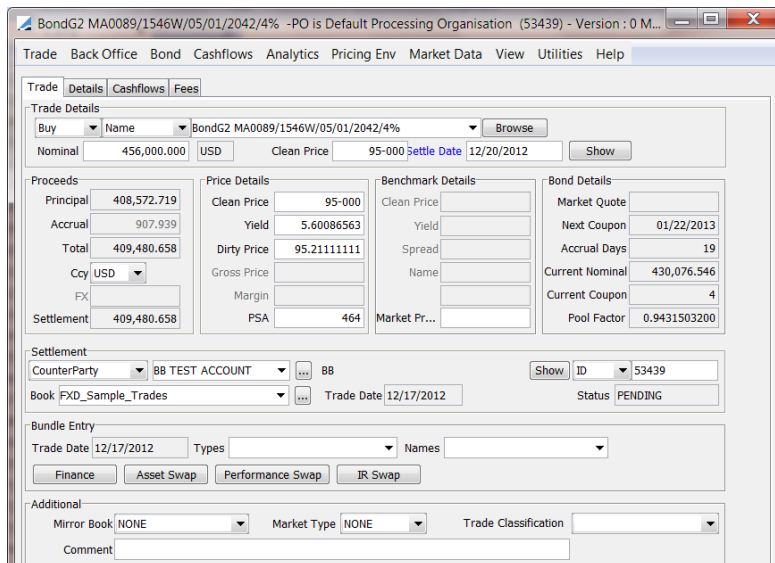
Delete

Help

Cancel

Ok

The Asset Backed Securities trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond trades.

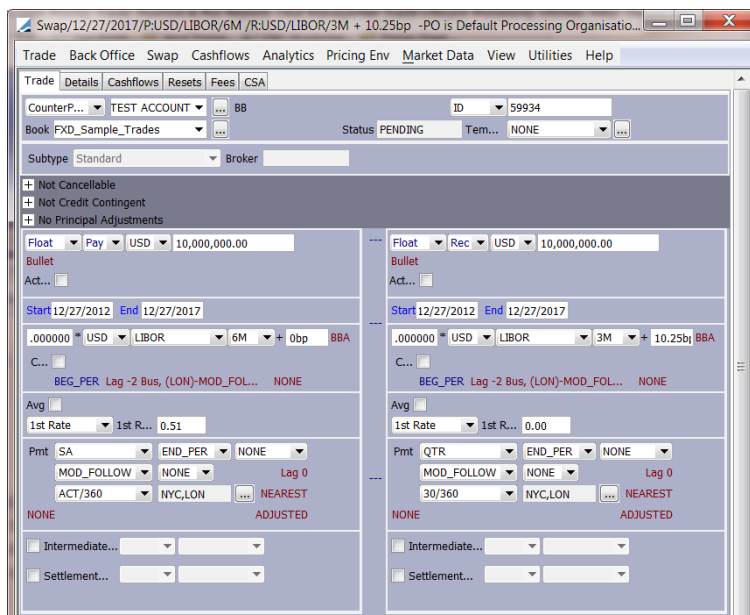


The screenshot shows the 'Trade' tab of the Calypso interface for a Bond trade. The trade details include:

- Trade Details:** Buy, Name: BondG2 MA0089/1546W/05/01/2042/4%, Nominal: 456,000,000, USD, Clean Price: 95-000, Settle Date: 12/20/2012.
- Proceeds:** Principal: 408,572,719, Accrual: 907,939, Total: 409,480,658, Ccy: USD, FX, Settlement: 409,480,658.
- Price Details:** Clean Price: 95-000, Yield: 5.60086563, Dirty Price: 95.21111111, Gross Price, Margin, PSA: 464.
- Benchmark Details:** Clean Price, Yield, Spread, Name, Market Pr...
- Bond Details:** Market Quote, Next Coupon: 01/22/2013, Accrual Days: 19, Current Nominal: 430,076,546, Current Coupon: 4, Pool Factor: 0.9431503200.
- Settlement:** CounterParty: BB TEST ACCOUNT, ID: 53439, Book: FXD_Sample_Trades, Trade Date: 12/17/2012, Status: PENDING.
- Bundle Entry:** Trade Date: 12/17/2012, Types, Names.
- Additional:** Mirror Book: NONE, Market Type: NONE, Trade Classification, Comment.

2.4.13 Basis Swap

The Basis Swap trades of Bloomberg AIM/TOMS are integrated into Calypso as Interest Rate Swap trades.

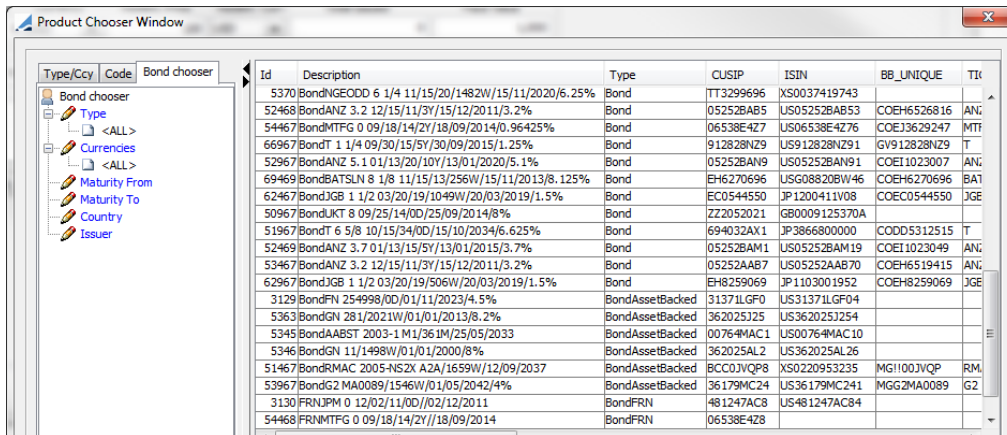


The screenshot shows the 'Trade' tab of the Calypso interface for a Swap trade. The trade details include:

- CounterParty:** TEST ACCOUNT, ID: 59934, Status: PENDING, Tem: NONE.
- Subtype:** Standard, Broker.
- Not Cancellable, Not Credit Contingent, No Principal Adjustments.**
- Float Pay:** USD, 10,000,000.00, Start: 12/27/2012, End: 12/27/2017, .000000, USD, LIBOR, 6M, 0bp, BBA, C... BEG_PER Lag -2 Bus, (LON)-MOD_FOL... NONE.
- 1st Rate:** 1st R... 0.51.
- Pmt:** SA, END_PER: NONE, MOD_FOLLOW: NONE, Lag 0, ACT/360, NYC, LON, NEAREST, NONE, ADJUSTED.
- Intermediate...**
- Settlement...**
- Float Rec:** USD, 10,000,000.00, Start: 12/27/2012, End: 12/27/2017, .000000, USD, LIBOR, 3M, + 10.25bp, BBA, C... BEG_PER Lag -2 Bus, (LON)-MOD_FOL... NONE.
- 1st Rate:** 1st R... 0.00.
- Pmt:** QTR, END_PER: NONE, MOD_FOLLOW: NONE, Lag 0, 30/360, NYC, LON, NEAREST, NONE, ADJUSTED.
- Intermediate...**
- Settlement...**

2.4.14 Callable Bond

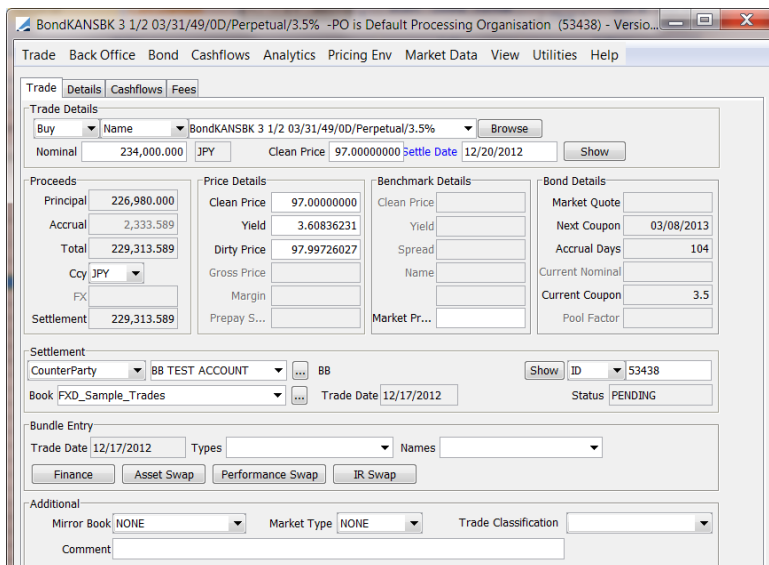
The system will look up the Bond by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message.



Type/Ccy	Code	Bond chooser
Bond	chooser	
Type	<ALL>	
Currencies	<ALL>	
Maturity From		
Maturity To		
Country		
Issuer		

Id	Description	Type	CUSIP	ISIN	BB_UNIQUE	TI
5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		
52468	BondANZ 3.2 12/15/11/3/15/12/2011/3.2%	Bond	052528AB5	US052528AB53	COEH6526816	AN
54467	BondMTFG 0 09/18/14/2/18/09/2014/0.96425%	Bond	06538E427	US06538E4276	COEJ3629247	MT
66967	BondT 1 1/4 09/30/15/5/30/09/2015/1.25%	Bond	912828N29	US912828N291	GV912828N29	T
52967	BondANZ 5.1 01/13/20/10/1/13/01/2020/5.1%	Bond	052528AN9	US052528AN91	COEI1023007	AN
69469	BondBATSUN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG088208W46	COEH6270696	BA
62467	BondJGB 1 1/2 03/20/19/10/49W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JG
50967	BondDUKT 8 09/25/14/00/25/09/2014/8%	Bond	ZZ2052021	G80009125370A		
51967	BondT 6 5/8 10/15/13/4/00/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	T
52469	BondANZ 3.7 01/13/15/13/01/2015/3.7%	Bond	052528AM1	US052528AM19	COEI1023049	AN
53467	BondANZ 3.2 12/15/11/3/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
62967	BondJGB 1 1/2 03/20/19/10/49W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
3129	BondFN 254998/00/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025J25	US362025J254		
5345	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
5346	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
51467	BondMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC03VQP8	XS0220953235	MG1100JVQP	RM
53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
3130	FRNJP 0 12/02/11/00/02/12/2011	BondFRN	481247AC8	US481247AC84		
54468	FRNMTFG 0 09/18/14/2/18/09/2014	BondFRN	06538E428			

The Callable Bond trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond trades.



Trade Back Office Bond Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details Cashflows Fees

Trade Details

Buy Name BondKANSBK 3 1/2 03/31/49/00/Perpetual/3.5% Browse

Nominal 234,000,000 JPY Clean Price 97.00000000 Settle Date 12/20/2012 Show

Proceeds

Principal 226,980,000

Accrual 2,333,589

Total 229,313,589

Ccy JPY

FX

Settlement 229,313,589

Price Details

Clean Price 97.00000000

Yield 3.60836231

Dirty Price 97.99726027

Gross Price

Margin

Prepay S...

Benchmark Details

Clean Price

Yield

Spread

Name

Market Pr...

Bond Details

Market Quote

Next Coupon 03/08/2013

Accrual Days 104

Current Nominal

Current Coupon 3.5

Pool Factor

Settlement

CounterParty BB TEST ACCOUNT BB Show ID 53438

Book FXD_Sample_Trades Trade Date 12/17/2012 Status PENDING

Bundle Entry

Trade Date 12/17/2012 Types Names

Finance Asset Swap Performance Swap IR Swap

Additional

Mirror Book NONE Market Type NONE Trade Classification

Comment

2.4.15 CD

The system will look up the CD by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message.

Product Chooser Window

Type/Ccy	Code	Bond chooser	Id	Description	Type	CUSIP	ISIN	BB_UNIQUE	TI
Bond	chooser		5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		
Bond	chooser		52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	AN
Bond	chooser		54467	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E427	US06538E4276	COEJ3629247	MT
Bond	chooser		66967	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828N29	US912828N291	GV912828N29	T
Bond	chooser		52967	BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI1023007	AN
Bond	chooser		69469	BondBATSUN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG088208W46	COEH6270696	BA
Bond	chooser		62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JG
Bond	chooser		50967	BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	222052021	GB0009125370A		
Bond	chooser		51967	BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	T
Bond	chooser		52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI1023049	AN
Bond	chooser		53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
Bond	chooser		62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
BondAssetBacked			3129	BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
BondAssetBacked			5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025J25	US362025J254		
BondAssetBacked			5345	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
BondAssetBacked			5346	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
BondAssetBacked			51467	BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC0JVQP8	XS0220953235	MG1100JVQP	RM
BondAssetBacked			53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
BondFRN			3130	FRNJP 0 12/02/11/0D/02/12/2011	BondFRN	481247AC8	US481247AC84		
BondFRN			54468	FRNMTFG 0 09/18/14/2Y/18/09/2014	BondFRN	06538E428			

The CD trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond trades.

FRNMTFG 0 09/18/14/2Y/09/18/2014 - PO is Default Processing Organisation (53440) - Version : 0 Mod

Trade Back Office Bond Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details

Buy Name FRNMTFG 0 09/18/14/2Y/09/18/2014 Browse

Nominal 678,000,000 USD Clean Price 101.00000000 Settle Date 12/24/2012 Show

Proceeds

Principal 684,780,000

Accrual 0.000

Total 684,780,000

Ccy USD

FX

Settlement 684,780,000

Price Details

Clean Price 101.00000000

Yield 0.00000000

Dirty Price 0.00000000

Gross Price

Margin 0.00

Prepay S...

Benchmark Details

Clean Price

Yield

Spread

Name

Market Pr...

Bond Details

Market Quote

Next Coupon null

Accrual Days 0

Current Nominal

Current Coupon

Pool Factor

Settlement

CounterParty BB TEST ACCOUNT BB

Book FXD_Sample_Trades Trade Date 12/17/2012 Status PENDING

Bundle Entry

Trade Date 12/17/2012 Types Names

Finance Asset Swap Performance Swap IR Swap

Additional

Mirror Book NONE Market Type NONE Trade Classification

Comment

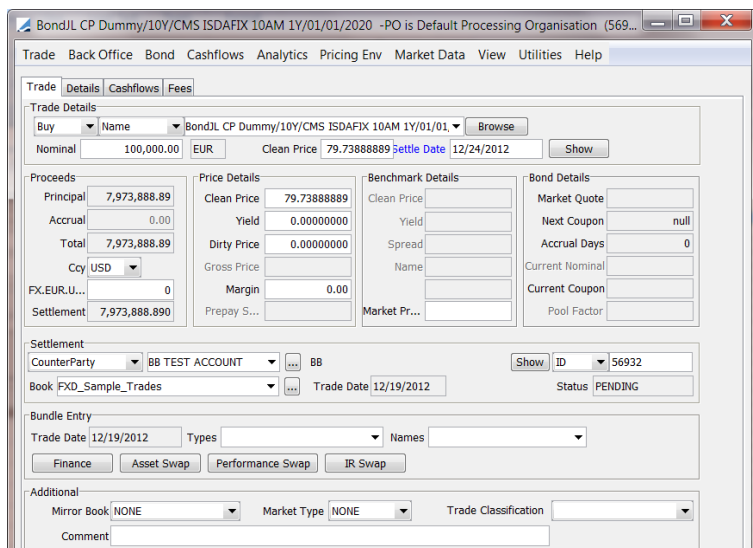
2.4.16 CP

The system will look up the CP by CUSIP, ISIN or BB_UNIQUE.

Product Chooser Window

Type/Ccy	Code	Bond chooser	Id	Description	Type	CUSIP	ISIN	BB_UNIQUE	TI
Bond	chooser		5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		
Bond	chooser		52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	AN
Bond	chooser		54467	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E427	US06538E4276	COEJ3629247	MT
Bond	chooser		66967	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828N29	US912828N291	GV912828N29	T
Bond	chooser		52967	BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI1023007	AN
Bond	chooser		69469	BondBATSUN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG088208W46	COEH6270696	BA
Bond	chooser		62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JG
Bond	chooser		50967	BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	222052021	GB0009125370A		
Bond	chooser		51967	BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	T
Bond	chooser		52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI1023049	AN
Bond	chooser		53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
Bond	chooser		62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
BondAssetBacked			3129	BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
BondAssetBacked			5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025J25	US362025J254		
BondAssetBacked			5345	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
BondAssetBacked			5346	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
BondAssetBacked			51467	BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC0JVQP8	XS0220953235	MG1100JVQP	RM
BondAssetBacked			53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
BondFRN			3130	FRNJP 0 12/02/11/0D/02/12/2011	BondFRN	481247AC8	US481247AC84		
BondFRN			54468	FRNMTFG 0 09/18/14/2Y/18/09/2014	BondFRN	06538E428			

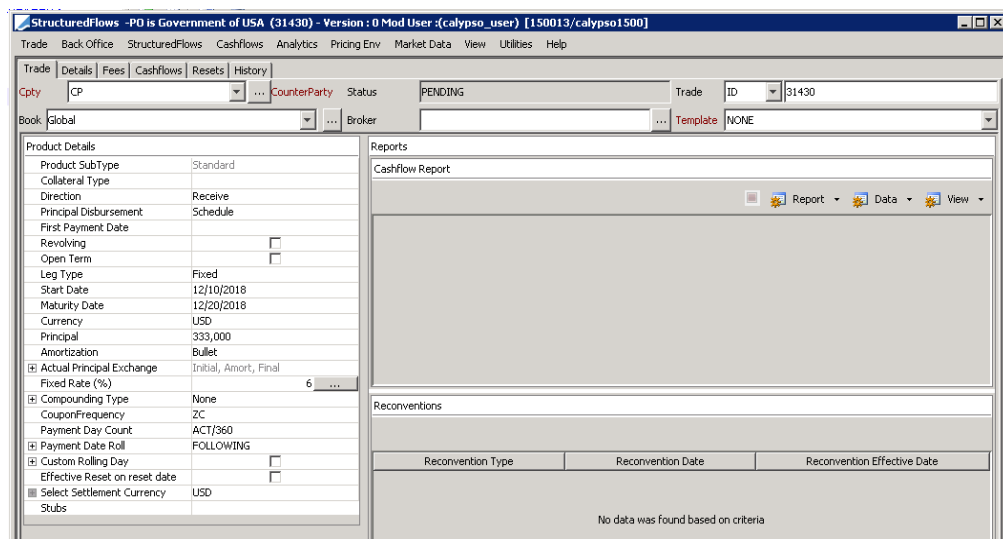
The CP trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond trades.



The screenshot shows the 'Trade' tab of the Calypso interface. The trade name is 'BondJL CP Dummy/10Y/CMS ISDAFIX 10AM 1Y/01/01/2020'. The nominal value is 100,000.00 EUR. The clean price is 79.7388889. The trade date is 12/24/2012. The status is 'PENDING'. The counterparty is 'BB TEST ACCOUNT'. The book is 'FXD_Sample_Trades'. The trade date is 12/19/2012. The bundle entry is 'Finance'. The market type is 'NONE'. The trade classification is 'NONE'.

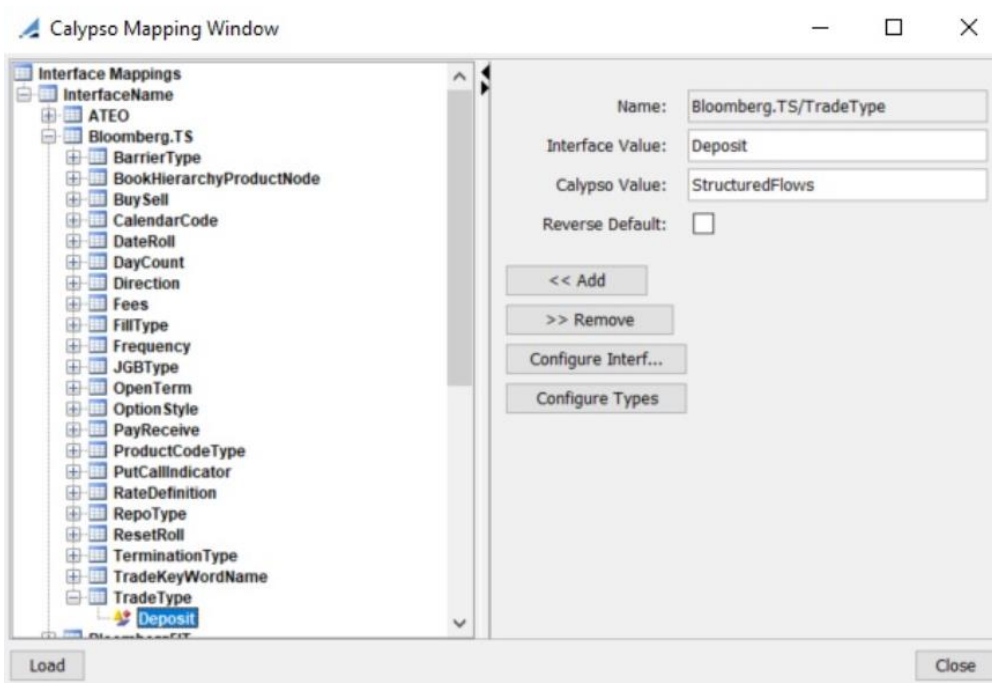
2.4.17 Fixed Term Loan and Deposit

The Fixed Term Loan and Deposit trades of Bloomberg AIM/TOMS are integrated into Calypso as StructuredFlows trades by default.

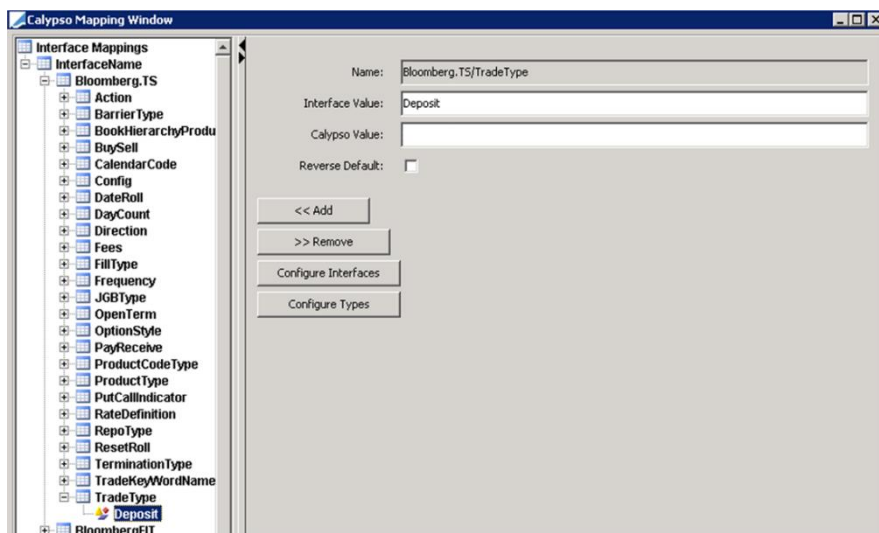


The screenshot shows the 'Trade' tab of the Calypso interface. The trade name is 'StructuredFlows -PO is Government of USA (31430)'. The counterparty is 'CP'. The status is 'PENDING'. The trade ID is 31430. The book is 'Global'. The product details include: Product SubType: Standard, Collateral Type: Receive, Direction: Receive, Principal Disbursement: Schedule, First Payment Date: 12/10/2018, Revolving: No, Open Term: No, Leg Type: Fixed, Start Date: 12/10/2018, Maturity Date: 12/20/2018, Currency: USD, Principal: 333,000, Amortization: Bullet, Actual Principal Exchange: Initial, Amort, Final, Fixed Rate (%): 6, Compounding Type: None, Coupon Frequency: ZC, Payment Day Count: ACT/360, Payment Date Roll: FOLLOWING, Custom Rolling Day: No, Effective Reset on reset date: No, Select Settlement Currency: USD, Stubs: No. The reports section shows 'Cashflow Report' and 'Reconventions'.

It is set in the mapping for TradeType > Deposit.



You can integrate the trades into Calypso as Loan/Deposit trades instead by clearing the Calypso Value for TradeType > Deposit.



Loan/12/10/2018/12/20/2018/6.000000% -PO is Government of USA (30430) - Version: 0 Mod User:(calypso_user) [150013/ca...]

Trade Back Office Cash Cashflows Analytics Pricing Env Market Data Utilities View Help

Trade Details CashFlows Fees CSA Actions

Cpty CP CounterParty Broker NONE Status PENDING ID 30430

Book Global Template NONE

☐ B2B

Product

Direction	Loan
Start Date	12/10/2018
End Date	12/20/2018
Nominal	333,000
Currency	USD
Day Count	ACT/360
Discount Method	NONE
Compounding Freque...	NON
Compounding Method	None
Capitalize Method	<input type="checkbox"/>
Roundoff Method	

Payment

Payment Frequency	ZC
Payment Holidays	
Roll Day	0
Date Roll	NO_CHANGE
Period Rule	ADJUSTED
Stub Rule	NONE
Lag	0 C
Stub Description	NONE
Principal Exchange	<input checked="" type="checkbox"/>

Rate

Is Fixed Rate	<input checked="" type="checkbox"/>
Fixed Rate	6.000000
Sales Margin	0.000000
Final Rate	6.000000

2.4.18 FX Swap

The FX Swap trades of Bloomberg AIM/TOMS are integrated into Calypso as FX Swap trades.

Buy or Sell Trade Id: 101965 Status: PENDING 14:53:00

Deliverable Type Buy/Sell Ccy Pair Book Counterparty

Ccy USD Amount 1 23,000,000.00 Date 06/09/2012 Spot Margin 3.39 USD JPY

Amount 2 -1,308,746,000 Points 23.59 Final 56.902 Near 0.00000 149.77778

Far Amount 1 -23,000,000.00 Far date 05/10/2012 Far Points 49.67 Far Margin 23.67 USD JPY

Far Amount 2 1,320,968,200 Fwd/Fwd 26.08 Far Trader 57.1967 Far Final 57.4334 Near 23,000,000.00 -1,303,323,53

Far -23,000,000.00 1,309,496,822

Comments Final Margin: 0.00 Delivery Unknown Limits SAVE(F5) NEW(F6)

Back to Back Currency Split Spot Risk Transfer Fwd Risk Transfer

Default Split Currency Primary Book Quoting Book User Override Base Split Book Quoting Split Book

Previewed Trades Actual Trades

Book	Currency Pair	Primary	Quoting	ID	Type	Mirror Book	Cou
TRADINGC	USD/JPY	23,000,000.00	(1,308,746,000)	101965	Originating	CALY	

Routing Reporting Currency Split Rate

Details

Trade Date	03/09/2012 20:...
Alternate Settle D...	
Far leg Alternate ...	
Trader	NONE
Mirror Trader	NONE
Sales	NONE
Broker	CounterParty
Role	FO_AMEND
Action	20130116_FXS...
Internal Ref.	20130116_FXS...
External Ref.	20130116_FXS...
Bundle Type	
Bundle Name	
CLS	<input type="checkbox"/>
CLS Far	<input type="checkbox"/>
Prime Broker	

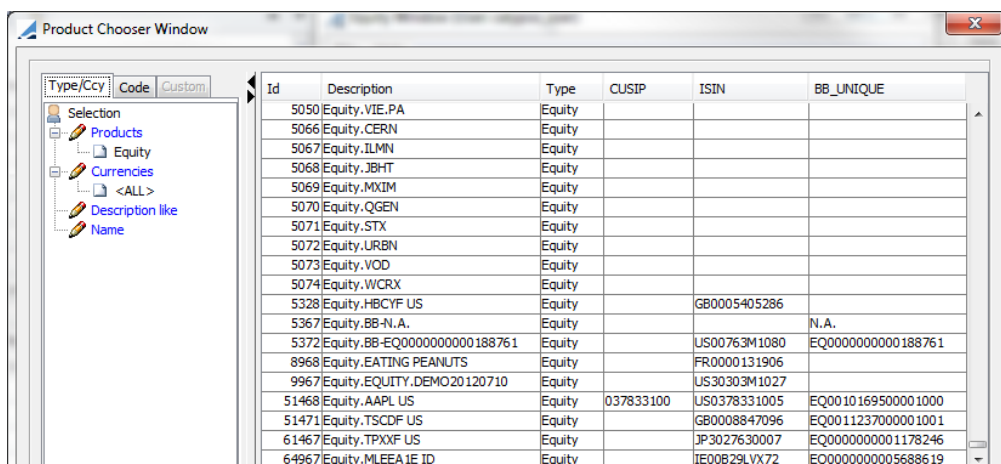
Keywords

Q Filter Keywords

Strategy	
Broker	
NEAR_CLS	false
FAR_CLS	false
CLS_ELIGIBL...	
CLS_ELIGIBL...	
SPOT_MARGIN	3.39
FAR_MARGIN	23.67
LateTradeDa...	
LateTradeDa...	
ReportingCc...	
ReportingCc...	
LIMIT_BREA...	
LIMIT_VIOLA...	
SalesB2B	
SalesB2BFrom	
SalesB2BTo	
SavedSalesB...	
SavedTransf...	
CustomTransf...	

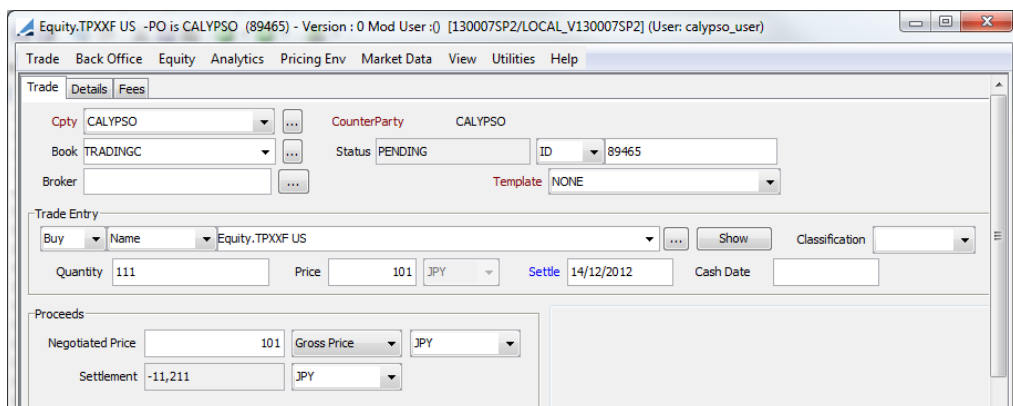
2.4.19 Index Exchange Traded Fund

The system will look up the bond by CUSIP, ISIN or BB_UNIQUE.



Type/Ccy	Code	Custom		Id	Description	Type	CUSIP	ISIN	BB_UNIQUE
				5050	Equity.VIE.PA	Equity			
				5066	Equity.CERN	Equity			
				5067	Equity.ILMN	Equity			
				5068	Equity.JBHT	Equity			
				5069	Equity.MXIM	Equity			
				5070	Equity.QGEN	Equity			
				5071	Equity.STX	Equity			
				5072	Equity.URBN	Equity			
				5073	Equity.VOD	Equity			
				5074	Equity.WCRX	Equity			
				5328	Equity.HBCYF US	Equity		GB0005405286	
				5367	Equity.BB-N.A.	Equity			N.A.
				5372	Equity.BB-EQ0000000000188761	Equity		US00763M1080	EQ0000000000188761
				8968	Equity.EATING PEANUTS	Equity		FR0000131906	
				9967	Equity.EQUITY.DEMO20120710	Equity		US30303M1027	
				51468	Equity.AAPL US	Equity	037833100	US0378331005	EQ0010169500001000
				51471	Equity.TSCDF US	Equity		GB0008847096	EQ0011237000001001
				61467	Equity.TPXXF US	Equity		JP3027630007	EQ00000000001178246
				64967	Equity.MLEE1E ID	Equity		IE00B29LVX72	EQ00000000005688619

The Index Exchange Traded Fund trades of Bloomberg AIM/TOMS are integrated into Calypso as Equity trades.



Equity.TPXXF US -PO is CALYPSO (89465) - Version : 0 Mod User :() [130007SP2/LOCAL_V130007SP2] (User: calypso_user)

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

Trade Details Fees

Cpty CALYPSO CounterParty CALYPSO

Book TRADINGC Status PENDING ID 89465

Broker Template NONE

Trade Entry

Buy Name Equity.TPXXF US Show Classification

Quantity 111 Price 101 JPY Settle 14/12/2012 Cash Date

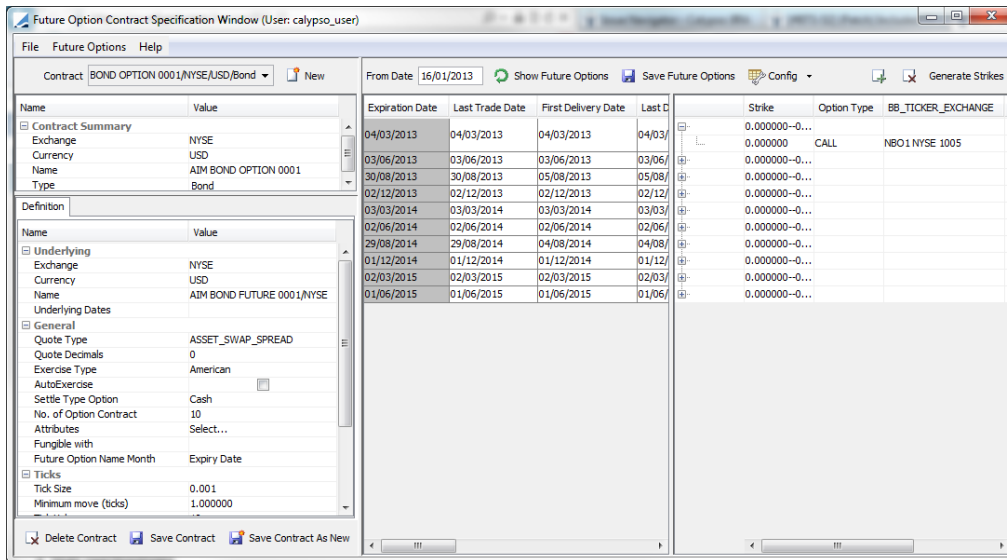
Proceeds

Negotiated Price 101 Gross Price JPY

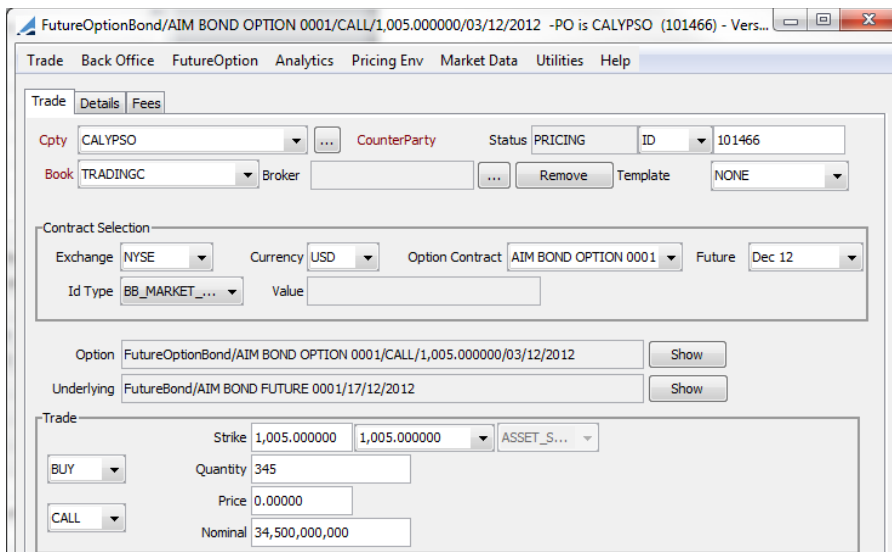
Settlement -11,211 JPY

2.4.20 Listed Option on Bond Future

At the future option level, map Calypso Product Code "BB_TICKER_EXCHANGE" to Bloomberg value "<Ticker> <Exchange> <Strike>" (note the space between <Ticker>, <Exchange> and <Strike>, and note that the number format of <Strike> should be the same between Bloomberg and Calypso).

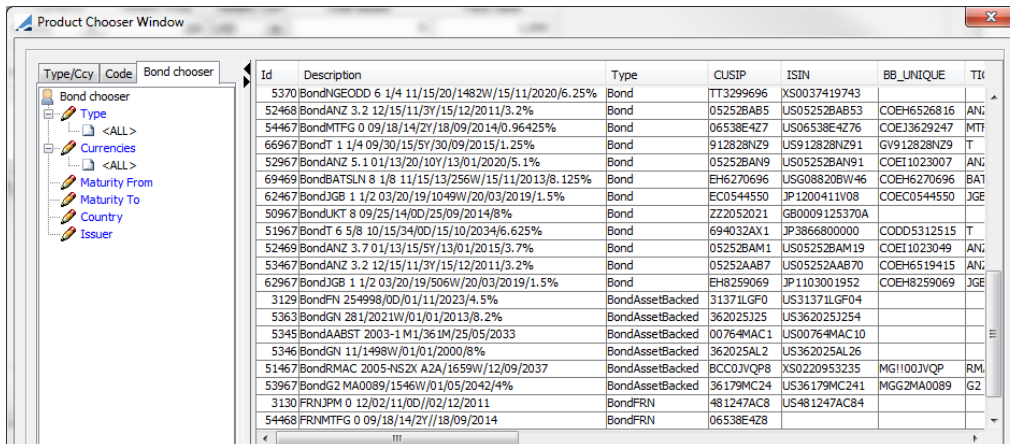


The Listed Option on Bond Future trades of Bloomberg AIM/TOMS are integrated into Calypso as Listed Option on Bond Future trades.



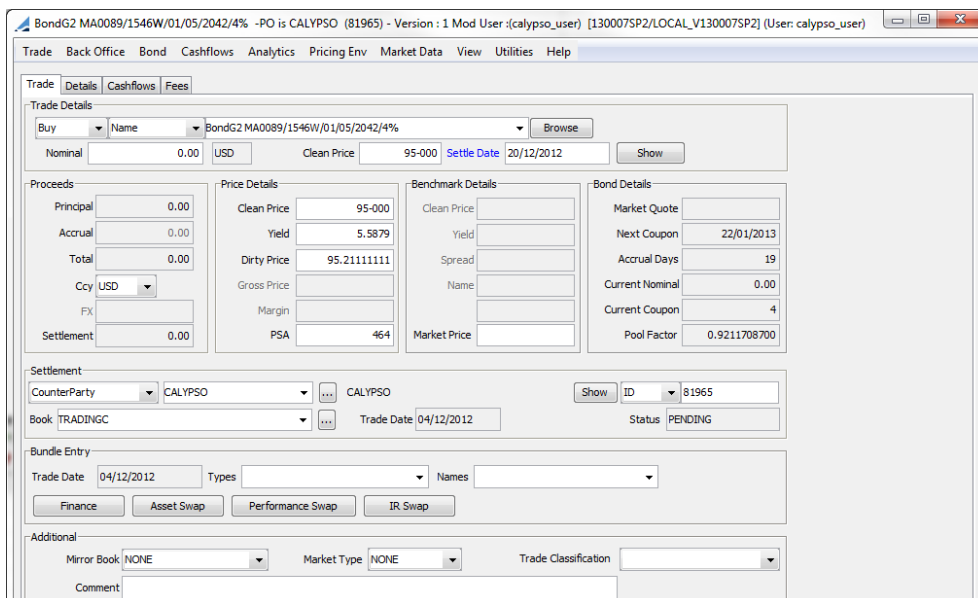
2.4.21 Mortgage Backed Securities

The system will look up the securities by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message.



Type/Ccy	Code	Bond chooser	Id	Description	Type	CUSIP	ISIN	BB_UNIQUE	TI
			5370	BondGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		
			52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAM5	US05252BAM53	COEH6526816	ANG
			54467	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E427	US06538E4276	COE13629247	MTF
			66967	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828N29	US912828N291	GV912828N29	T
			52967	BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI1023007	ANG
			69469	BondBATSUN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG088208W46	COEH6270696	BA1
			62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JGB
			50967	BondUKT 8 09/25/14/00/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		
			51967	BondT 6 5/8 10/15/34/00/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	T
			52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI1023049	ANG
			53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	ANG
			62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JGB
			3129	BondFN 254998/00/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
			5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025J25	US362025J254		
			5345	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
			5346	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
			51467	BondRMC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC03VQP8	XS0220953235	MGI1003VQP	RM
			53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
			3130	FRNJPM 0 12/02/11/00/02/12/2011	BondFRN	481247AC8	US481247AC84		
			54468	FRNMTFG 0 09/18/14/2Y/18/09/2014	BondFRN	06538E428			

The Mortgage Backed Securities trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond trades.



Trade Back Office Bond Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details Cashflows Fees

Trade Details

Buy Name BondG2 MA0089/1546W/01/05/2042/4% Browse

Nominal 0.00 USD Clean Price 95-000 Settle Date 20/12/2012 Show

Proceeds

Principal 0.00

Accrual 0.00

Total 0.00

Ccy USD

FX

Settlement 0.00

Price Details

Clean Price 95-000

Yield 5.5879

Dirty Price 95.21111111

Gross Price

Margin

PSA 464

Benchmark Details

Clean Price

Yield

Spread

Name

Market Price

Bond Details

Market Quote

Next Coupon 22/01/2013

Accrual Days 19

Current Nominal 0.00

Current Coupon 4

Pool Factor 0.9211708700

Settlement

CounterParty CALYPSO CALYPSO Show ID 81965

Book TRADINGC Trade Date 04/12/2012 Status PENDING

Bundle Entry

Trade Date 04/12/2012 Types Names

Finance Asset Swap Performance Swap IR Swap

Additional

Mirror Book NONE Market Type NONE Trade Classification

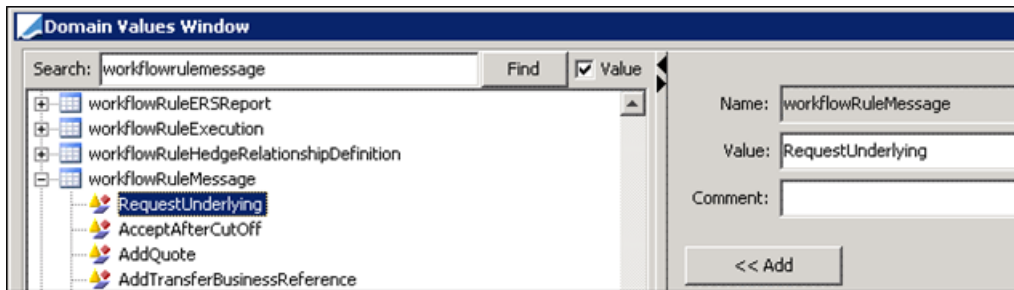
Comment

2.4.22 Repo and Reverse Repo

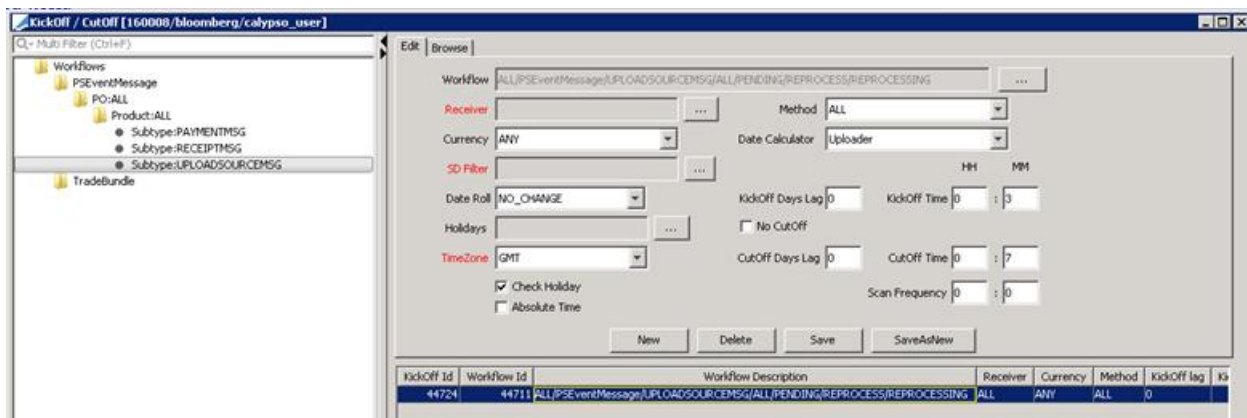
The interface supports both Bond and Equity underlying products for Repo trades.

The underlying product will be looked up by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message. For the product definition download to work correctly for Repo and Security Lending trades, ensure that the following configurations exist, and if not, add them.

- “RequestUnderlying” must be present in the workflowRuleMessage domain value.

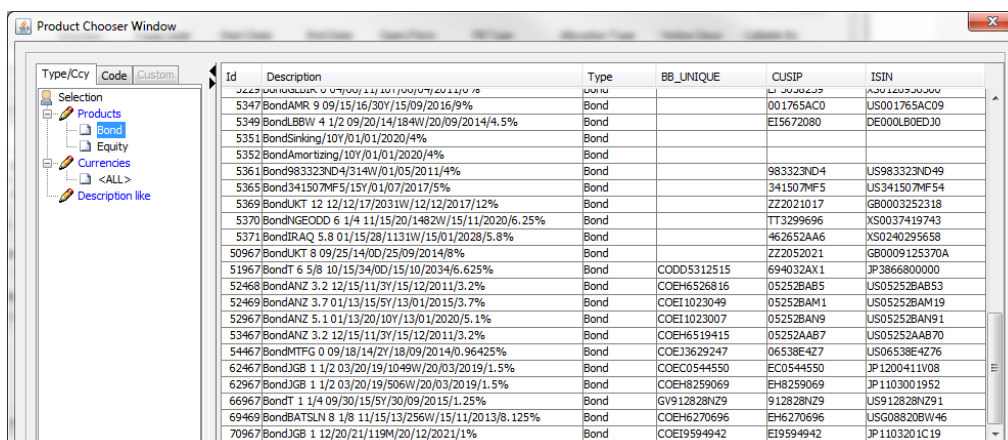


- On the PENDING – REPROCESS – REPROCESSING transition, the following rules must be present:
 - UploadReprocess
 - CheckLink
 - CheckKickOff
 - RequestUnderlying
- There should be a STP and KickOff / CutOff config defined for PENDING – REPROCESS – REPROCESSING just like you have for GATEWAYMSG.



The supported transaction types are: RP (Repo), RR (Reverse Repo), BN (Buy New Gensaki), SN (Sell New Gensaki), JP (Yen Repo) and JR (Yen Reverse Repo).

Transaction Type refers to the Transaction Type on the Bloomberg Repo Trade screen.



The Repo and Reverse Repo trades of Bloomberg AIM/TOMS are integrated into Calypso as Repo trades.

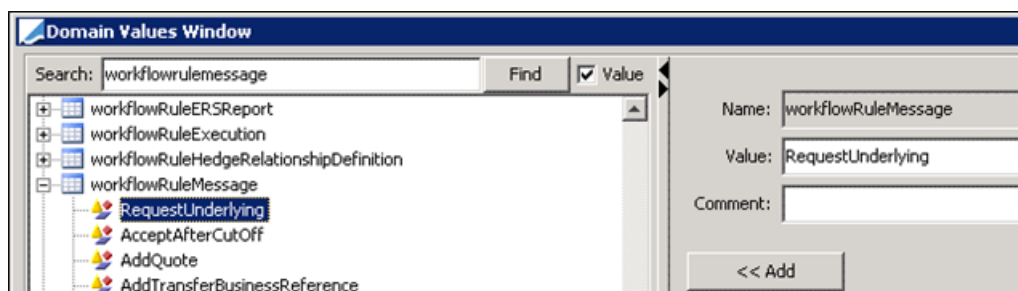
When the underlying bond is inflation-indexed, the mapping RepoFactorOverrideForInflationIndex is used to set the default value of 'Sec. Index Factor' in Calypso. If the mapping is left empty then 'Sec. Index Factor' will not be explicitly set.

2.4.23 Security Lending

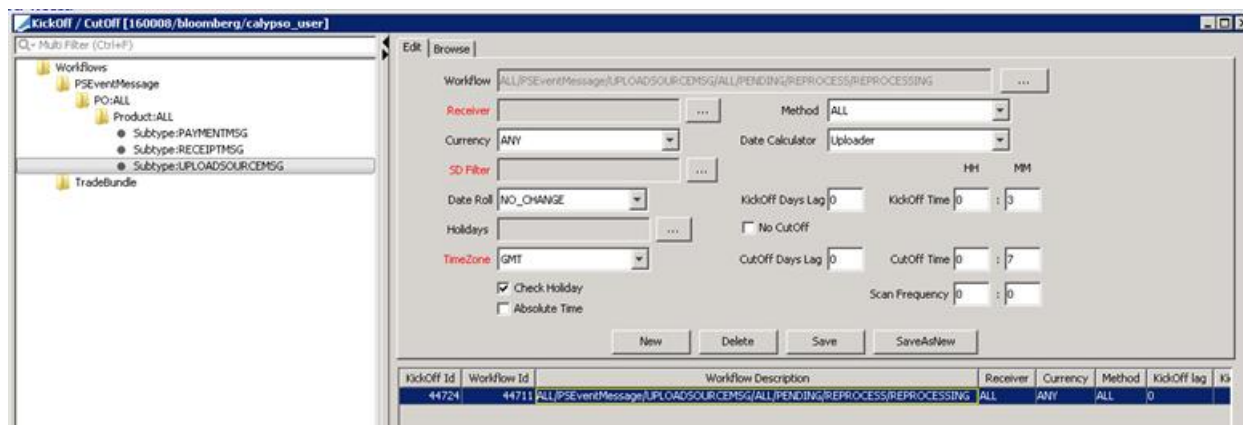
Id	Description	Type	BB_UNIQUE	CUSIP	ISIN
5347	BondAMR 9 09/15/16/30Y/15/09/2016/9%	Bond		001765AC0	US001765AC09
5349	BondLBBW 4 1/2 09/20/14/184W/20/09/2014/4.5%	Bond		EI5672080	DE000LBOED30
5351	BondSinking 10Y/01/01/2020/4%	Bond			
5352	BondAmortizing 10Y/01/01/2020/4%	Bond			
5361	Bond98332ND 4/314W/01/05/2011/4%	Bond		98332ND4	US98332ND49
5365	Bond341507MF5 15Y/01/07/2017/5%	Bond		341507MF5	US341507MF54
5369	BondLKT 12 12/12/17/2031W/12/12/2017/12%	Bond		ZZ2021017	GB0003252318
5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond		TT3299696	XS0037419743
5371	BondIRAQ 5.8 01/15/28/1131W/15/01/2028/5.8%	Bond		462652AA6	XS0240295658
50967	BondLKT 8 09/25/14/00/25/09/2014/8%	Bond		ZZ2052021	GB0009125370A
51967	BondT 6 5/8 10/15/34/00/15/10/2034/6.625%	Bond	COOD5312515	694032AX1	JP3866800000
52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	COB6526816	05252BAB5	US05252BAB53
52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	COE1023049	05252BAM1	US05252BAM19
52967	BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	COE1023007	05252BAN9	US05252BAN91
53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	COB6519415	05252AAB7	US05252AAB70
54467	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	COE33629247	06538E427	US06538E4276
62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	COEC0544550	EC0544550	JP1200411V08
62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	COB8259069	BH8259069	JP1103001952
66967	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	GV912828N29	912828N29	US912828N291
69469	BondBATSUN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	COB6270696	BH6270696	US0627069646
70967	BondJGB 1 12/20/21/119M/20/12/2021/1%	Bond	COE19594942	EI9594942	JP1103201C19

The underlying product will be looked up by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message. For the product definition download to work correctly for Repo and Security Lending trades, ensure that the following configurations exist, and if not, add them.

- “RequestUnderlying” must be present in the workflowRuleMessage domain value.



- On the PENDING – REPROCESS – REPROCESSING transition, the following rules must be present:
 - UploadReprocess
 - CheckLink
 - CheckKickOff
 - RequestUnderlying
- There should be a STP and KickOff / CutOff config defined for Pending – Reprocess – Reprocessing just like you have for GATEWAYMSG.



The Security Lending trades of Bloomberg AIM/TOMS are integrated into Calypso as Security Lending trades.

SecLendingLend-(BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%)/22/11/2012/22/11/2012 -PO is CALYPSO (101468) - Version : 0 Mod User :0 [13...]

Trade Back Office SecLending Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details Fees Cashflows Actions Actions Input

Cpty CALYPSO CounterParty CALYPSO Legal ...

Book TRADINGC Status PRICING ID 101468 Substitution ...

Broker ... Template NONE Substitutable Limit ...

Frequency ...

General Type Direction Trade Date Start Date End Date Open/Term Fill Type Allocation Type Notice Days Callable By

Unsecured Lend 22/11/2012 22/11/2012 22/11/2012 TERM PAR FILL 0 NONE

Security Name BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5% Browse

Nominal 10,000,000 Quantity 200 JPY USD/JPY FX 1.0000000000

Clean 101.0000 Dirty 101.2589 Adj. 91.1330 Gross

Yield 1.3280 Accrual 0.2589041 Acc.Days 63 Quote

Dirty Money Value 10,125,890 Adj. Money Value 9,113,301 Value 9,113,301

Haircut 10.000000000 DirtyPrice Regular Give

Unsecured Dirty Money Value Required (incl. Hc)

10,125,890.41 USD 0.00

Mark Proc Auto Mark Mark Freq

Mark Proc NONE Mark Freq NONE

Fees Type Fee Basis Fee Currency FX Rate Fee Nominal Day count Rate/Amount Minimum Fee Daily Amount

Percentage rate All-In Money value USD 1.00000 0.00 ACT/365 0.12 0.00 0.00

Billing Type Billing Period Fee dispatch

Maturity NONE NONE

2.4.24 Shin-Gensaki

The underlying product will be looked up by CUSIP, ISIN or BB_UNIQUE.

Product Chooser Window

Type/Ccy	Code	Custom	Id	Description	Type	BB_UNIQUE	CUSIP	ISIN
Products			5347	BondAMR 9 09/15/16/30Y/15/09/2016/9%	Bond		001765AC0	US001765AC09
Bond			5349	BondLBBW 4 1/2 09/20/14/184W/20/09/2014/4.5%	Bond		EI5672080	DE000LB0EDJ0
Equity			5351	BondSinking/10Y/01/01/2020/4%	Bond			
Currencies			5352	BondAmortizing/10Y/01/01/2020/4%	Bond			
<ALL>			5361	Bond983323ND4/314W/01/05/2011/4%	Bond		983323ND4	US983323ND49
Description like			5365	Bond341507MF5/15Y/01/07/2017/5%	Bond		341507MF5	US341507MF54
			5369	BondUKT 12 12/17/2031W/12/12/2017/12%	Bond		ZZ2021017	GB0003252318
			5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond		TT3299696	XS0037419743
			5371	BondIRAQ 5.8 01/15/28/1131W/15/01/2028/5.8%	Bond		462652AA6	XS0240295658
			50967	BondUKT 8 09/25/14/00/25/09/2014/8%	Bond		ZZ2052021	GB0009125370A
			51967	BondT 6 5/8 10/15/34/00/15/10/2034/6.625%	Bond	CODD5312515	694032AX1	JP3866800000
			52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	COEH6526816	05252BAB5	US05252BAB53
			52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	COEI1023049	05252BAM1	US05252BAM19
			52967	BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	COEI1023007	05252BAN9	US05252BAN91
			53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	COEH6519415	05252AAB7	US05252AAB70
			54467	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	COEJ3629247	06538E427	US06538E4276
			62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	COEC0544550	EC0544550	JP1200411V08
			62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	COEH8259069	EH8259069	JP1103001952
			66967	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	GV912828N29	912828N29	US912828N291
			69469	BondBATSIN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	COEH6270696	EH6270696	USG08820BW46
			70967	BondJGB 1 12/20/21/119M/20/12/21/1%	Bond	COEI9594942	EI9594942	JP1103201C19

The Shin-Gensaki trades of Bloomberg AIM/TOMS are integrated into Calypso as Repo trades.

2.4.25 Single Barrier FX Option

The Single Barrier FX Option trades of Bloomberg AIM/TOMS are integrated into Calypso as FX Option trades.

2.4.26 Standard Bonds

The system will look up the bond by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message.

Id	Description	Type	CUSIP	ISIN	BB_UNIQUE	Ticker
5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		
52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	ANZ
54467	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E427	US06538E4276	COE13629247	MTF
66967	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828N29	US912828N291	GV912828N29	T
52967	BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COE11023007	ANZ
69469	BondBATSUN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG088208W46	COEH6270696	BAT
62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JGB
50967	BondUKT 8 09/25/14/00/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		
51967	BondT 6 5/8 10/15/34/00/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	COED5312515	T
52469	BondANZ 3.7 01/13/15/3Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COE11023049	ANZ
53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	ANZ
62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JGB
3129	BondFRN 25498/00/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025125	US3620251254		
5345	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
5346	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
51467	BondRMC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC03VQP8	XS0220953235	MG11003VQP	RMC
53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
3130	FRNJP 0 12/02/11/00/02/12/2011	BondFRN	481247AC8	US481247AC84		
54468	FRNMTFG 0 09/18/14/2Y/18/09/2014	BondFRN	06538E428			

The Standard Bond trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond trades.

Trade Back Office Bond Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details

Buy Name BondJGB 1 1/2 03/20/19/1049W/03/20/2019/1.5% Browse

Nominal 444,000.00 JPY Clean Price 99.000 Settle Date 12/11/2012 Show

Proceeds

Principal	439,560.00
Accrual	1,496.22
Total	441,056.22
Ccy	JPY
FX	
Settlement	441,056.22

Price Details

Clean Price	99.000
Yield	1.6760
Dirty Price	99.336986
Gross Price	
Margin	
Prepay S...	

Benchmark Details

Clean Price	
Yield	
Spread	
Name	
Market Pr...	

Bond Details

Market Quote	
Next Coupon	03/21/2013
Accrual Days	82
Current Nominal	
Current Coupon	1.5
Pool Factor	

Settlement

CounterParty BB TEST ACCOUNT BB Show ID 46932

Book Sales Trade Date 12/06/2012 Status PENDING

Bundle Entry

Trade Date 12/06/2012 Types Names

Finance Asset Swap Performance Swap IR Swap

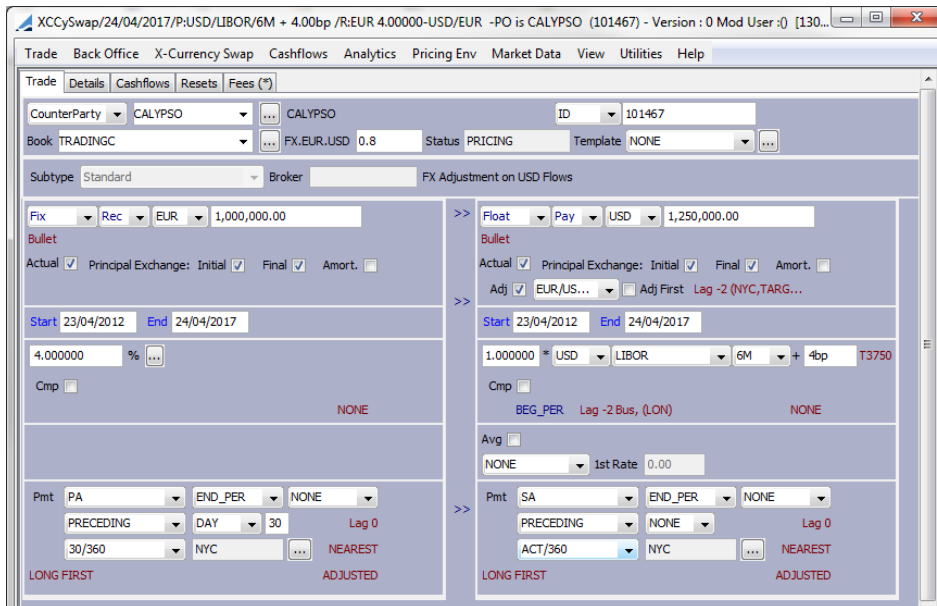
Additional

Mirror Book NONE Market Type NONE Trade Classification

Comment

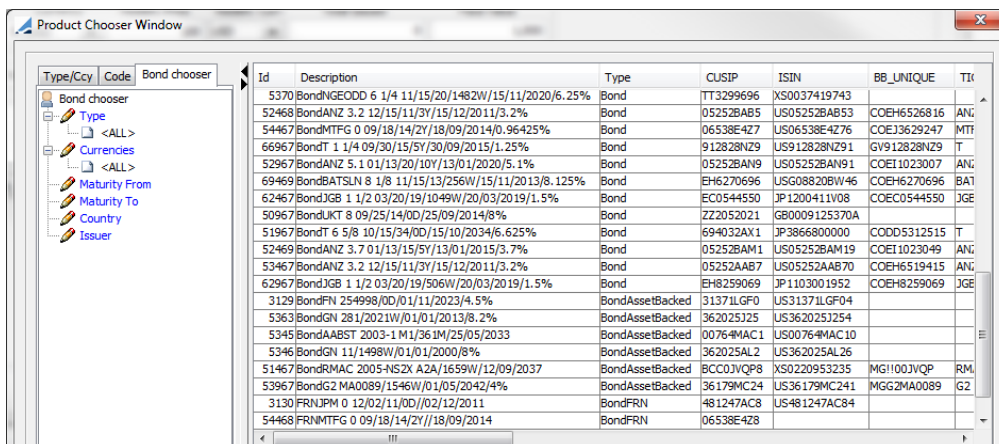
2.4.27 Vanilla Cross Currency Swap

The Vanilla Cross Currency Swap trades of Bloomberg AIM/TOMS are integrated into Calypso as Interest Rate Swap trades.



2.4.28 When Issued Bond

The system will look up the bond by CUSIP, ISIN or BB_UNIQUE. If the product specified cannot be found, it will put the trade message on hold and download the product definition from Bloomberg Data License (for integrating with Bloomberg Data License). After the product definition is fed into Calypso, the system will continue to process the trade message.



Id	Description	Type	CUSIP	ISIN	BB_UNIQUE	TI
5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		
52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	ANZ
54467	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E427	US06538E4276	COE13629247	MTF
66967	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	91282BNZ9	US91282BNZ91	GV91282BNZ9	T
52967	BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COE11023007	ANZ
69469	BondBATS LN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG088208W46	COEH6270696	BAT
62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JGB
50967	BondJKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB00009125370A		
51967	BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	COED5312515	T
52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COE11023049	ANZ
53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	ANZ
62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JGB
3129	BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
5363	BondGN 281/2021W/01/01/2021/8.2%	BondAssetBacked	362025J25	US362025J254		
5345	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
5346	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
51467	BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC03VQP8	XS0220953235	MG11003VQP	RMA
53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MG22MA0089	G2
3130	FRNJP 0 12/02/11/0D/02/12/2011	BondFRN	481247AC8	US481247AC84		
54468	FRNMTFG 0 09/18/14/2Y/18/09/2014	BondFRN	06538E428			

The When Issued Bond trades of Bloomberg AIM/TOMS are integrated into Calypso as Bond trades.

BondWII 0.8 12/20/22/10Y/12/20/2022/0.8% -PO is Default Processing Organisation (53437) - Version : ...

Trade Back Office Bond Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details Cashflows Fees

Trade Details

Buy Name BondWII 0.8 12/20/22/10Y/12/20/2022/0.8% Browse

Nominal 123,000.000 JPY Clean Price 98.000 Settle Date 12/20/2012 Show

Proceeds

Principal 120,540.000

Accrual 0.000

Total 120,540.000

Ccy JPY

FX

Settlement 120,540.000

Price Details

Clean Price 98.000

Yield 1.0200

Dirty Price 98.000000

Gross Price

Margin

Prepay S...

Benchmark Details

Clean Price

Yield

Spread

Name

Market Pr...

Bond Details

Market Quote

Next Coupon 06/20/2013

Accrual Days 0

Current Nominal

Current Coupon 0.8

Pool Factor

Settlement

CounterParty BB TEST ACCOUNT B8 Show ID 53437

Book FXD_Sample_Trades Trade Date 12/17/2012 Status PENDING

Bundle Entry

Trade Date 12/17/2012 Types Names

Finance Asset Swap Performance Swap IR Swap

Additional

Mirror Book NONE Market Type NONE Trade Classification

Comment

Data Mapping

3.1 External Reference and Internal Reference

Calypso maintains links to imported Bloomberg trades via the Internal Reference and External Reference fields. When a trade is integrated from Bloomberg, the Internal Reference is updated to match the transaction number of the latest Bloomberg Trade Feed. The External Reference is set only for new trades, so that it keeps a reference to the first Bloomberg Trade Feed for that particular trade.

If two Bloomberg tickets are generated for a trade, for example, FX Swap and Vanilla Cross Currency Swap trades, Calypso will combine the transaction numbers of Bloomberg Feeds in the format `<tr#_tradeFeed1>_<tr#_tradeFeed2>`.

① [NOTE: In Calypso trades, the Internal Reference and External Reference are automatically prefixed with "BB_AIM_<BloombergFirmID>" (for trades from Bloomberg AIM) or "BB_TOMS_<BloombergFirmID>" (for trades from Bloomberg TOMS).]

When trades are manually created in Calypso, the Internal Reference and External Reference should be left blank.

3.2 Trade Date

The "as of date" from Bloomberg AIM/TOMS message is taken as trade date for the corresponding Calypso trade.

3.3 MiFID Trade Keywords

Mapping for MiFID trade keywords can be provided in the domain "BloombergTS.MifidKeywords". Only the fields provided in this domain are saved as trade keywords.

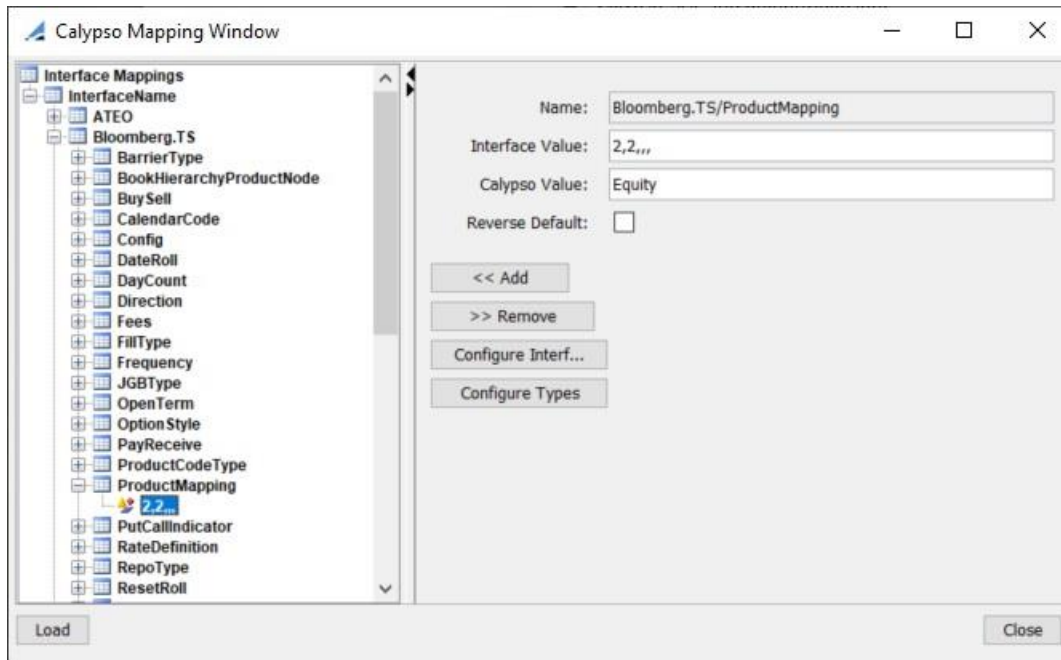
By default, this domain also contains the default SFTR field mappings.

► Please refer to Calypso Securities Financing Transaction Regulation documentation for details on SFTR.

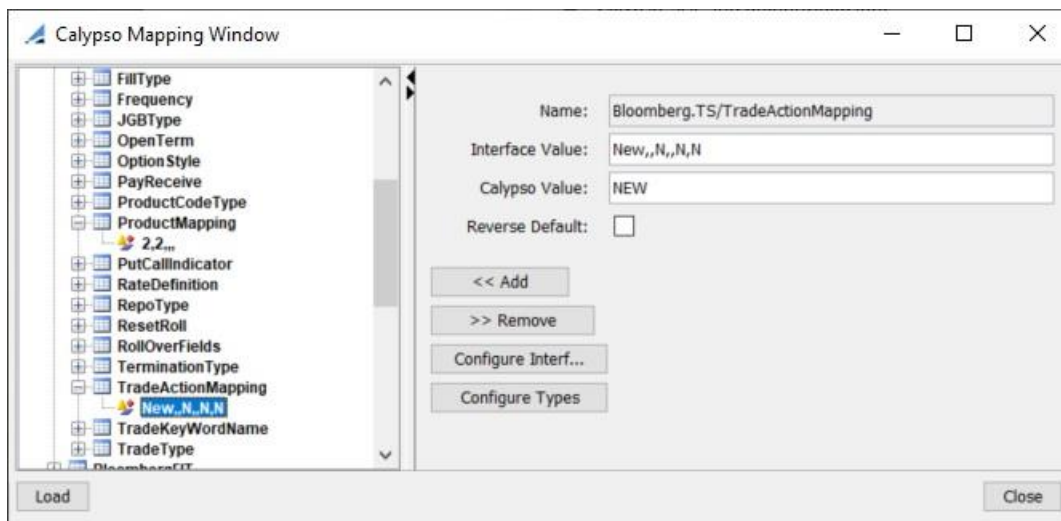
3.4 Configurable Mapping

Calypso has added a support to provide configurable mapping of product type and trade action via 'ProductMapping' and 'TradeActionMapping' in Calypso mapping window. We have provided an extension to map product type with the incoming trade feed based on key formed from trade feed. This mapping is given in Calypso mapping window under 'ProductMapping' option. Similar extension is provided to map trade action under 'TradeActionMapping' title.

Here is an example screen for 'ProductMapping':



Here is an example for 'TradeActionMapping' option:



Trade Handling

4.1 Supported Products and Actions

Supported Actions

- NEW, AMEND, CANCEL (for all products)
- ALLOCATE (for Bond only)
- TERMINATE, ROLLOVER (for Repo only)
-

Supported Product	Products supported in Bloomberg TOMS/AIMS version (V12 or V20)				Remarks
	TOMS		AIMS		
	V12	V20	V12	V20	
Asset Backed Securities	✓				Mapped as bond trades in Calypso
Basis Swap	✓				Mapped as interest rate swap trades in Calypso
Bond Future	✓	✓	✓		
Bond Future Option	✓		✓		
Callable Bond	✓				Mapped as bond trades in Calypso
CDS Index Trade			✓		
Certificate of Deposit	✓				Mapped as bond trades in Calypso
Commercial Paper	✓				Mapped as bond trades in Calypso
Cross Currency Swap (Vanilla)	✓		✓		
Equity	✓		✓		

Supported Product	Products supported in Bloomberg TOMS/AIMS version (V12 or V20)				Remarks
	TOMS		AIMS		
	V12	V20	V12	V20	
Equity Index Future	✓	✓	✓		
Equity Index Future Option	✓		✓		
FX Forward	✓		✓		
FX Future	✓	✓	✓		
FX NDF	✓		✓		
FX Option (Single Barrier)	✓		✓		
FX Option (Vanilla)	✓	✓	✓		
FX Spot	✓	✓	✓		
FX Swap	✓	✓			
Index Exchange Traded Fund	✓				Mapped as equity trades in Calypso
Interest Rate Future	✓		✓		Mapped as money market future in Calypso
Interest Rate Future Option	✓				Mapped as money market future option in Calypso
Interest Rate Swap (Vanilla)	✓		✓		
Loan and Deposit (Fixed Term)	✓				Mapped as loan/deposit trades in Calypso (default), or as structured flows trades (configurable)
Mortgage Backed Securities	✓				Mapped as bond trades in Calypso
OTC Equity Index Option			✓		

Supported Product	Products supported in Bloomberg TOMS/AIMS version (V12 or V20)				Remarks
	TOMS		AIMS		
	V12	V20	V12	V20	
Repo and Reverse Repo	✓	✓			Mapped as repo trades in Calypso
Security Lending	✓				
Shin-gensaki	✓				Mapped as repo trades in Calypso
Standard Bond	✓	✓	✓		Mapped as bond trades in Calypso
Swaptions			✓		Supporting only the European exercise type
Unitized Funds	✓	✓			
When Issued Bond	✓	✓			Mapped as bond trades in Calypso

4.2 New Trade in Bloomberg

Bloomberg will generate a new trade ticket.

Calypso will create a new trade. Calypso will update the Internal Reference and the External Reference to match the Bloomberg Trade ID.

4.3 Correct Trade in Bloomberg

Bloomberg will generate a cancel ticket to cancel the original trade and generate a correction ticket with a new trade ID. The cancel ticket can be identified as part of a correction by the value `CancelDueToCorrection=Y`. The Bloomberg correction trade contains the field `TransactionNumberOfOriginTrans` to identify the original trade in Bloomberg.

Calypso will ignore the cancel ticket due to a correction (identified by the value `CancelDueToCorrection=Y`). Calypso will instead amend the original trade. Calypso will identify the original trade by matching the Bloomberg `TransactionNumberOfOriginTrans` to the Calypso Internal Reference. As part of the amendment, Calypso will then update the Internal Reference to match the Bloomberg correction trade ID. The External Reference remains unchanged with the original Bloomberg Trade ID.

4.4 Cancel Trade in Bloomberg

Bloomberg will generate a cancel ticket. The Bloomberg cancel trade will have the same trade ID as the original trade.

Calypso will cancel the original trade. The Internal Reference and External Reference remain unchanged.

4.5 Terminate Trade in Bloomberg (for Repo only)

Bloomberg will generate a termination ticket which carries the same trade ID as the original trade.

Calypso will terminate the original trade. The Internal Reference and External Reference remain unchanged.

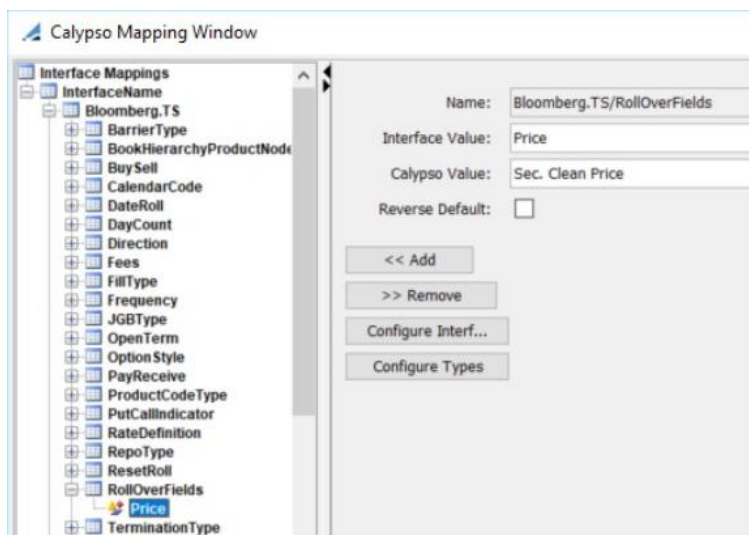
4.6 Rollover Trade in Bloomberg (for Repo only)

Bloomberg will generate a rollover ticket. End users have to fill in the trade ID of the original trade in Short Note 1 on Bloomberg systems.

[NOTE: End user should leave Short Note 1 on Bloomberg Systems empty except for [rolling over a repo trade](#) or [amending a pre-existing trade](#).]

Calypso will rollover the original trade. The Internal Reference and External Reference remain unchanged.

During a rollover action, the Bloomberg TOMS 'Price' value is mapped to 'Sec. Clean Price' in Calypso through the RollOverFields mapping.



4.7 Lifecycle Actions

Other lifecycle actions are generally not supported. The interface will not send new trades to Calypso when an option is exercised, any barrier is hit, or a rate reset is performed on Bloomberg AIM or Bloomberg TOMS.

4.8 Pre-Existing Trades

A trade may be booked in Calypso before it is booked in Bloomberg. Reasons can include simulating a hedge trade or booking trades while Bloomberg is unavailable. When the user enters a new trade in Calypso that will later be entered into Bloomberg, the user will need to set the External Reference ID to be the same as the Calypso Trade ID. When the user enters a new trade in Bloomberg that corresponds to a pre-existing trade in Calypso, the user will need to specify the Calypso Trade ID in designated Short Note 1³. During TOMS integration, the appropriate mappings and validation will be performed. An Amend event will be performed on the pre-existing trade in Calypso and its fields will be updated to match those of the Bloomberg trade.

ACK/NACK process

For Bloomberg TOMS, Calypso supports Ack Nak messages for all incoming messages in V20 for the following list of Products:

- Bonds
- Repo
- Bond Issuance
- Futures
- Unitized Funds

Once a trade is booked in Bloomberg TOMS, Calypso receives a trade feed message. Calypso then sends an acknowledgment (ACK) or a negative acknowledgment (NACK) after translation. If there are validation errors Calypso sends NACK with errors and when successful, Calypso sends ACK.

Trade would remain in PENDING in Bloomberg TOMS until ack is sent. In case of missing mapping in Calypso, a NACK is sent and once the trade is created, an ACK is sent, which will move trade to ACKed Status in Bloomberg.

The trade will remain in a PENDING status in Bloomberg (BBG) until an ACK is sent. If there is a missing mapping in Calypso, a NACK is sent. Once the trade is created, an ACK is sent, updating the trade status to ACKED in Bloomberg.

Sender configs

Id	Status	Product	Advice Type	Address Type	Gateway	SD Filter	Send	Save	By Gateway	By Method	By JMS	JMS Name
135707	COMPLETED	ALL	UPLOADSOURCMSG	BloombergTOMS	BloombergTOMS		✓	✓	✓	✓	✓	
135706	COMPLETED	ALL	UPLOADSOURCMSG	BloombergAIM	BloombergAIM		✓	✓	✓	✓	✓	
132207	PENDING	ALL	UPLOADSOURCMSG	BloombergAIM	BloombergAIM		✓	✓	✓	✓	✓	
132206	PENDING	ALL	GATEWAYMSG	BloombergAIM	BloombergAIM		✓	✓	✓	✓	✓	
131206	COMPLETED	ALL	GATEWAYMSG	BloombergAIM	BloombergAIM		✓	✓	✓	✓	✓	
130707	PENDING	ALL	GATEWAYMSG	BloombergTOMS	BloombergTOMS		✓	✓	✓	✓	✓	
130706	COMPLETED	ALL	GATEWAYMSG	BloombergTOMS	BloombergTOMS		✓	✓	✓	✓	✓	
129206	PENDING	ALL	UPLOADSOURCMSG	BloombergTOMS	BloombergTOMS		✓	✓	✓	✓	✓	
62706	PENDING	ALL	GATEWAYMSG	TradeUploader	TradeUploader		✓	✓	✓	✓	✓	
45409	TO_BE_SENT	ALL	CONFIRM	MAIL	PRINTER		✓	✓	✓	✓	✓	
21263	EDITED	ALL	RECEIPTMSG	SWIFT	SWIFT		✓	✓	✓	✓	✓	
17990	VERIFIED	ALL	SEC_RECEIPTMSG	SWIFT	SWIFT		✓	✓	✓	✓	✓	
17989	VERIFIED	ALL	SEC_DELIVERYMSG	SWIFT	SWIFT		✓	✓	✓	✓	✓	
17988	VERIFIED	ALL	RECEIPTMSG	SWIFT	SWIFT		✓	✓	✓	✓	✓	
17987	EDITED	ALL	PAYMENTMSG	SWIFT	SWIFT		✓	✓	✓	✓	✓	
17986	VERIFIED	ALL	PAYMENTMSG	SWIFT	SWIFT		✓	✓	✓	✓	✓	
16085	TO_BE_SENT	ALL	SEC_RECEIPTMSG	SWIFT	SWIFT		✓	✓	✓	✓	✓	

Once the trade is booked, Calypso creates UPLOADSOURCMSG message, it will remain in the PENDING status, then in case of any validation error Calypso sends a NACK. In case of no error, Calypso sends an ACK and the status is updated as COMPLETED.

A GATEWAYMSG message is created, it remains in the PENDING status. In case of any error or missing entity, it will remain in PENDING status and NACK is sent. Then once the user corrects the config or adds the missing entity, Calypso sends ACK and the status is updated to COMPLETED status.

XML messages

The following are samples XML messages.

Status Ack

```
<?xml version="1.0" encoding="UTF-8"?>
<TradeFeedReply>
  <BloombergFirmID>4159</BloombergFirmID>
  <AckNack>Ack2</AckNack>
  <ErrorCount>0</ErrorCount>
  <ErrorMessage>Complete</ErrorMessage>
  <BloombergReferenceNumber>274141591K0000073882</BloombergReferenceNumber>
  <UserReferenceNumber>Sending In Ack2</UserReferenceNumber>
  <SecondaryUserReferenceNumber>123</SecondaryUserReferenceNumber> <!-- Optional Calypso trade Id -->
</TradeFeedReply>
```

Status Reject

```
<?xml version="1.0" encoding="UTF-8"?>
<TradeFeedReply>
  <BloombergFirmID>4159</BloombergFirmID>
  <AckNack>Nack</AckNack>
  <ErrorCount>1</ErrorCount>
  <ErrorMessage>Unable to process trade 274141591 because reason</ErrorMessage>
  <BloombergReferenceNumber>274141591K0000073882</BloombergReferenceNumber>
  <UserReferenceNumber>test Nack</UserReferenceNumber>
  <SecondaryUserReferenceNumber>123</SecondaryUserReferenceNumber>
</TradeFeedReply>
```